THE HISTORY OF THE NATIONAL ASSOCIATION OF MEDICAL EXAMINERS

National Association of Medical Examiners
Past Presidents History eBook

2022 EDITION

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On the Occasion of the 50th Annual Meeting, held in Minneapolis, Minnesota

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Introduction

Preface to the 2013 NAME History eBook

Third Edition

This eBook is the Third Edition of the NAME History eBook. As I look back to the First Edition of the NAME Past Presidents Committee Annual History Project done in 2011, we began with guided autobiographies. Seventeen past presidents submitted their memoirs following the guided questions prepared by Randy Hanzlick. The Publication Team consists of Randy Hanzlick, Jeffrey Jentzen and myself. Production team consists of coordinator, Denise McNally and graphic designer Raul Vergara of Los Angeles. In 2012, we added two more sections, i.e. History of Medical Examiner's Office and dedication. The total pages were over 300.

In 2013, we have further improved by adding more sections. We now call Chapters. Chapter I is newly added audio and video series. I obtained an audiotape from my friend and colleague, Amnon Carmi of Haifa, Israel, who asked me if I could use this audiotape that Milton Helpern gave me. William G. Eckert recorded these audiotapes in 1970. One recording was Milton Halpern's comments on why he decided to establish an organization exclusive for the medical examiner officers and system. The tape may have been deteriorated; some areas were not clearly audible. Randy Hanzlick spent many hours listening to the video and compared with initially transcribed audio by Denise McNally. He suggested if someone had not seen nor heard Dr. Helpern, we should use subtitles, and after 4 or 5 revisions of subtitles, further suggesting introducing Mr. Richard Child, who was the Director of the Municipal League and instrumental for the idea of creating a new organization, NAME. Chapter II is also new. This series deals with specific topics, such as women in the history of the NAME, Helpern Laureate Award and Gantner lecturer, etc. Chapter III is the history of the Medical Examiner's Office, but for 2013, we divided into the State-Wide Medical Examiner system from the County Medical Examiners Officers. Chapter IV is also new. I solicited contributions on the overview of history for each

state. We had an article by Joe Prahlow and John Pless regarding State of Indiana, and now adding the State of Arizona, and of Pennsylvania. Chapter V is memoir series and Chapter VI is expanded into the dedication of deceased colleagues by co-workers or students dedicating the accomplishment. I decided to use collected obituaries filed from the NAME Date Committee. As we increase edition, we should be able to fill in, and complete our History.

Review and proof reading are important jobs. For 2013, we asked Past President Marcella Fierro to assist the team in proof reading. Raul Vergara, graphic designer who is in charge of layout and selection of software for eBook, as new software is becoming improved, and popularity of iPad and other devices, we are now able to include video recording into the eBook. As all editions, Jeff Jentzen totally reviewed prior to release of eBook 2013. In the Past Presidents Luncheon and committee meeting, we will work on eBook 2014. We have only three more years to complete the NAME History Book, hopefully published in the occasion of the 50th Anniversary Meeting.

Thomas T. Noguchi, MD
September 13, 2013

Preface to the 2016 NAME History eBook

Fourth Edition

This is the Fourth Edition of the NAME History eBook. It is presented on the occasion of the 50th Anniversary of the National Association of Medical Examiners. For this edition, all of the authors were asked to review and revise their previous submissions. Additional authors were solicited from the NAME membership. Finally, the entire document was edited by Gregory Schmunk to correct any errors, provide a more consistent order to the submissions, and include a table of contents and index. Photographs were obtained and inserted where available and dates of submission of each of the articles were included after the title of each manuscript as it became clear during the editing process that the histories were obtained at a given point in time. The offices have sometimes changed in their nature or leadership, and the inclusion of these dates provides context. Unfortunately, some of the original authors have passed from our presence over the years, and thus dates of death were included as necessary.

It is hoped that this history of our organization will provide the reader with an important context of the development of each system. It is also hoped that the memoirs of the individual leaders in our field will not only provide enjoyment and pleasant memories to many of our older members, but will also provide enlightenment to the newer members, so that the lessons of the past may be remembered and errors in judgement not be repeated.

The Editors wish to thank the Past Presidents Committee, the NAME Foundation Historical Committee and all of the Past Presidents, Chief Medical Examiners and other valued contributors who have submitted works for this and past editions. Their hard work in memorializing their offices and careers is greatly appreciated.



Gregory A. Schmunk, MD
Editor
Chairman, Past Presidents Committee



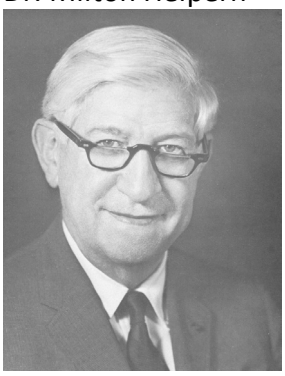
Thomas T. Noguchi, MD
Emeritus Editor

May 2016

Past Presidents

NAME PAST PRESIDENTS

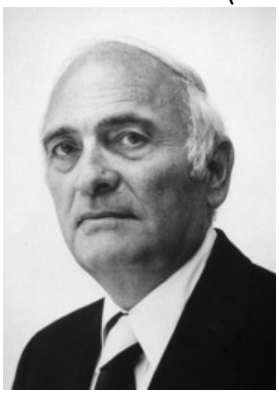
Dr. Milton Helpern 1966-70 4/17/02-4/22/77



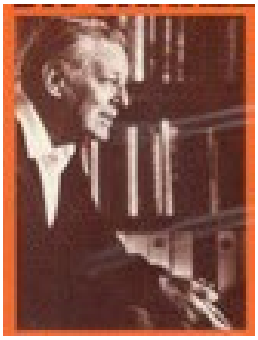
Dr. Joseph Spelman 1970-71 D-1971



Dr. Leslie Lukash (Gladys) 1971-72 10/25/20-8/19/07, Nassau Co., NY

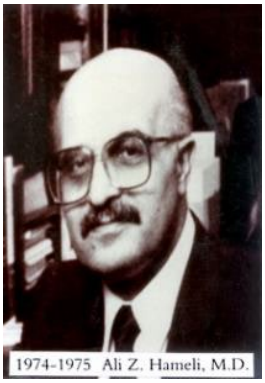


Dr. Charles Larson 1972-73 Deceased





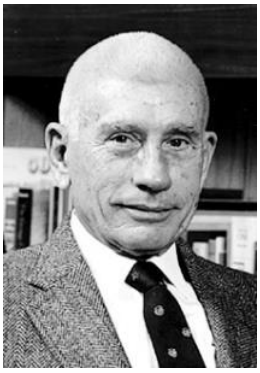
Dr. Ali Hameli 1973-75



Dr. Joseph Davis (Rose Marie) 1975-76 4/16/24-3/19/13, Miami, FL



Dr. Frank Cleveland (Doreene) 1976-77 11/2/19-11/28/11, Cincinnati, OH

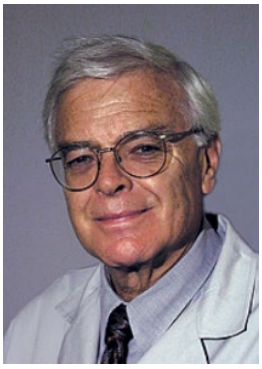




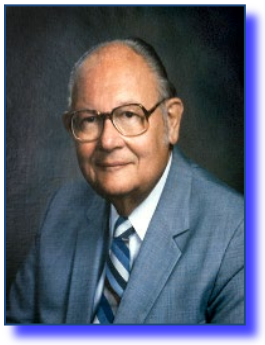
Dr. Jerry Francisco (Carol) 1977-78



Dr. William Sturner 1978-79 9/6/34-12/9/16, Fayetteville, AR



Dr. John Coe (Myrtle-D) 1979-80 1/21/19-3/26/11, Minneapolis, MN



Dr. William Eckert (Haroldine) 1980-81 7/23/26-9/17/99, New Orleans, LA



Dr. David Wiecking (Mary Ann) 1981-82 4/4/33-7/22/11, Richmond, VA



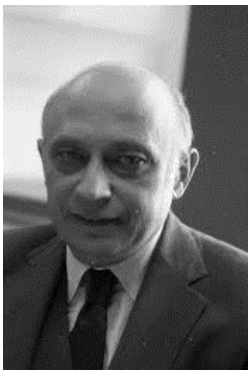
Dr. Thomas Noguchi (Hisako-D 2014) 1982-83



Dr. Robert Stein (Elsa) 1983-84 D-7/12/94 Highland Park, IL



Dr. Elliot Gross 1984-85



Dr. Eleanor McQuillen (James) 1985-86



Dr. James Spencer Bell (Katherine-D) 1986-87 D-4/30/87



Dr. Donald T. Reay (Judy) 1987-88 D-11/10/18, Seattle, WA
(Filled unexpired term of Dr. Bell)



Dr. Thomas Hegert (Julie) 1988-89 9/30/28-8/29/10, Orlando, FL

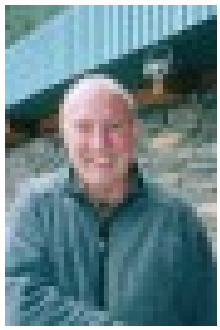


Dr. Marcella Fierro (Robert) 1989-90



Dr. John Butt 1990-91





Dr. Sandra Conradi (Edward-D) 1991-92



Dr. Lawrence (Stan) Harris (Camille) 1992-93 3/14/31-5/1/18, Mars Hill, NC



Dr. Charles Stahl III (Ellen) 1993-94 8/5/30-3/1/16 Rockville, IL



Dr. Boyd Stephens (Diana) 1994-95 7/19/39-4/2/05 San Francisco, CA



Dr. Ross Zumwalt 1995-96



Dr. James (Jack) Frost 1996-97 12/19/30-6/27/16, Morgantown, WV





Dr. John Pless (Lois) 1997-12/31/98 8/26/38-3/7/14, Indianapolis, IN
(Prior to 1998, terms of Presidents expired at the Annual Meeting)



Dr. Edmund Donoghue (Judy) 1999



Dr. Garry Peterson (Mary Ann) 2000



Dr. Randy Hanzlick (Mary) 2001



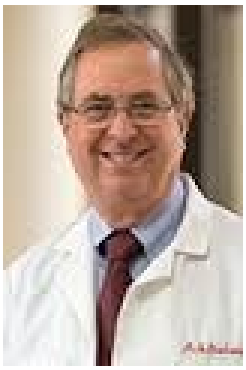
Dr. Joni McClain 2002



Dr. Michael Bell (Tanis) 2003



Dr. Michael Graham (Irene) 2004



Dr. Fred Jordan 2005



Dr. John Hunsaker (Brenda) 2006



Dr. Joseph Prahlow (Tamara) 2007



Dr. Jeffrey Jentzen (Dorianne) 2008



Dr. John Howard (Marjan) 2009



Dr. Lakshmanan Sathyavagiswaran (Vijay) 2010



Dr. Mary Ann Sens (Don) 2011



Dr. Andrew Baker (Peggy) 2012



Dr. Gregory Schmunk (Stephanie) 2013



Dr. Gregory G. Davis (Sue) 2014



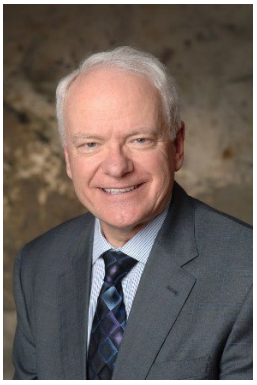
Dr. Marcus Naschelsky (Joan) 2015



Dr. David Fowler (Carolyn) 2016



Dr. Brian L. Peterson (Jeanne) 2017



Dr. Kim Collins (David Norton) 2018



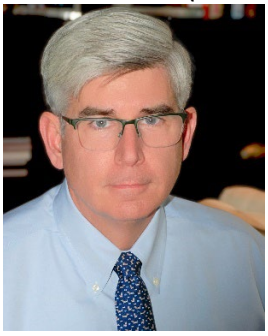
Dr. Jonathan Arden (Ronni) 2019



Dr. Sally Aiken (Bruce) 2020



Dr. James Gill (Raffaella) 2021



Dr. Kathryn Pinneri (Jason) 2022



Helpern Video Transcript

Milton Helpern Video Transcript

Development of the National Association of Medical Examiners

William Eckert: This is some of Dr. Helpern's comments on the development of the National Association of Medical Examiners.

Helpern: They don't allow the forensic pathologists to do this work – which further, the standards vary – and forensic pathology in this country even with the academy probably in some areas it was alright and in most areas it was no good at all. And it's that way now. And the fellows who get into this academy don't really understand. We started the National Association of Medical Examiners a few years ago at the instigation of and urging of Richard Childs (President of the Municipal League). We tried to elevate the standards and to improve everything and take people into it (NAME) so to make them feel they belong but it was not done in competition. Ours was a medical group, because a medical examiner by definition is a physician and a pathologist. That is the most important thing.

Eckert: Did that group arise under the deficiency of the academy?

Helpern: Well, not exactly, no. I'll tell you how it arose. The National Association of Medical Examiners was a brain child of Richard Childs. He had words over the years showing up how coroners are really ineffective. And in this day and age the community wasn't really getting it. He wasn't altogether aware of the whole situation. He had ideas if you're a medical examiner you are alright. If you're a coroner you are all wrong. Well that doesn't work either because there are a lot of medical examiners who are misguided and really don't do their job and don't know what the hell it's all about. And then there are some Coroners who run good offices like Sam Gerber ran a good office. Frank Cleveland runs a good coroner's office. They had a professional standard with quality people in it, but by-and-large, the coroner system was very bad and Childs came to me. I think he was already 88 and said "I have 12 more years before I retire".

[Background painting of Dr. Charles Norris, the first CME of NYC ME Office, Dr. Gonzales, the second CME of NYC ME Office, and Dr. Milton Helpern, Third CME of NYC ME Office]

Before I retire I would like you, since you are the largest medical examiner in the country, I would like you to start an organization of all the professional people who work as medical examiners or as forensic pathologist, even though they can't work as medical examiners they might work in coroners offices…but at least the medical people, the non-elected people who do this kind of work and they didn't want to include at that time. We didn't include toxicologists – not that they didn't consider them important – but this was primarily for the physicians who had the responsibility for certification, the investigation, certification. He said "could you start that?" He said "I think you would be able to get some money" but the old rascal, he had fifty million dollars but he wouldn't spend a nickel. He was as tight as could be.

Eckert: What was he then?

Helpern: He was a man [unclear] and was one of its directors, his father had been there too so they were and old New York family. A very interesting man. He wanted to get this going, but he wanted to have this organization started so that people who do medical examiners work and forensic pathology, the medical people, would have an organization in which they would be able to consult each other, talk to each other. There wouldn't be so much a scientific organization as, I don't know how you would say it, a "professional organization" to increase to improve standards. I said alright, I have a planning committee at the office, and several years ago we just wanted to get it done, and we set up this organization (NAME). I invited all medical examiners there, I invited some of the coroners who were pathologists and the equivalents of a medical examiner – hey were forensic pathologists and so on. We set up and we were going to meet simultaneously with the Academy. And we had a day that we met, we had the audience and so on, but the Academy, really the Section of Pathology, didn't understand what was really needed. They didn't know…they wanted somebody to give papers but really without knowing what we were all about. But I set that up with Richard Childs. Our first meeting was in Chicago. And a lot of people did not like the idea. The toxicologists were getting worried, the coroners were getting worried.

The Office of Chief Medical Examiner of the City of New York ("OCME") was established in 1918 pursuant to a 1915 Act of the New York State Legislature.

In addition to being the first governmental agency of its type in the United States, OCME established the first toxicology laboratory in 1918 and the first serology laboratory in 1938.

In 1933, New York University established the first Department of Forensic Medicine in the country. Since that date, Medical Examiners at OCME have held faculty positions in NYU's Forensic Medicine department.

OCME's administrative offices were in the Municipal Building from 1918 to 1934, and at 125 Worth Street from 1934 to 1960; autopsies were performed at Bellevue Hospital and other borough municipal hospitals during those years.

In 1960, OCME's six-story headquarters at 520 First Avenue (northeast corner of First Avenue and 30th Street) opened on land provided by New York University, adjacent to NYU Medical Center.

In 1968 the Institute of Forensic Medicine of New York University and the City of New York was created; in 1977 the Institute was named after the late Milton Helpern, Chief Medical from 1954 to 1973. The Institute is comprised of OCME, the New York University School of Medicine, and the New Your University College of Dentistry.

OCME's headquarters at 520 First Avenue houses executive offices, the mortuary, autopsy rooms, X-Ray/photography facilities, as well as toxicology and histology laboratories.

In February 2007, OCME opened the OCME DNA Building located at 421 East 26 Street (east of First Avenue), which houses state of the art Forensic Biology laboratories, as well as OCME's Administrative unit and Evidence facilities including a forensic garage to examine vehicles for forensic evidence.

By: William G. Eckert, MD
NAME Past President
Director of the Milton Helpern Center, originally located at WSU, Wichita, KS. Now located at the Jefferson Parrish Coroner's Office, New Orleans, Louisiana

Audiotape was contributed by the INFORM AUDIOVISUAL PRODUCTION

Reference: History of the Office of the Chief Medical Examiner
http://www.nyc.gov/html/ocme/html/about/about.shtml

Historical Documents

1966 - 1967 Interim Steering Committee

Milton Helpern, M.D. - Interim President
Joseph W. Spelman, M.D. - Executive Vice-President
Leslie Lukash, M.D. - Secretary-Treasurer
Edwin Albano, M.D.
Victoria A. Bradess, M.D.
John I. Coe, M.D.
Daniel J. Condon, M.D.
Theodore J. Curphey, M.D.
Russell S. Fisher, M.D.
Richard Ford, M.D.
Robert M. Greendyke, M.D.
Ali Z. Hameli, M.D.
Robert Hausman, M.D.
R.C. Henry, M.D.
Martin F. Hilfinger, M.D.
Joseph A. Jachimczyk, M.D.
Charles P. Larson, M.D.
Michael Luongo, M.D.
Alvin V. Majoska, M.D.
Geoffrey T. Mann, M.D.
Charles S. Petty, M.D.
T.C. Terrell, M.D.
Sidney B. Weinberg, M.D.
William C. Wilentz, M.D.
Edward S. Zawadski, M.D.

1966 NAME Articles of Incorporation

This document was executed 13 October 1966 by:

Milton Helpern
Michael M. Baden
John F. Devlin
Elliott Gross
Henry Siegel

A Certificate of Incorporation was recorded 20 December 1966 in Albany, New York,

593475

The University of the State of New York

STATE OF NEW YORK:
: SS.
COUNTY OF ALBANY :

Pursuant to the provisions of Section 11, Article 2 of the Membership Corporations Law, consent is hereby given to the filing of the annexed certificate of incorporation of

NATIONAL ASSOCIATION OF MEDICAL EXAMINERS, INC

as a membership corporation.

This consent, however, shall in no way be construed as an approval by the Board of Regents, Commissioner of Education or Education Department of the purposes and objects of this corporation, nor shall it be construed as giving the officers or agents of this corporation the right to use the name of the Board of Regents, Commissioner of Education, University of the State of New York or Education Department in its publications and advertising matter.

IN WITNESS WHEREOF, I, James E. Allen, Jr., Commissioner of Education of the State of New York, for and on behalf of the State Education Department, do hereunto set my hand and affix the seal of the State Education Department, at the City of Albany, this 20th day of December, 1966.

James E. Allen, Jr.
Commissioner of Education

CERTIFICATE OF INCORPORATION

OF

NATIONAL ASSOCIATION OF MEDICAL EXAMINERS, INC.

Pursuant to the Membership Corporation Law

We, the undersigned, desiring to form a corporation pursuant to the Membership CorporationsLaw of the State of New York, do hereby certify as follows:

FIRST: The name of the proposed corporation (hereafter referred to as "the Corporation") is "NATIONAL ASSOCIATION OF MEDICAL EXAMINERS, INC."

SECOND: The purposes for which the Corporation is to be formed are as follows:

a. To provide a professional organization for medical examiners, being those physicians who investigate sudden, violent and suspicious deaths and perform autopsies in connection therewith, as well as for those physicians who investigate such deaths but do not perform autopsies; for the discussion of administrative,career and financial problems affecting medical examiners; the exchange of professional experiences; the consideration of methods of improving and promoting the medical examiner system and for enhancing the prestige of medical examiners.

b. Subject to the provisions of the Membership Corporations Law, to acquire by gift, legacy, bequest,

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devise, grant, purchase, exchange, lease or any other lawful means, funds and property of every kind and nature, without limitation as to amount or value, and to hold, invest, re-invest, administer, use, expend, contribute, convey, assign, dispose of and/or devote the same or any part thereof, including income or capital, or both, for the advancement, promotion, fostering or accomplishment of the aforesaid purposes, or any of them.

c. To the extent permitted by law, to exercise its rights, powers and privileges, to hold meetings of its Board of Directors, to have one or more offices, and to keep the books of the Corporation, in any part of the world.

d. To do any and all lawful acts and things suitable, useful, desirable or proper, for the advancement, promotion, fostering or accomplishment of the aforesaid purposes, or any of them, directly or indirectly, and either alone or through the agency of, or in association in any form with, other persons, organizations, firms, associations, corporations or institutions, within such limitations as are provided by law.

e. Nothing herein contained shall be deemed to authorize the Corporation to establish or maintain in the State of New York any institution or agency mentioned in Section 11 of the Membership Corporations Law of the State of New York or in Section 35 of the Social Welfare Law of the State of New York, or in such corresponding section or sections as may from time to time be in force.

f. The Corporation shall not be conducted or operated for profit, and no part of the net earnings of the Corporation shall inure to the benefit of any member or any individual; and none of such net earnings nor any of

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the property of the Corporation nor any other assets of the Corporation shall be used otherwise than for any of the purposes of the Corporation. No substantial part of the activities of the Corporation shall consist of carrying on propaganda, or otherwise attempting to influence legislation.

g. Subject to approval of the Supreme Court, in the event of liquidation, dissolution or winding up of the Corporation whether voluntary or involuntary or by operation of law, the property or other assets of the Corporation, and any proceeds thereof, insofar as permitted by law, shall be distributed to such non-profit corporations, associations, trusts, community chests, funds and foundations, which shall have received notice of exemption and which shall be exempt from federal income taxes under Section 501 of the Internal Revenue Code or such corresponding section or sections as may from time to time be in force, as the members of the Corporation, by majority vote thereof, shall determine; and none of such property, assets or proceeds shall be distributed to, or divided among, any of the members of the Corporation.

THIRD: The Corporation may do any one or more of the acts herein set forth as its purposes within or without the United States of America or in any part of the world.

FOURTH: The principal office of the Corporation is to be located in the City, County and State of New York.

FIFTH: The number of directors of the Corporation shall not be less than three (3) nor more than seven (7).

SIXTH: The names and residences of the directors until the first annual meeting of the Corporation are as follows:

Dr. Milton Helpern — 99 East 8[illegible] Avenue, New York, N.Y.

Dr. Leslie Lukash — P.O. Box 160, East Meadow, New York

Dr. Joseph Spelman — 13th and Wood Street, Philadelphia, Pa.

SEVENTH: All of the subscribers to this Certificate of Incorporation are of full age; at least two-thirds of them are citizens of the United States; at least one of them is a resident of the State of New York; and, of the persons hereinabove named as directors, at least one is a citizen of the United States and a resident of the State of New York.

IN WITNESS WHEREOF, we have made, subscribed and acknowledged this certificate this 13th day of October, 1966.

Milton Helpern (L.S.)

Michael M. Baden (L.S.)

John F. Devlin (L.S.)

Elliot Gross (L.S.)

Henry Siegel (L.S.)

STATE OF NEW YORK)
: SS.:
COUNTY OF NEW YORK)

On this 13th day of October, 1966 before me personally came MILTON HELPERN, MICHAEL M. BADEN, JOHN F. DEVLIN, ELLIOT GROSS and HENRY SIEGEL, to me known and known to me to be the individuals described in and who executed the foregoing instrument, and they duly adknowledged to me that they executed the same.

Edward D. Moldover
Notary Public

EDWARD D. MOLDOVER
Attorney and Counsellor at Law
State of New York No. 31-2741025
Qualified in New York County
Commission Expires March 30, 1967

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MILTON HELPERN, being duly sworn, deposes and says:

That he is a subscriber to the foregoing Certificate of Incorporation; that all of the subscribers of the said Certificate of Incorporation are of full age; that at least two-thirds of them are citizens of the United States; that at least one of them is a resident of the State of New York; and that, of the persons named in said Certificate of Incorporation as directors, at least one is a citizen of the United States and a resident of the State of New York.

That no previous application has been made to any Justice of the Supreme Court for an order approving said Certificate of Incorporation and consenting that the same be filed.

Milton Helpern
Milton Helpern

Sworn to before me this
13th day of October, 1966.

Edward D. Moldover
Notary Public

EDWARD D. MOLDOVER
Attorney and Counsellor at Law
State of New York No. 31-2741025
Qualified in New York County
Commission Expires March 30, 1967

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I, GEORGE POSTEL, a Justice of the Supreme Court of the State of New York, Judicial Districts, do hereby approve the foregoing Certificate of Incorporation of NATIONAL ASSOCIATION OF MEDICAL EXAMINERS, INC., and consent that the same be filed.

Dated:

OCT 18 1966

Justice of the Supreme Court of the State of New York

The undersigned has no objection to judicial approval being granted.

Louis J. Lefkowitz
Attorney General
State of New York

State of New York
DEPARTMENT OF STATE } ss.:

26864

I CERTIFY That I have compared the preceding copy with the original Certificate of Incorporation of

NATIONAL ASSOCIATION OF MEDICAL EXAMINERS, INC.

filed in this department on the 22nd day of December, 1966, and that such copy is a correct transcript therefrom and of the whole of such original.

WITNESS my hand and the official seal of the Department of State at the City of Albany, this twenty-second day of December, one thousand nine hundred sixty-six.

John P. Lomenzo
Secretary of State

Form CO-304

593375 - 9

CERTIFICATE OF INCORPORATION

OF

NATIONAL ASSOCIATION OF MEDICAL EXAMINERS, INC.

STATE OF NEW YORK
DEPARTMENT OF STATE
FILED DEC 2 2 1966
TAX $ None
FILING FEE $ 50

John P. Lomenzo
Secretary of State
By M. K.

P-31-N.Y.

WIEN, LANE & KLEIN
ATTORNEYS AT LAW
LINCOLN BUILDING
60 EAST 42ND STREET
NEW YORK, N.Y. 10017
MU7-8700

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EC and BOD History 1970 to 1994

Executive Committee Meeting
February 25, 1970
Drake Hotel, Chicago
[NAME Did not have a separate Board of Directors at this time]

Present:
John I. Coe, MD, Minneapolis MN
John F. Edland, MD, Rochester NY
Russell S. Fisher, MD, Baltimore MD
Robert Hausman, MD, New York NY
Milton Helpern, MD, New York NY
Joseph Jachimczyk, MD, Houston TX
Charles Larson, MD, Tacoma WA
Leslie Lukash, MD, East Meadow NY
Michael Luongo, MD, Boston MA
Alvin V. Majoska, MD*
Geoffrey T. Mann, MD*
Charles S. Petty, MD*
Joseph Spelman, MD*
William C. Wilentz, MD*

William G. Eckert, MD and Feliks Gwozdz, MD were present as guests. Past-President Helpern ran the meeting.

Dr. Gil Corrigan offered a resolution concerning special educational requirements for medical examiners which could be implemented at medical schools. The issue was one of recruiting people into the field, keeping them in the field, and to provide capable qualified people to work in various jurisdictions. The resolution was tabled but discussion ensued.
The feasibility of practicing general pathology and forensic pathology was discussed.
It was suggested that the legal portion (legal medicine) of forensic pathology training be relaxed
The “outmoded” coroner’s system was discussed as was the forensic pathologist’s lack of control of such systems
The American Board of Pathology’s relaxing of clinical pathology training requirements for forensic pathologist training was discussed, as was the combined AP/FP certificate
The concept of one-week forensic pathology courses for general pathologists was discussed, along with “apprenticeships” in hospitals where forensic autopsies were performed
The “downgrading” of medical examiner systems was deplored. That is, some coroner systems were just changing the name of the system instead of improving it.
The need for regional forensic pathologists was identified as was the need to recruit more people into the field

R Page Hudson, MD, Charles P Larson, MD, and John Edland, MD were elected as the Executive Committee representatives for the Board of Directors.

Combined Interim Executive Committee and Board Meeting
September 15, 1970
Royal Coach Motor Hotel, Atlanta, Georgia

Present:
John I. Coe, MD, Minneapolis MN
Ali Z. Hameli, MD, Wilmington DE
Page Hudson Jr, MD, Chapel Hill, NC
Charles Larson, MD, Tacoma WA
Leslie Lukash, MD, East Meadow, NY
William Q. Sturner, MD, Dallas TX
Sidney Weinberg, MD, Hauppage NY

Dr. Leslie Lukash presided over the meeting.

Bylaws amendments were approved (not details)
The need to concentrate NAME meeting programs on administrative issues facing the nation's medical examiner was emphasized
It was stated that a report on the nation's medical examiner and coroner systems was being prepared
12 new members were approved for acceptance
The idea of inviting Canadian and British counterparts to meetings was discussed
It was proposed that NAME become a "licensing" organization to accredit medical examiner systems (Lukash)
It was proposed that national standards be developed for "Care of the Dead" (Lukash)
Hopes for speed growth of NAME were expressed and that NAME could become a "sister" organization to AAFS (Larson)

Executive Committee and Board Meeting
February 20, 1971
Phoenix, Arizona

A list of attenders has not been located. Neither have the Minutes. However, the following Board activities were reported to the membership the following day at the general NAME meeting:

ASTM was considering the development of standards for a Medico-Legal Death Investigation System through a committee on forensic science utilizing the Pathology/Biology Section of AAFS
ASTM was informed by NAME that NAME would not take a position until further discussion could occur
Doctor Francisco resolved that NAME undertake standards at an appropriate time and would establish liaison with ASTM. The motion was seconded and approved by the Board.

Board of Directors Meeting
November 9, 1982
Newporter Inn, Newport Beach, CA

Due to increasing journal costs, membership dues were increased from 50 to $60.
The bylaws wording "Affiliate member shall spend the majority of his time in the death investigation field and shall work directly under the administrative supervision of his sponsoring member" was approved (Wiecking),
Discussion occurred as to whether Past Presidents should be accepted as voting members of the Board. Action was deferred (Noguchi)
A disaster committee reported that it was trying to develop a standard procedure manual (Noguchi).
A charge was distributed to define what Regional Coordinators were supposed to do
The results of a "Special Statistics" pilot study (Ryan) based in New England were discussed. Presumably, this had something to do with office funding and staffing. A motion was made to further fund the study, but the motion was defeated. An ad hoc committee was formed to determine if the study should continue.
It was concluded to be good practice to let a medical examiner know if one was interviewing for his/her job, but that not doing so would not be unethical. It was also concluded that NAME should not make recommendations about expert witness fees, and that a lawyer should be involved in Ethics Committee deliberations (Hameli).
Discussion occurred about pursuing AMA House of Delegate representation (Sturner)
It was moved, seconded, and approved that accredited facilities (10 at that time) should be made available to those who need them to perform duties that need to be done and require such facilities (Bell).
It was reported that a "White Paper" was being prepared for the journal (topic unspecified) (Eckert)
The applications of a surgeon and a dentist were tabled.
Books called "Crime Doctor" and being prepared by Charles Larson were discussed in terms of NAME sponsorship. No action was taken.
A request was made to distribute the Minutes of the previous meeting prior to the next meeting rather than at it. No specific action was taken (Katsas).

Board of Directors Meeting
February 14, 1989
Las Vegas, Nevada

The 2ND Edition of the NAME Inspection and Accreditation Standards were discussed. (McQuillen)
Release of Medical Examiner Case Information was discussed, there had been requests for NAME to take a position on this. It was reported that NAME had previously considered autopsy reports to be privileged and not releasable without permission from next of kin. President Reay had requested a NAME member to prepare an amicus brief, but none was received. The matter was referred to a committee (McCormick, Hegert, Goode, Reay)
It was suggested that NAME take a stand a stand supporting legislation to prevent religious exemptions from prosecution. The matter was referred to the Human Rights Committee with a charge to develop a statement (reay)
The proposed development of ASTM Standards for death investigation were discussed (McQuillen). A motion was made (Smialek) for NAME to appoint a liaison to ASTM. The motion passed.
The proportion of the NAME Secretary's (Judy Thomas) salary being paid by NAME and SLU was discussed. NAME's share was increased by $3,000 to purchase 53% of her time.
A recommendation was made (Reay) that NAME's fiscal affairs be moved to a calendar year basis.
Questions arose about the budget and it was noted that secretarial costs and the journal drove the budget while dues were the only reliable income (Smialek, Stahl, Reay)
Dr. Hegert (President) reported that he thought it was time for NAME to establish itself as the resource organization for forensic medicine in this country.
Committees were discussed extensively (Hegert). It was pointed out that some committees had no clear purpose, the duties of others overlapped, and some did not do much. Attempts were made to address these concerns.
Relations with the Journal were discussed as was the need to find contact people there to address relevant issues (Reay/Eckert), and that relations had been very loose and needed to be formalized.
The concepts of an annual lecturer and Helpern award were discussed and that criteria and policy for these be fine tuned.
The Liaison and Information Committee was discussed in terms of its relative inactivity and confusion about what its tasks were (McCormick). Dr Hegert envisioned that three main committees would be Standards and Accreditation, Liaison and Information, and Education and Publications.
The Committee on International Forensic Medicine reported its communications with organizations overseas (Noguchi).

The Committee on Contractual Arrangements (Copeland) reported some salary survey infomation but the Board decided not to distribute the information until it could be further examined.
The Committee on Medical Device malfunction reported that it was determining the direction that the committee would take (Smialek and Graves).
The need to have a Committee on AIDS was discusses (Hegert).
The Standards and Accreditation Committee duties were reviewed (Hegert).
Eleanor McQuillen was formulating a Peer Review Committee to address specific issues when a request was made of NAME to evaluate a particular problem.
Confusion was expressed about the Forensic Communication Network Committee and how it related to other committees such as Liaison and Information and Inspection/Accreditation (Goode). It was reported that the Regional Coordinators Committee had been dissolved and became the Forensic Communication Network Committee which would execute surveys (Hegert)
The development of policies for Inspection/Accreditation was discussed (Goode). A 40-page draft checklist had been sent out for review.
It was suggested that the Ethics and Legal Committees be combined (Wiecking).
The Human Rights Committee reported on some issues.
It was mentioned that NAME needed to develop standards regarding the use of medical examiner cases for research purposes (Laposata). A draft was to be prepared for the next meeting.
The issue of Pathology Assistants and their role was discussed (Eckert/Reay/Brissie).

Board of Directors Meeting
October 13, 1989
Sanibel Island, Florida

Dr. Reay Presiding.

Dr. Hegert reported that Dr. Goode had resigned from Inspections and Accreditation.
An Executive Decision was made to keep the fiscal year on an April to March basis.
The value of keeping NAME at SLU, following the death of Dr. Gantner, was discussed.
A motion was approved to allow audio taping of presentations
A dispute with the Antlers Hotel in Colorado Springs was discussed concerning breech of contract for a proposed meeting. A motion passed to consult an attorney about the issue and to allow the Executive Committee to authorize payment of legal expenses above $500.
A motion passed to hold the 25th anniversary meeting (1991) on a cruise ship in Hawaii.
A motion passes to admit most applicants except three who may not have met requirements, and to assess membership criteria.
A motion passed to require evidence of medical licensure and Board certification if claims of certification are made in application materials.
The Affiliate Membership, Education and Publications, and Journal Committee reports were reviewed.

A motion passed that correspondence be directed to the journal Editor and Publisher expressing NAME's concerns about the journal.
A motion passed that the Editor and Associate Editor be ex-officio members of the Journal Committee and that the Journal Committee Chair be appointed by the President.
A motion passed that the President, with concurrence of the Executive Committee, would accept the person nominated to give the annual NAME lecture. Guidelines for the Helpern Award (Laureate) were also presented.
The Liaison and Information, Tissue Bank, Pediatric Toxicology Committee reports were reviewed.
Interactions and projects with CDC were discussed. A motion passed to develop a preliminary application for medical examiner data collection.
A motion passed to send a letter to DHHS and the President spelling out what the role of NAME and medical examiners are in death investigation.
The International, Past Presidents, and Contractual Arrangements Committee Reports were reviewed. The Salary Survey information was tabled because of controversy about potential abuse and Federal Trade Commission issues. The information in the survey was not made available to NAME.
The Medical Device, AIDS, and Child Abuse Committee reports were reviewed. The availability of educational materials on AIDS was noted. It was also noted that a formal Child Abuse Committee had not been established but there were issues about religion and child abuse.
Liaison and Delegate reports were reviewed.
The Standards and Accreditation Committee Report was reviewed. A motion was passed to impose a $600 inspection fee and a $300 re-inspection fee.
The Forensic Communications Network was discussed.
Proposed bylaws changes were discussed.
A matter of alleged falsified credentials was referred to the Ethics Committee, as was a complaint about information provided by an expert. A motion passed to refer to the Ethics Committee.
The ASTM Standards Committee was discussed, and that the committee was being reorganized.
A motion was passed for the President to send a letter in support of legislation in California which was geared at controlling sexually transmitted disease.
A motion passed for the President to develop a response to concerns about religious exemptions in child abuse cases.
A motion was passed for the President to obtain more information about complaints regarding the way in which infant death investigations are conducted.
A motion passed to appoint Judy Thomas as the Executive Secretary.

Board of Directors Meeting
February 20, 1990
Cincinnati, Ohio

Dr. Hegert Presiding

President Fierro discussed her goals to evaluate committees and change some committees, enact proposed bylaws changes, address journal issues, continue work on inspections and accreditation, and address NAME office administration issues.
The Secretary-Treasurer and Meeting Manager reports were discussed.
The Inspections and Accreditation Committee Report was discussed along with the new checklist.
The Bylaws, Liaison and Information, Pediatric Toxicology, Past Presidents, and AIDS Committee Reports were discussed. The AIDS Committee was disbanded because it was inactive.
Delegate and Liaison Reports were presented.
The Quality Assurance (formerly Peer Review) Committee Report was discussed. Direction was given to further discuss fees and guidelines for how the Committee would operate.
The Program, Management and Administration, Affiliate Membership, Milton Helpern Lectureship, Membership and Credentials, and Ethics Committee Reports were discussed.
The ad hoc Committee on Utilization of Autopsy Tissue for Research reported were working on guidelines.
More conversation occurred regarding ASTM Standards development which seemed to be dying and evolving more toward toxicology issues.
Lengthy discussion ensued about the journal and related issues. Major issues included editor selection, quality, ownership, and the outcome of meetings with the publisher.
A motion passed to adopt a 4-point proposal to address journal issues. This included Oversight of Editorial Control by NAME, the adoption of peer-review standards for acceptance of articles, to implement standards and document their use, and that NAME would select future editors with approval by the publisher.
A motion passed to contact Dr. Lester Adelson to determine whether he would accept a position of Honorary Editor.
A motion passed to accept the publisher's offer to hold and fund an annual editorial board meeting at NAME's annual meeting.
Distribution of NAME's organ and tissue brochure was discussed.
A motion passed for the Journal to publish, in each issue, a one-page summary of NAME works in progress to inform the membership of what is transpiring in terms of NAME activities. The Journal and Education Committees were to be assigned this task.
Manner of death classification was discussed because of disputes between medical examiners and vital records registrars. A committee was to be appointed to study the issue, and a letter was to be drafted requesting clarifications from NCHS.

Board of Directors Meeting
September 14, 1990
Brown Palace Hotel, Denver, Colorado

Dr. Marcella Fierro, Presiding

The training session for the new inspection guidelines was acknowledged.
The development of CAP Forensic Pathology Practice Guidelines was discussed
A draft generic disaster plan was produced.
A settlement with the Antlers Hotel (Colorado Springs) was announced concerning its inability to meet obligations in the holding of a meeting there.
Discussion of Los Angeles' plan to establish a coroner system occurred and that this was contrary to NAME's recommendation. Later, it was reported that a Medical Examiner would report to the County Board of Supervisors.
The idea of regional rosters of forensic pathologists to assist in mass fatality incidents was discussed.
A CAP forensic quality assurance program was announced.
The idea of medical examiners as a group in in APHA was put forth.
The Executive, Secretary-Treasurer, Finance, and Meeting manager's reports were reviewed.
Nominating Committee recommendations were accepted.
Education and Programs Committee Report was offered.
It was announced that the journal would publish abstracts of its annual and interim meeting and that the journal had first right of publication of articles presented at meetings.
The Tissue Banking, Pediatric Toxicology, and Medical Device Committee Reports were heard.
CDC projects and NAME-CDC interactions were discussed.
Past Presidents and International Committee reports were heard.
The Forensic Pediatric Pathology Committee announced that it may present a pamphlet for the parent of murdered children to the Board for endorsement.
The importance of having an AMA delegate was discussed.
The Scientific Society President's Forum was discussed.
Intersociety Pathology Council Minutes were reviewed.
Standards and Accreditation, Ethics, and Membership and Credentials Committee Reports were reviewed.
A motion passed not to accept into membership armed forces personnel who did not meet established criteria for membership.
A motion passed to establish a committee to develop a separate category of military affiliate for membership in NAME.
A motion passed that applicants must submit a notarized photocopy of current medical license.
Ad hoc Committee reports for Implementation of Inspection and Accreditation and Forensic Communication Network were discussed.
The Finance Committee reported that the need for a full-time secretariat may emerge, that the budget needed to be presented more formally than in the past, and that dues increases may be on the horizon.
The Journal Subcommittee reported that a Journal Editor Search Committee was formed.
Journal costs were discussed.
Other ad hoc committee reports were reviewed.
A proposal to hold "animal house" presentations every other year was referred to the Program Committee.

The Awards Committee reported on the establishment of a Helpern Medallion. It was decided that any proposed recipient of the Helpern award would be presented to the Executive Committee for approval at the Interim Meeting, so that disclosure would be minimized.
A motion passed allowing the Awards Committee to carry out its mission and spend money that had been budgeted to it.

Board of Directors Meeting
February 19, 1991
Anaheim, California

Dr. John Butt, Presiding

There was discussion about the apparent confusion regarding the roles of certain committees and that too many committees exist.
Special plans and awards for the 25th Anniversary Meeting in Hawaii were discussed.
A motion passed to invite Mrs. Helpern to the Anniversary Meeting but that NAME would not pay her expenses.
A motion passed to fund the commemorative program and to make the program available to the general membership with a $2.00 per program cap on production cost.
The Journal Editor Search Committee reported that James Luke, MD, was its first choice. A motion passed to recommend Dr. Luke to the publisher as the new Editor.
A special anniversary issue of the journal was announced as forthcoming. A motion passed to table discussion of the details of that issue. A motion passed to leave the details of the issue up to the Executive Committee and Editor.
Travel and expense procedures for meeting site selection and staff attendance at meetings was discussed, as was allocation or complimentary rooms.
A motion passed for the Meeting Manager to determine whether, at Interim Meetings, it is most economical to use locals as support staff or to bring in NAME staff.
A motion passed to accept outstanding service award nominees.
A motion passed to accept an amended travel policy regarding car rentals.
Journal expense was discussed and it was pointed out the $65 or the $75 annual dues were required to pay journal costs. A motion passed that dues be increase to $130 per member and that affiliate dues be raised proportionately and that Non-US members would pay $20 more than US members.
A motion passed to delay discussion of the audit report until the Fall meeting.
A motion passed to charge $1000 per day plus costs for external audits. The examiners professional component would be an additional amount.
The Pediatric Pathology Committee suggested that NAME take a stand on whether autopsy protocols should be used but discussion was postponed.
The Program Committee reported its desire for abstracts to be promptly published in the journal following the annual meeting.

A motion passed to endorse the document made for parents of murdered children, and to also endorse the Florida Medicolegal Investigators Association Continuing Education Series Program.
A motion passed to accept new members as recommended by the Membership and Credentials Committee.
It was announced that the Tissue Banking brochure (Guidelines for ME/Cs and OPOs) was ready for publication

Board of Directors Meeting
September 20, 1991
Hawaii

Dr. Marcella Fierro, Presiding

Judy Thomas had retired as Executive Secretary and was now replaced by Denise Randazzo (now McNally)
The recent implementation of new accounting procedures was reviewed.
It was reiterated that the dues increase to $130 would go into effect in December 1991.
It was stated that dues would go up incrementally in the future.
It was stated that long range planning would focus on ways to get revenue that would decrease reliance on annual meeting revenue.
The drain of journal costs on NAME was reiterated.
The decision of the Board to not have a contingency fee system for inspections and audits was discussed along with the decision to keep a flat fee plus expenses.
A motion passed to allow $1500 for the meeting manager to attend a meeting manager's school.
A motion passed to have the Journal Subcommittee attempt to negotiate with the journal publisher to improve the relationship.
A motion passed for the disaster manual project to be referred to the Education-Publication Committee for preparation as a publication.
Discussion occurred regarding the unfunded and unfilled positions in forensic pathology training.
The Editor Search Committee Report was reviewed.
The Helpern Award and Liaison and Information Committee reports were discussed. A motion passed to authorize Dr. McCormick to complete the dissemination and recovery of survey information.
A motion passed to fund two trips annually for appointed NAME members to attend UNOS meetings.
The Pediatric Toxicology and CDC Projects Committee reports were reviewed. A motion passed for Dr. Smialek to remain as liaison for CDC, CSPC, and FDA medical device issues.

The International and Medical Device Committee reports were discussed. A motion passed that Dr. Smialek should report relevant details to the membership annually.
After review of the Pediatric Forensic Pathology Committee report, a motion passed to deny approval of a resolution/policy statement proposed by the Committee that some felt would impair the quality of childhood death investigation.
A motion passed to thank Dr. Sturner for his many years as Delegate to the AMA.
The IPC Liaison noted that Dr. Hirsch (a NAME member) had become President of the American Board of Pathology.
The Inspection/Accreditation Committee report was reviewed.
The Subcommittee on External Audit reported. A motion passed that three criteria proposed for audits be adopted. A motion passed that this committee would carry out its duties subject to approval of the Executive Committee.
Discussion occurred about an audit conducted in a particular state, and who, in general, should have access to such audit reports. It was concluded that the requesting agency and NAME would have a copy, but such reports would not be otherwise available.
Plans were discussed to keep an Ethics Committee but disband the Legal Committee.
A motion passed to allow a dues option for affiliate members who wished to obtain the journal.
A motion passed to refer a request back to Committee that an affiliate be involved in audits. Discussion would be focused on meeting such requests when they occurred, and how to establish the criteria for such an affiliate.
A motion passed to NOT alter affiliate membership requirements to accommodate requests from military personnel.
A motion passed to thank Bill Haglund and Don Reay for donating their disaster manual to NAME.
A motion passed that the next year's program should include a training session on death certification.
A motion passed to refer inquiries about a specific dilemma to the medical examiner involved in that dilemma.
A motion passed to disapprove a $1000 donation to the National Library of Medicine.
A motion passed for the President to contact the pathology training program directors' group to get information and to request that a NAME member could attend its meetings.
A motion passed not to address an issue raised by a NAME member regarding an organization that had nothing to do with NAME.
It was announced that John Butt would be the new Chairman of the Board.

Board of Directors Meeting
February 18, 1992
New Orleans, LA

Dr. John Butt, Presiding

Kathleen Diebold was introduced as a new secretary at the NAME office.

An announcement was made that the Executive Committee would begin to meet for a full day so a half-day could be committed to strategic planning.
It was noted that no members had resigned because of the recent dues increase.
The President's, Meeting Manager's, AMA Delegate, and IPC Liaison reports were reviewed.
A motion was tabled to endorse a pamphlet published by SIDS Program Professionals.
A motion passed the endorsement, in general, be a function of the Education and Publication Committee.
It was announced that Dr, DiMaio was the new journal Editor.
Discussion occurred about the confusion between the Helpern Laureate Award and the Annual Helpern Lecture. A motion passed to remove the Helpern name from the annual lecture.
The Liaison Committee reported that data from the transplantation policy questionnaire were being reviewed. Results were to be forwarded to the membership.
Organ/Tissue procurement issues were discussed.
The I&A and External Audit Program reports were reviewed. It was noted that follow-up on the implementation of audit recommendations would be useful.
A motion passed to recommend that the bylaws be changed so that a member be a member in good standing for at least 5 years before emeritus status could be granted.
A motion passed to reduce affiliate dues, with journal, to the same price a member pays.
A motion passed to thank Dr. Jordan for all the work he had done on the Finance Committee.
It was noted that the Executive Committee recommended that the Past President's Committee elect a chair rather than the chair defaulting to the immediate past-president.

Board of Directors Meeting
September 18, 1992
Milwaukee, WI

Dr. John Butt, Presiding

President Conradi reported that she had revamped committees.
A note was made that the Disaster Manual was ready for purchase.
Dr. Stahl was congratulated on his selection as Armed Forces Medical Examiner.
Journal costs rose 5%.
Discussion occurred about moving finances to a calendar year.
A motion passed to select a meeting site at least 2.5 years in advance of the meeting.
Discussion of having a Resident Member category occurred.
Proposed bylaws changes were discussed including those relating to emeritus status, standing committees, external audits, and Past Presidents Chair.
Duties of the Liaison and Information Committee and Forensic Communications Committee were clarified.
It was noted that NAME would continue to pursue "profit" making ventures by publishing marketable reports.
A request to endorse a pediatric autopsy protocol was tabled.

It was noted that there was no place for NAME to have a Board Member on UNOS, but that NAME could be a member organization.
A report on death certificate issues was presented along with plans for an NCHS death certificate revision meeting.
An FDA representative was at the meeting and expressed a desire to strengthen the relations between government and NAME.
It was recommended that Dr. Joe Davis' survey (salary?) be continued in future years.
It was recommended that NAME not take a stand on alleged Prozac-related suicides and involvement of the Church of Scientology.
The usual standing and ad hoc committee reports were reviewed.

Board of Directors Meeting
February 16, 1993
Boston, Massachusetts

Dr. Sandra Conradi, Presiding.

Discussion was held concerning possible implementation of poster sessions at the NAME meeting.
The fiscal year had been changed to coincide with the calendar year
A motion passed to select meeting sites at least 18 months in advance of the meeting as compared with the 2.5 years that had been approved by motion at the last business meeting.
It was reported that AMA considers it unethical to participate in a legal execution or to pronounce such people dead during an execution, but it is not unethical to certify such deaths in the course of duties.
The Education-Publications Committee indicated it was going to prepare an information brochure on medical examiners and forensic pathologists and what they do.
Journal cost issues were then discussed as was meeting that was held between NAME Journal Committee members and the publishers. Alternative publishers were discussed as was NAME's role in Editor Selection.
Routine standing committee reports were presented.
It was noted that the I&A standards were in need of revision and should be revised on an ongoing basis. OSHA standards need to be better addressed and the list was view as amenable to being pared down.
The Ethics Committee reported an ongoing investigation in which expulsion from NAME was being considered.
The Liaison and Information Committee distributed the results of its first survey and was further evaluating some of the data obtained from 117 responders. An addition survey was under consideration.
It was noted that CDC money may be available for capacity building and meetings. It was also recommended that a survey be done regarding office computerization and data sharing potential.

A musical memorial event was being planned in memory of Feliks Gwozdz (a former NAME member and piano player from Ft Worth, where the annual meeting would be held).
It was announced that NAME would be involved in death certificate revision processes.
Past President, International, and Pediatric Tox Registry Reports were discussed.
A motion was passed to continue NAME NEWS for another year (it had begun in 1992).
A motion passed to spend $250 toward the AMA Coalition of Physicians against Family Violence.
It was recommended that NAME produce a directory of members to be published every other year and to contain the current bylaws, membership roster, and other information about NAME.

Board of Directors Meeting
September 10, 1993
Fort Worth, Texas

Dr. Sandra Conradi, Presiding

It was noted that Dr. Hegert had been nominated to the UNOS Board of Directors.
The availability of DCD grant money to NAME was mentioned.
A dues increase was discussed but not considered necessary this year.
It was noted that several pathologists or coroners had been elected or appointed to several executive positions in the AMA.
An AMA resolution supporting child fatality review teams and second suggesting that religious exemptions for child abuse be removed from the federal CFR.
A recommendation was made that NAME join the coalition against family violence. It was also discussed that name be in the forefront in supporting a number of causes rather than following the lead of other organizations.
An increase in journal cost was discussed. The need to obtain regular reports from the Editor was mentioned. The desire to publish meeting abstracts in the journal was again mentioned.
The need to establish written criteria for the Annual Lecturer and Helpern Laureate was discussed.
It was noted that NAME now had 40 trained inspectors. The first draft of suggested revisions for inspections standards was reviewed.
Multiple issues were discussed concerning organ and tissue procurement including concerns about legislation that would impact on medical examiner discretion.
During an Ethics probe, a member resigned. It was felt that NAME would have expelled him had he not resigned.
Upcoming meetings to revise the US Standard Death Certificate were reviewed, and the progress on a CAP manual for death certification was discussed.
Past-Presidents reported progress on the development of a historical archive and recognition of long-time accredited offices.

The International and Nominating Committee Reports were presented.
MECISP, Medical Device Malfunction, Pediatric Toxicology, and NAME NEWS were discussed.
Plans were to be developed for charging for ads in NAME NEWS to offset costs.
It was noted that a proposed bylaws amendment was I conflict with existing bylaws.
A letter was to be drafted for Los Angeles supporting a medical examiner system.
It was noted that any NAME member representing NAME at a meeting would be required to obtain prior approval from the Executive Committee for reimbursement.
Policy was reiterated that upon appointment of the Nominating Committee by the President, the Board would be contacted to solicit names for candidates to the Board, and that any nominations would be sent by the Secretariat to the Nominating Committee.

Board of Directors Meeting
February 15, 1994
San Antonio, Texas

Dr. Stan Harris, Presiding

The Past-Presidents Committee announced that it would develop a Quality Assurance Program and would also develop a brochure outlining the history of NAME and how to become a member.
An ad hoc Strategic Planning Committee was established
NAME agreed to work with CBS on a show involving controversies between medical examiners and OPOs.
It was announced that NAME was operating on a zero-based budget and that conference grant money had been received from CDC.
A problem was abstract processing was noted an a plan was developed to prevent such problems in the future. The outlook for commercial exhibitors at meetings was reported as good. Audiotapes of meetings may end because they did not produce revenue.
A draft of the pamphlet “So you want to be a Forensic Pathologist” was reviewed.
The Subcommittee for Awards presented criteria for the Annual Lecturer, Helpern Laureate, and Outstanding Service Awards. Motions passed to bestow these awards on specific individuals that year.
Inspections were discussed in terms of follow up for reinspection and the relatively small number of offices that had been inspected. It was recommended that an annual meeting include information about the realities of the inspection process.
Past Presidents reported the need to strengthen the accreditation program and perhaps should work with other professional organizations. The proposed Quality Assurance Program was mentioned as was the plan to complete its brochure by the fall meeting.
Various issues regarding tissue procurement and proposed legislation and articles were discussed.
The Strategic Planning Committee offered its first report.
CDC and Federal reports were offered.

The International Committee reported on several meetings.
AMA opposition to physician assisted suicide was noted and proposed bans on handguns and semiautomatic weapons was discussed along with OPO issues.
NAME's inability to financially support to proposed new museum of Health and Medicine was voiced.
Several NAME publications were discussed in terms of costs and amount of revenue generated.
It was noted that NAME had not yet signed a written agreement with the journal publisher and that it would not sign the currently proposed agreement.
It was noted that a Policy Book had been prepared.
A motion passed to cosponsor a CAP seminar on Medical and Legal Investigations pertaining to resident involvement in such investigations.
The Board took the position that it did not recognize the American Board of Forensic Examiners.
Steve Clark's work with Jeff Jentzen on death investigator pre-employment and work performance evaluation was first discussed at this meeting.
Dues increases were not established but the need to adjust affiliate dues was mentioned.
A request from Correctional Physicians to study deaths in custody evoked some interest but follow up was lost and the project was dropped.
Consideration was given to writing an amicus brief regarding a case in New York but a motion passed to take no action on the matter.

2010 Conversion from 501c6 to 501c3

At the 2010 annual meeting in Cleveland, NAME Secretary Gregory A. Schmunk, MD reported on the actions and considerations of the Finance committee over the previous five years to reincorporate NAME as a 501c3 organization. NAME had originally incorporated in the State of New York in 1966 and had a foreign presence in Georgia, where the NAME offices were located. The committee had approached the American Academy of Forensic Sciences for advice. They indicated that a 501(c)6 organization was essentially a trade organization, not a professional organization and suggested that NAME become a 501(c)3. Both the AAFS and the Forensic Sciences Foundation are 501(c)3 organizations. At the interim meeting in February 2009 the finance committee recommended conversion. It was noted that the NAME Foundation did not have an opinion, either pro or con, on the conversion. Secretary Schmunk then moved to convert NAME to a 501(c)3 and this was passed by the Board of Directors. Reports were filed by the Secretary at the meetings in September 2009 and February 2010. In October 2010 Articles of Incorporation were filed as a 501(c)3 in the State of Missouri under the name of the Secretary-Treasurer, Dr. Schmunk.

On August 3, 2010 the Board received electronic notification with the new (Missouri) bylaws, and agreement of the plan of merger, and the Missouri Articles of Incorporation. Also sent were meeting notices for both the (New York) BOD and the (New York) general NAME membership. The (New York) BOD approved the agreement and plan of merger on October 1, 2010 at the annual meeting of the BOD.

At the general membership meeting on October 4, 2010, Dr. Schmunk presented the rationale for the conversion. This included allowing members to donate to NAME and receive tax benefits. A major benefit to NAME would be that when we did business in many states (such as Ohio where the meeting was held), the organization would not have to pay sales tax on things such as food and beverage. This would save NAME thousands of dollars per year. It was noted that a 501(c)6 is not for profit, but that a 501(c)3 is a non-profit. Individual NAME members incurring mileage and other expenses in the furtherance of NAME business would likely be able to deduct such expenses. The main restriction for NAME under 501(c)3 rules would be that NAME would need to limit lobbying efforts to 20% of our income, but this was felt to not be a concern. Finally, it was noted that conversion to 501(c)3 would open up federal grant monies only available to a charitable foundation.

The Executive Committee had previously moved to adopt the agreement and plan of merger. A minor motion had been passed which made modifications to the name of the two organizations (NY and MO) as contained in the documents. The vote required a 2/3 majority of the members and passed unanimously. NAME then became a MO corporation with Dr. Schmunk as the sole member. The nomination committee had already proposed a slate of Officers and Directors earlier in the meeting and those individuals had been elected. Dr. Schmunk then appointed the entire slate of elected Officers and Directors for the NY corporation to the surviving MO corporation. An opportunity for questions from the audience was given but no questions were posed. The meeting

was then recessed so that the new Officers and BOD could vote on the merger agreement and proposed bylaws for the surviving (new) MO corporation. This vote was immediately held and the merger and bylaws for the MO corporation were accepted.

2010 NAME Articles of Incorporation

ARTICLES OF INCORPORATION

OF

NATIONAL ASSOCIATION OF MEDICAL EXAMINERS

I, the undersigned, being a natural person of the age of eighteen (18) years or more and a citizen of the United States, for the purpose of forming a nonprofit corporation under the provisions of the Missouri Nonprofit Corporation Act, do hereby adopt the following Articles of Incorporation:

ARTICLE ONE
NAME

The name of the Corporation is:
NATIONAL ASSOCIATION OF MEDICAL EXAMINERS

ARTICLE TWO
PURPOSES

The purposes for which the Corporation is organized are as follows:

(a) The Corporation is organized and shall be operated exclusively for nonprofit professional and educational purposes. The specific purposes for which the Corporation is organized are:

1. To provide a professional organization for medical examiners, being those physicians who investigate sudden, violent and suspicious deaths and perform autopsies in connection therewith, as well as for those physicians who investigate such deaths but do not perform autopsies; to obtain and participate in educational, research and professional development activities and literature; for the discussion of administrative, career and financial problems affecting the ability of medical examiners to carry out their professional duties without offering opinions regarding specific death investigations or trials to third parties except as required by the Corporation or the committees thereof to carry out their respective functions; to promote the exchange of professional experiences so as to promote the betterment of the overall profession; to develop consensus professional standards and guidelines; to promote the recognition, value and confidence in the medical examiner system and medicolegal death investigation to the families, the justice system, public health agencies, governmental officials, the medical community and the public; to promote excellence in medicolegal death investigation; to promote the highest practice of medical professional and ethical conduct; to provide professional

education and training to the membership; to promote forensic pathology as a career choice for physicians and to encourage diversity within the profession; to act as a clearinghouse of relevant scientific information and administrative procedures and policy matters; to assist and support the membership of the Corporation; to act as a representative and voice for death investigators and administrative partners in the medical examiner community; to provide leadership and advocacy for the medical examiner, medicolegal death investigator, and medical examiner administrator professions; and to encourage research in forensic medicine.

2. To do any and all lawful acts and things suitable, useful, desirable or proper, for the advancement, promotion, fostering or accomplishment of the aforesaid purposes, or any of them, directly or indirectly, and either alone or through the agency of, or in association in any form with, other persons, organizations, firms, associations, corporations or institutions within such limitations as are provided by law.

(b) The Corporation is irrevocably dedicated to, and shall be operated exclusively for, nonprofit purposes; no part of the income or assets of the Corporation shall be distributed to, nor inure to the benefit of, any of its members, officers, directors, or other private persons, except that the Corporation shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of the purposes set forth herein. No substantial part of the activities of the Corporation shall be the carrying on of propaganda, or otherwise attempting to influence legislation, and the Corporation shall not participate in, nor intervene in (including the publishing or distribution of statements), any political campaign on behalf of any candidate for public office. Notwithstanding any other provision of these Articles, the Corporation shall not carry on any activities not permitted to be carried on: (a) by a corporation exempt from Federal income tax under Section 501(c)(3) of the Internal Revenue Code of 1986, as amended (or the corresponding provisions of any future United States Internal Revenue Law); or (b) by a corporation, contributions to which are deductible under Section 170(c)(2) of the Internal Revenue Code of 1986, as amended (or the corresponding provisions of any future United States Internal Revenue Law).

(c) The Corporation is a public benefit corporation.

ARTICLE THREE

DURATION

The duration of the Corporation shall be perpetual.

ARTICLE FOUR

INCORPORATOR

The names and address of the incorporator is:

Name	Address

Gregory A. Schmunk 1914 Carpenter Avenue
Des Moines, IA 50314

ARTICLE FIVE
MEMBERS

The Corporation shall have members. The By-Laws of the Corporation shall create multiple classes of members and provide differing rights, powers and privileges for each respective class of members, and the requirements for qualification thereof.

ARTICLE SIX
BOARD OF DIRECTORS

(a) The Corporation shall have a Board of Directors, in which board there shall be vested all of the power and authority to supervise, control, direct and manage the property, affairs and activities of the Corporation. The rights, powers, and privileges of the directors shall be fixed in the By-Laws. The By-Laws of the Corporation may, from time to time, be altered, amended, suspended or repealed, or new By-Laws may be adopted, by resolution adopted by a two-thirds (2/3) affirmative vote of the members present at the annual meeting and entitled to vote, so long as not inconsistent with the provisions of these Articles.

(b) The first Board of Directors shall consist of Twenty-Seven (27) voting members, who shall be vested with the power and authority to adopt the initial By-Laws of the Corporation, and one non-voting member, all of which directors shall hold office until their successors are duly elected and have commenced their terms of office, all as provided in the By-Laws. The number of members of the Board of Directors shall be fixed by the By-Laws, as amended from time to time, and at any time after the adoption of the initial By-Laws, the number of directors may be increased or decreased, from time to time, by amendment to the By-Laws, but in no event shall there be less than three (3) directors. Directors shall be elected by the members of the Corporation in the manner and for the terms provided in the By-Laws of the Corporation.

ARTICLE SEVEN
REGISTERED AGENT

The address of the initial registered office in the State of Missouri is 1015 Locust, Suite 400, St. Louis, Missouri 63101. The name of the initial registered agent at said address is David P. Weiss.

ARTICLE EIGHT
POWERS

The Corporation shall have all the powers of a nonprofit corporation under the Missouri Nonprofit Corporation Act and the following enumeration of powers shall not be construed to limit or be in derogation of such statutory powers; provided, however, that none of the powers of the Corporation shall be exercised to carry on activities, otherwise than as an insubstantial part of its activities, which are not in themselves in furtherance of the purposes of the Corporation.

Without in any way limiting the generality of the foregoing powers, the Corporation shall specifically have the following powers, to be exercised only to prosecute and further its nonprofit purposes:

(a) to purchase, take, receive, lease as lessee, take by gift, devise, bequest, or otherwise acquire, and to own, hold, use and otherwise deal in and with any real or personal property, or any interest therein, situated in or out of the State of Missouri, as may be necessary and proper for carrying on its legitimate affairs;

(b) to receive and take by gift, grant, assignment, transfer, devise or bequest, any real or personal property in trust for such purposes as may be necessary and proper for carrying on its legitimate affairs and to execute and perform all such trusts in accordance with the terms, conditions, limitations and restrictions thereof;

(c) to sell, convey, mortgage, pledge, lease as lessor, and otherwise dispose of all or any part of its property and assets;

(d) to purchase, take, receive, subscribe for, or otherwise acquire, own, hold, vote, use or employ shares or other interests in or obligations of domestic or foreign corporations, whether for profit or nonprofit, associations, partnerships, or individuals; and to sell, mortgage, loan, pledge, or otherwise dispose of, such shares, interests or obligations;

(e) to make contracts and incur liabilities which may be appropriate to enable it to accomplish any or all of its purposes; to borrow money for its corporate purposes at such rates of interest as the Corporation may determine; to issue its notes, bonds, and other obligations; and to secure any of its obligations by mortgage, pledge, or deed of trust of all or any of its property, franchises and income; and

(f) to invest its funds, from time to time, in any real or personal property; to lend money for its corporate purposes; and to take and hold real and personal property as security for the payment of funds so invested or loaned.

The Corporation shall have the power to do any and all act or acts, thing or things, necessary or incidental to the accomplishment of the purposes hereinbefore set forth, and generally to do any and all things not herein specifically enumerated which may tend to promote the purposes hereinbefore set forth, provided that such act or thing is permitted to corporations organized under the laws of the State of Missouri by The General Nonprofit Corporation Law of Missouri, and

permitted under the Internal Revenue Laws of the United States to an organization described in Section 501(c)(3) of the Internal Revenue Code of 1986, as amended (or the corresponding provisions of any future United States Internal Revenue Law).

ARTICLE NINE
DISSOLUTION

In the event of the dissolution of the Corporation or the winding up of its affairs, or other liquidation of its assets, all assets of the Corporation remaining after the payment of the Corporation's debts shall be conveyed or distributed only to such organization or organizations created and operated for nonprofit purposes similar to those of the Corporation as the Board of Directors may determine, provided that such organization or organizations are tax exempt under the provisions of Section 501(c)(3) of the Internal Revenue Code of 1986, as amended.

ARTICLE TEN
AMENDMENTS

Any provision contained in these Articles may be altered, amended or repealed, or new provisions may be added, upon receiving the affirmative vote of at least two-thirds (2/3) of all votes cast or a majority of the voting power, whichever is less, by members of the Corporation present at a meeting, or upon obtaining the consent in writing of two-thirds (2/3) of all members entitled to vote with respect thereto; provided, however, that no such alteration, amendment or repeal of any such provisions shall affect the disposition of property contributed to the Corporation before such alteration, amendment or repeal, and any property contributed to the Corporation before any such event shall be used and employed by the Corporation only in accordance with the provisions and in furtherance of the purposes of the Corporation as set forth in the Articles of Incorporation and By-Laws of the Corporation in effect at the time such property was contributed.

ARTICLE ELEVEN
INDEMNIFICATION

The Corporation shall have the power to indemnify its directors and officers, notwithstanding the provisions of Section 355.461 - 355.476 of The Missouri Nonprofit Corporation Act, as set forth below:

1. Definitions. As used in this Article Eleven, any word or words that are defined in Section 355.461 - 355.476 of The Missouri Nonprofit Corporation Act, as amended from time to time (the "Indemnification Section"), shall have the same meaning as provided in the Indemnification Section.

2. Required Indemnification of Directors and Officers. The Corporation shall indemnify and advance expenses to a director or officer of the Corporation in connection with a proceeding to the fullest extent permitted by and in accordance with the Indemnification Section.

3. Additional Permissive Indemnification. In addition to indemnification of directors and officers as required under Section 2 above, the Corporation shall indemnify and advance expenses to a director or officer of the Corporation as to any expenses actually and reasonably incurred by said director or officer, including attorneys' fees, judgments, fines and amounts paid in settlement in connection with any proceeding in accordance with the Indemnification Section.

4. Determination Regarding Permissive Indemnification. Any determination as to indemnification hereunder shall be in accordance with the Indemnification Section.

5. Indemnification of Employees and Agents. With respect to an employee or agent, other than a director or officer, of the Corporation, except as to such indemnification as is required under the Indemnification Section, the Corporation may, as determined by the Board of Directors of the Corporation, indemnify and advance expenses of such employee or agent in connection with a proceeding to the extent permitted by and in accordance with the Indemnification Section.

IN WITNESS WHEREOF, I have hereunto set my hand on this 17th day of September, 2010.



Gregory A. Schmunk, M.D.

Deceased Members

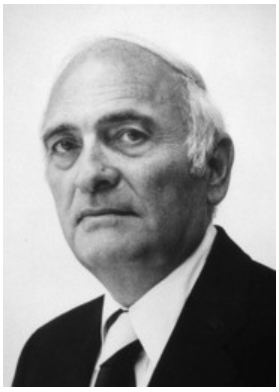
(P) – Past President



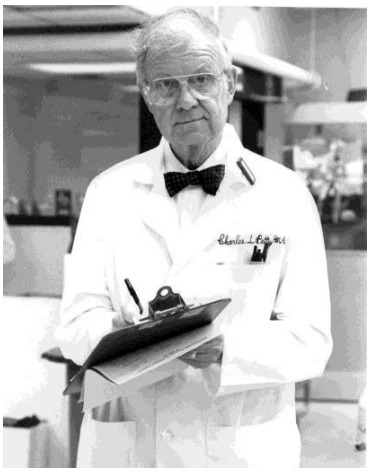
Boyd Stephens (P-1995)
(7/19/39-4/2/2015
San Francisco, CA)



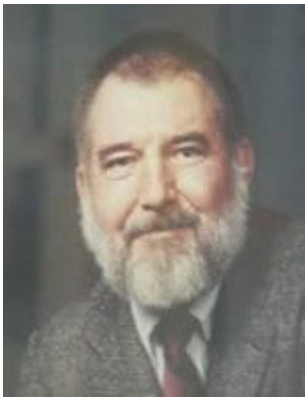
Lester Adelson
(d-3/10/2006
Cleveland, OH)



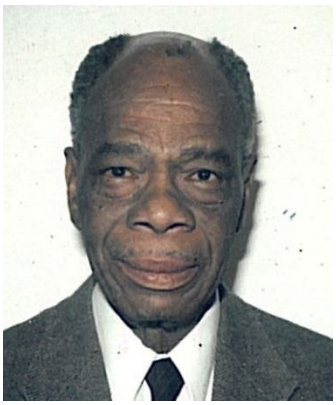
Leslie Lukash (P-1971-72)
(10/25/20-8/19/07
Nassau Co., NY)



Charles Petty
(d2007
Dallas, TX)



Robert Stivers
(d2007
Atlanta, GA)



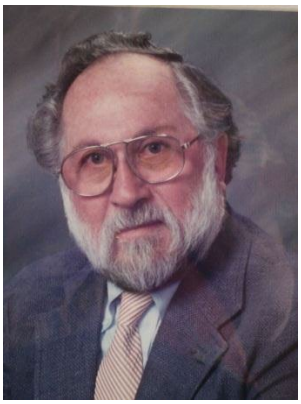
Justin Uku
(d2007
Buffalo, NY)



James Weiner
(d2007
Punta Gorda, FL)



Franc Fallico
(d2008
Anchorage, AK)



Heinz Karnitschnig
(d2008
Phoenix, AZ)



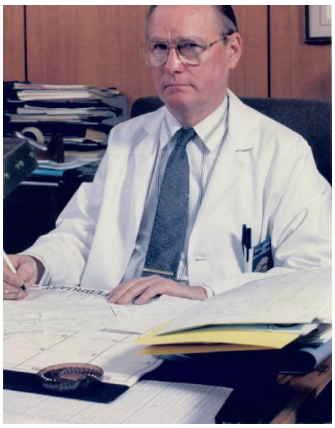
Donald Wright
(d2008
Air Force, Silver Spring, MD)



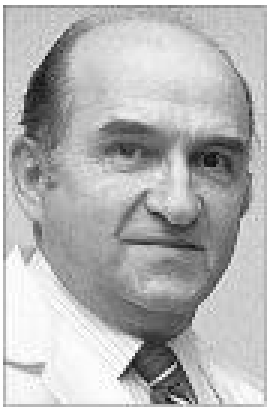
Jerome “JD” Bond
(d2008
Muskegon, MI)



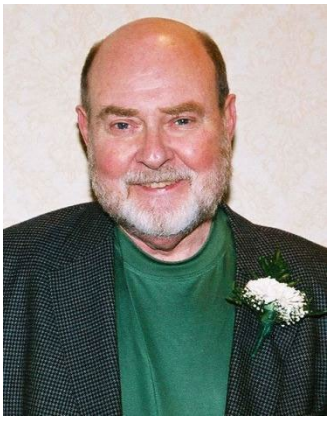
Maureen Frikke
(d2008
Salt Lake City, UT)



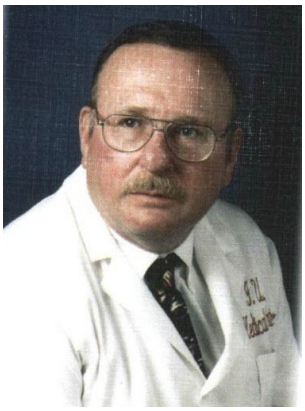
Ronald N. Kornblum
(d2008
Los Angeles, CA)



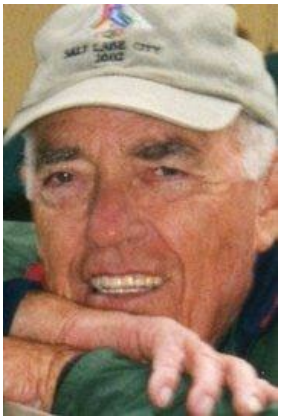
Cleland C. Blake
(d2009
Morristown, TN)



Thomas F. Gilchrist
(d2009, Army
Chapel Hill, NC)



Michael Clark
(d-2/26/2010
Navy, Indianapolis, IN)



Pierce A. Rooney Jr
(d2009
Sacramento, CA)



Wallace Graves
(d-1/12/2010
Fort Myers, FL)



Thomas Hegert (P-1989)
(d-8/29/2010
Orlando, FL)



James Werts Thorpen
(d-10/30/2010
Casper, WY)



Richard Wooters
(1/18/25-12/31/2010
Des Moines, IA)



Bryan Mitchell
(d-3/11/2010, Will County, IL)

Charles Wells
(d-4/15/2010, Fayetteville, NC)

Hobart Wood
(d-8/10/2010, Matthews, NC)

James Falterman
(d-10/15/2010, Jeanerette, LA)



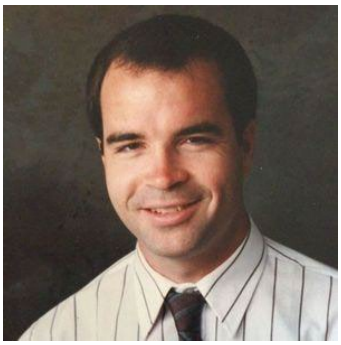
David Wiecking (P-1982)
(4/4/33-7/22/2011
Charlottesville, VA)



Richard C. Froede
(5/1/29-2/9/2011
AFME, Tucson, AZ)



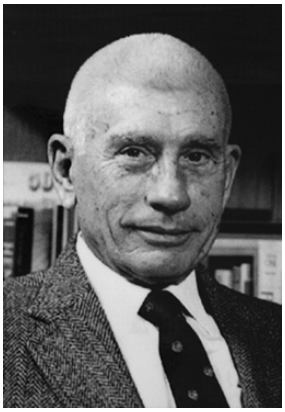
Anthony “Tony” Manoukian
(5/21/52-2/6/2011
Maui, HI)



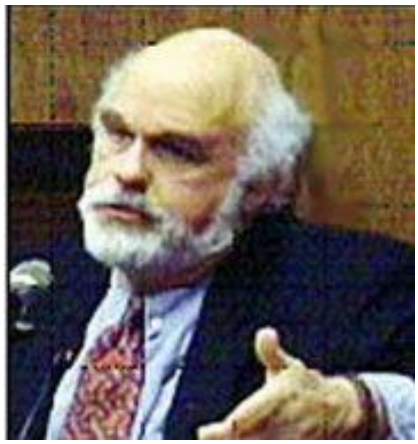
Dan Konzelman
(d11/21/2011
Arkansas, Ft. Worth, TX)



Joan Wood
(d-7/19/2011
Pinellas-Pasco Counties, FL)



Frank P. Cleveland (P-1977)
(11/2/19-11/28/2011
Cincinnati, OH)



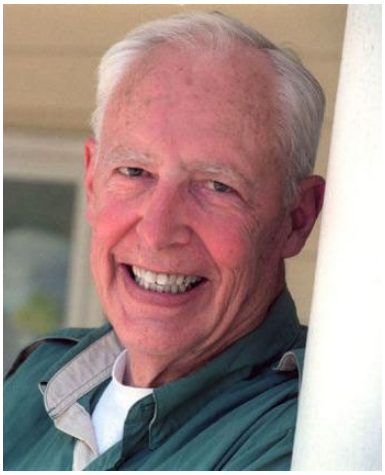
Stanton Kessler
(10/18/44-12/15/2011
Columbia, SC)



Earl F. Rose
(9/25/26-5/1/2012
Iowa City, IA)



Glenn Nazareno
(4/6/16-5/7/2012
Santa Clara, CA)



R. Page Hudson
(d2012, Chapel Hill, NC)



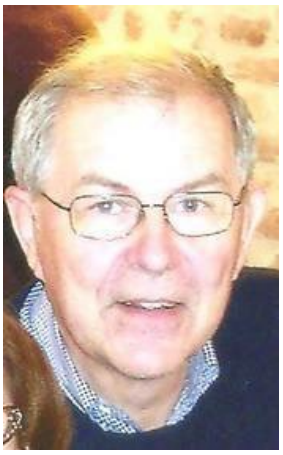
John Byron Parker
(10/14/27-4/14/2012
Atlanta, GA>>Boston, MA)



Robert L. Thompson
(9/24/36-7/20/2012
Chapel Hill, NC)



Terrence Roy Steiner
(7/1/45-11/14/2012
St Augustine, FL)



Thomas D. Smith
(2/21/44-8/15/2012
Rochester, NY)

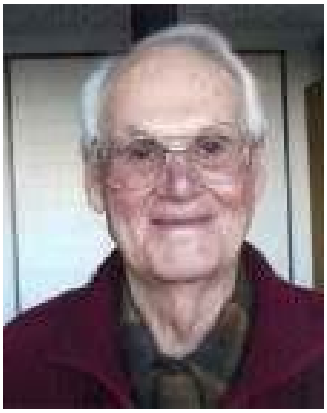


Glenn Larkin
(7/22/35-4/22/2013
Charlotte, NC)





Brian D. Blackbourne
(8/26/38-10/14/2012
San Diego, CA>>Ashville, NC)



John Peter Pfaff
(6/18/23-1/21/2013
Sequim, WA)



Kenneth Alan (Al) Stormo
(4/29/38-5/17/2013
Milwaukee, WI)



Joseph H. Davis (P-1976)
(4/16/24-3/19/2013
Tallahassee, FL)



Frederick Zugibe
(5/28/28-9/7/2013
Rockland County, NY)



Robert Challener
(5/21/35-9/7/2013
Magnolia Springs, AL)



Robert M. Brissie
(11/9/43-11/9/2013
Birmingham, AL)



John Pless (P-1998)
(8/26/38-3/17/2014
Indianapolis, IN)



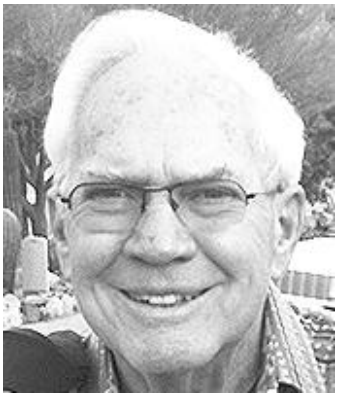
Byron Gilliam (Gill) Brogdon
(1/22/29-3/28/2014
Mobile, AL)

Collie Trant
(d-5/26/2014, Oklahoma City, OK)



Phillip Burch
(7/4/49-8/2/2014
St Louis, MO)

Marvin E. Aronson
(5/11/25-9/6/14
Holland, PA)



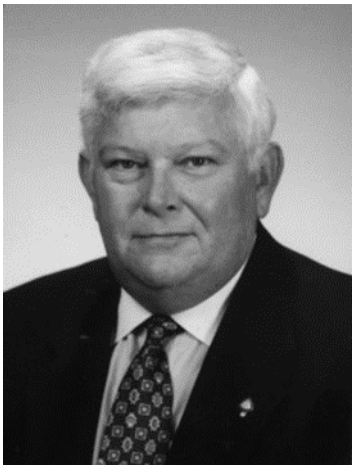
David Lee Bowerman
(6/14/28-10/21/2014
Colorado Springs, CO)



Robert Huntington
(3/12/37-2/22/2015
Madison, WI)



Ronald L. Rivers
(2/9/32-7/21/2015
Rancho Palos Verdes, CA)



Charles (Buddy) Garrett, Jr., MD
(5/7/40-11/10/2015
Jacksonville, NC)



Walter I. Hoffman, MD
(9/23/36-2/19/2016
Merion Station, PA)



Charles S. Hirsch, MD
(3/30/37-4/8/2016
New York, NY)



Charles J. Stahl, III, MD (P-1994)
(8/5/30-3/1/2016
Johnson City, TN)



Bruce A. Hyma, MD
(1/1/56-4/17/2016
Miami, FL)



Thomas P. Wood, MD
(10/1/29-2/15/2016
Tallahassee, FL)



James L. (Jack) Frost, MD
(12/19/30-6/27/2016
Morgantown, WV)



Patrick C. Allen, MD
(2/2/47-10/16/2016
Loveland, CO)



Saleh A. Zaki, MD
(10/25/35-10/17/2016
Atlanta, GA)



William Q. Sturner, MD (P-1979)
(9/6/34-12/9/2016
Fayetteville, AR)



Nancy L. Jones, MD
(8/31/52-2/1/2017
Chicago, IL)



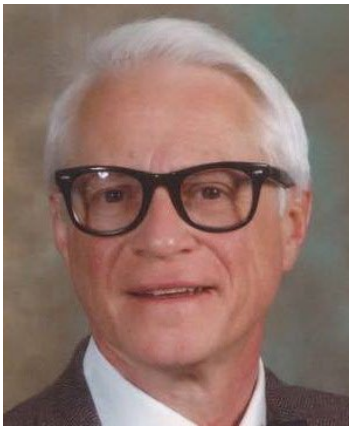
John Plunkett
(4/15/47-4/4/2018
Welch, MN)



Joseph Ohr, MD
(4/16/64-4/22/2017)



Henry F. Ryan, MD
(12/6/38-5/21/2017)



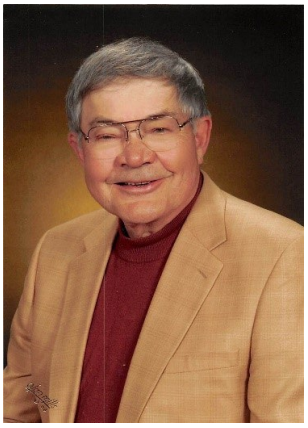
Humphrey Don Germaniuk
(2/4/54-4/20/2018
Warren, OH)



Lawrence (Stan) Harris (P-1993)
(3/14/31-5/1/2018
Mars Hill, NC)



Robert Failing
(10/20/28-9/1/2018
Montecito, CA)



Donald T. Reay (P-1988)
(5/14/37-11/10/2018
Oak Harbor, WA)





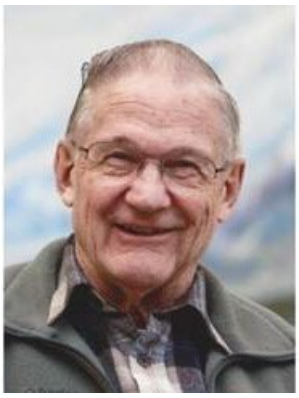
Nobby (Sekuru) Mambo
(7/1/44-11/18/2018
Texas City, TX)



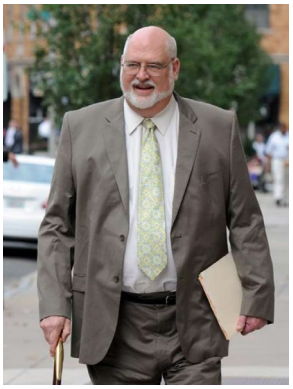
Julia Goodin
(3/10/57-4/12/2019
Columbia, KY)



John Roque Fernandes
(5/2/56-4/18/2019
Hamilton, Ontario, Canada)



Donald Robert Rogers
(4/7/32-10/9/2019
Anchorage, AK)



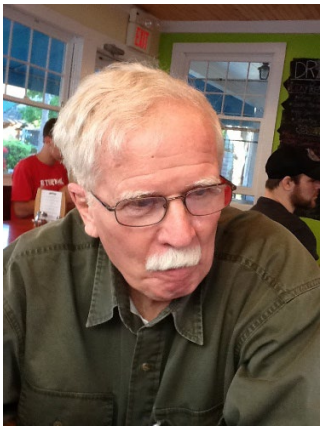
H. Wayne Carver II
(2/21/52-12/26/2019
Old Saybrook, CT)



Roy J. Dames
(2/24/44-1/23/2020
LaGrange, IL)




Charles V. Wetli
(8/27/1943-7/28/2020
Alpine, NJ)



Leroy (Roy) Riddick
(3/13/1936-1/29/2021
Mobile, AL)



Haresh Mirchandani
(7/16/1942-4/25/2021
Mumbai, India)



Eleanor Nicolai McQuillen
(12/26/1934-5/30/2021
Falmouth, ME)



Joshua A. Perper
(12/17/1932-7/12/2021
Boca Raton, FL)



Karen Elizabeth Chancellor
(9/4/1957-9/10/2021
Memphis, TN)



Randy Lee Hanzlick, MD
(1/22/1952-10/25/2021
Chapin, SC)



William “Bill” Haglund, PhD
(4/26/1943-6/16/2021
Seattle, WA)

Offices

Armed Forces Medical Examiner System

A History

Jerry D. Spencer, M.D., J.D.

May 2014

Beginnings

The Armed Forces Medical Examiner System (AFMES) was officially created by a Department of Defense Directive (6010.16) in 1988. However, the origins of this unique and worldwide medical examiner system goes back almost sixty years. This document will trace the evolution of the AFMES over the years.

In 1955, the Department of Defense designated the Armed Forces Institute of Pathology (AFIP) as the headquarters of the Joint Commission on Aviation Pathology with the mission to study and analyze military aircraft accidents. An Aviation Pathology section was then established at the AFIP for that purpose later that year. The following year a Registry of Forensic Pathology, a component of the American Registry of Pathology of the College of American Pathology, was established at the AFIP. In 1959, these two units were combined into a new Division of Military Environmental Pathology. The latter was composed of three branches: forensic pathology, aerospace pathology, and toxicology. Colonel Edward Johnston served as the first chief of the division.

In 1962 a residency training program in forensic pathology at the AFIP was approved by the American Board of Pathology and the Committee on Medical Education and Hospitals of the American Medical Association. Navy Commander Charles Stahl III was the first resident and completed the residency in 1963.

On November 22, 1963 the Division of Military Environmental Pathology became involved with the autopsy examination of President John F. Kennedy when Lieutenant Colonel Pierre A. Fincke, then Chief of Wound Ballistics Section, served as a consultant for the autopsy. Five years later, in June 1968, Colonel Fincke, then Chief of the Division of Military Environmental Pathology was invited by Doctor Thomas Noguchi (then Chief Medical Examiner/Coroner, Los Angeles) with a team (including then Captain Stahl) from the AFIP to serve as consultants for the autopsy of Attorney General Robert Kennedy.

Having returned to the AFIP in 1965 from a Navy assignment, Dr. Stahl became the Chief of the Division of Military Environmental Pathology in 1968. The division was later renamed the Division of Forensic Sciences, and following a reorganization of the AFIP in 1974, was again renamed as the Department of Forensic Sciences. The previously named branches were also renamed as divisions. At that time the department was composed of four divisions: Forensic Pathology, Aerospace Pathology, Toxicology and Legal Medicine. Air Force Colonel Richard

Froede, Chief of the Division of Forensic Pathology in 1974, succeeded Captain Stahl as the Chairman, Department of Forensic Sciences in 1975. The Legal Medicine Division became a separate department at the AFIP in 1976. The following officers succeeded Colonel Froede as department chairmen: Navy Captain Robert Thompson (1976 – 1982), Navy Commander Jerry Spencer (1982 – 1985), and Air Force Colonel Charles Ruehle (1985 – 1988).

Missions of the Department of Forensic Sciences

The missions of the Department of Forensic Sciences and its predecessors were the same as those of the parent AFIP, namely Consultation, Education and Research. Over the years, various consultation, education, and research programs in the forensic sciences were developed.

Consultations

Case reviews

Like pathologists in other specialty departments within the AFIP, forensic pathologists examined the material forwarded for review by Department of Defense pathologists, and federal government agencies, such as the Federal Bureau of Investigation, the Peace Corps, and the State Department. Following the review of the case materials, an AFIP consultative report giving an opinion was generated and sent to the requester.

Autopsy examinations

Forensic pathologists from the AFIP also performed autopsy examinations on request for the Department of Defense and other federal agencies. Until the AFMES was established, autopsy examinations on military members were performed after they had been authorized by Army, Air Force or Navy regulations (usually authorized by a base commander or hospital commander). Autopsy examinations of civilian dependents of military members required the consent of the next of kin.

The Division of Aerospace Pathology soon developed a worldwide reputation as a consultant for their expertise in aircraft accident investigations. Teams from the Aerospace Division were dispatched to sites in the United States and to other countries to investigate military aircraft accidents. The investigations included performing autopsy examinations, correlating injuries with impact forces generated by the crash, and postmortem toxicology examinations.

Mass Disasters

In addition to investigating fatalities in many military aircraft accidents, the Department of Forensic Sciences (and the AFMES) have been consulted on many mass disasters, both civilian and military, with large numbers of fatalities. For military aircraft accidents, autopsy examinations were performed. Until the establishment of the AFMES, and later the federal law for autopsy authorization (10 U.S. Code 1471), only identifications were performed on civilians

unless autopsies were authorized by the next of kin. Summaries of notable disasters investigated by the Department of Forensic Sciences (or the AFMES) are listed below:

Tenerife, Canary Islands – Collision of two airliners at airport – March 1977; 265 American victims brought to Dover Port Mortuary for identification.

Jonestown, Guyana – Homicides and mass suicides of Peoples Temple members – November 1978; 918 victims brought to Dover Port Mortuary for identification and selected autopsies.

Gander, Newfoundland – Crash of contract carrier aircraft on take-off while transporting military members to Fort Campbell, KY – December 1985; 248 victims were transported to the Dover Port Mortuary.

USS Iowa – explosion in gun turret of the battleship at sea – April 1989; 47 military victims transported to the Dover Port Mortuary.

Dubrovnik, Croatia – Crash into the side of mountain by an Air Force aircraft, April 1996; 36 victims including Secretary of Commerce Ron Brown, were transported to the Dover Port Mortuary.

USS Embassies at Nairobi, Kenya and Dar es Salam, Tanzania – Terrorist bombings --- August 1998; 233 total deaths; 11 Americans transported to the Dover Port Mortuary for identification and postmortem examinations.

USS Cole – Terrorist bomb exploded near the destroyer while in port in Aden, Yemen, October 2000; 17 sailors were transported to the Dover Port Mortuary.

Pentagon – September 2001; one of the terrorist attacks using a commercial aircraft struck the Pentagon on September 11, resulting in 189 deaths of passengers, civilian and military workers in the Pentagon, and five terrorists. All were transported to the Dover Port Mortuary for identification and autopsy examinations.

Helicopter crash – A CH-47 helicopter was shot down and crashed in Afghanistan, August 2011; 38 fatalities including 30 American military and 8 Afghan soldiers were transported to the Dover Port Mortuary.

Astronaut deaths

The Department of Forensic Sciences (or later the OAFME) has been requested by the National Aeronautics and Space Administration to perform postmortem examinations in all accidents involving astronauts. One accident involved three astronauts in a flash fire in a pre-launch test for the Apollo I spacecraft in January 1967. A second accident occurred in January 1986 when the Space Shuttle *Challenger* was destroyed soon after launch, resulting in the deaths of seven astronauts. The disintegration of the Space Shuttle *Columbia* in February 2003 during re-entry

after a two week mission that resulted in the deaths of seven astronauts was also investigated by forensic pathologists assigned to the OAFME.

Education

As previously indicated, an AFIP fellowship in forensic pathology was approved in 1962. To date, more than thirty military forensic pathologists and a few civilians have completed the fellowship. The fellowship was organized with Doctor Russell Fisher, then the Chief Medical Examiner of the State of Maryland. The autopsy experience at the Office of the Chief Medical Examiner in Baltimore remains a core part of the fellowship program. Courses in Basic and Advanced Forensic Pathology have been attended by thousands of military and civilian investigators and pathologists. The office also supports a Master of Forensic Science degree program associated with George Washington University that has been used by more than one hundred military investigators to obtain an advanced degree. An AFIP course in Aerospace Pathology was also developed to educate military and civilian pathologists about special techniques utilized in aircraft accident investigation.

Research

The building housing the Armed Forces Institute of Pathology was built with many research facilities including a hypobaric chamber and an indoor firing range.

Many studies utilizing these facilities were performed by personnel in the Department of Forensic Sciences and its predecessors. The toxicology division under Leo Goldbaum, Abel Dominguez, and others did considerable research into toxicology techniques beginning with the establishment of the Toxicology Branch.

Armed Forces Medical Examiner System – Established 1988

There had been discussions for years on how to convert the Division (later the Department) of Forensic Sciences into a Medical Examiner System. Captain Stahl and Colonel Froede first proposed an Armed Forces Medical Examiner System in 1973. At that time, the proposal did not obtain support from the Department of Defense. A regional forensic pathologist had been assigned to the Landstuhl Regional Medical Center in Germany for several years. Because of the increasing number of medicolegal deaths in the Pacific, a regional forensic pathologist was also assigned to the U.S. Naval Hospital, Okinawa, Japan in 1984. Plans for an Armed Forces Medical Examiner System finally came to fruition when a Department of Defense Directive (6010. 16) created a worldwide medical examiner system for the United States military.

Important features of the directive were that it provided for a central office (Office of the Armed Forces Medical Examiner) headed by a chief medical examiner (with the title of Armed Forces Medical Examiner), regional medical examiners and associate medical examiners in Europe, the Pacific, and various regions within the United States. The directive also stipulated and that all military deaths and deaths of certain civilians on military bases be reported to the Office of the Armed Forces Medical Examiner. For those deaths occurring on military posts and

bases with exclusive federal jurisdiction (examples are the Army posts like Fort Polk, Fort Bragg, Fort Hood and Marine Corps Bases like Camp Pendleton and Camp Lejeune), the Armed Forces Medical Examiner (or his designated regional medical examiners) could authorize an autopsy examination. However, autopsy examinations following the deaths of military members that occurred in locations other than exclusive federal jurisdiction still required authorization according to Navy, Air Force, and Army regulations.

Richard Froede, M.D. was appointed as the first Armed Forces Medical Examiner. He had previously served as the Chairman of the AFIP Department of Forensic Sciences. He proved to be a capable and innovative leader for the new medical examiner system. Dr. Froede appointed Regional Medical Examiners and Associate Medical Examiners at all of the major military medical treatment facilities, and also reorganized the former Department of Forensic Sciences. He combined the forensic pathology and aerospace pathology divisions into a single Medicolegal Investigation Division. He also developed two new divisions, a Mortality Surveillance Division and the Armed Forces DNA Laboratory/Armed Forces Repository of Specimen Samples (AFDIL). The Mortality Surveillance Division was created to standardize the reporting of military deaths, and to perform epidemiologic studies. A forensic anthropologist, William Rodriguez, Ph.D, was also added to the staff as a distinguished scientist.

Dr. Froede also supervised planning for expected fatalities of the Persian Gulf War (also called the First Gulf War) of 1990 – 1991. There were 294 deaths of U.S. military members during that war. All of the casualties were identified and received autopsy examinations at the Dover Port Mortuary. Armed Forces DNA Identification Laboratory (AFDIL).

AFDIL and its companion Armed Forces Repository of Specimen Samples for the Identification of Remains (AFRSSIR, or the “repository”) were created following the end of the Persian Gulf War. AFDIL provides human remains Identification supporting the Armed Forces Medical Examiner System, and supports identification efforts by the Joint POW/MIA Command Central Identification Laboratory (JPAC CIL) in Hawaii to identify American remains from past wars. It also provides assistance in mass fatality DNA specimen collection, cataloging and retrieval repository services. The “repository” began collection of DNA specimens of military members in 1994, and now has almost 7 million specimens for the identification of deceased military members or former military members.

Major (later Lieutenant Colonel) Victor Weedn was the first chief of the AFDIL Division, and managed the rapid growth of the division. AFDIL and AFRSSIR have been invaluable in the identification of human remains in the Persian Gulf, Iraqi and Afghan Wars. A standard protocol using comparisons of dental, fingerprint, and DNA examinations is now used for the identification of all military fatalities.

AFDIL has developed expertise in both Polymerase Chain Reaction (PCR) and mitochondrial DNA analytic techniques. The work of AFDIL and the availability of the previously collected reference specimens in the “repository” has been invaluable in identifying deceased military members.

The division has also been consulted in many other cases, including a confirmation of the remains of Czar Nicholas II of Russia in 1995, and the identification of the originally unidentified remains in the Vietnam Tomb of the Unknown Soldier. At the request of his family, the remains of Lieutenant Michael Blassie were exhumed from the tomb, and were identified by mitochondrial DNA analysis in 1998.

Dr. Froede was succeeded in 1992 by the second civilian Armed Forces Medical Examiner, Charles Stahl, III M.D. Dr. Stahl had also served as the chairman of the AFIP Department of Forensic Sciences, and he had wide management experience for the Navy and the Department of Veteran's Affairs. Dr. Stahl supervised the move of the OAFME from the campus of the Walter Reed Army Medical Center to a temporary office in Rockville, MD.

Following Dr. Stahl's retirement, Jerry Spencer, M.D., J.D. became the Armed Forces Medical Examiner in September 1996. Like Doctors Froede and Stahl, Dr Spencer had also served as the AFIP Chairman of the Department of Forensic Sciences. He also had experience as a regional medical examiner for seven years in the Pacific region at two military treatment facilities. While serving in those positions he became familiar with the problem of autopsy authorizations in overseas locations where exclusive U.S. federal jurisdiction did not exist. Local host government authorities might or might not assert jurisdiction to investigate the death of an American civilian or a military member. After becoming the Armed Forces Medical Examiner, Dr. Spencer worked with the Chief Legal Counsel of the Department of Defense to draft a comprehensive federal law for autopsy authorization (10 U.S. Code 1471). The federal law, which became effective in 1999, granted the Armed Forces Medical Examiner a similar authority to authorize autopsy examinations that state laws give to civilian medical examiners.

Following Dr. Spencer's departure in early 2001, Colonel Abubakr Marzouk became the acting Armed Forces Medical Examiner. A few months later, the Twin Towers of the World Trade center were attacked and destroyed on September 11th by terrorists who had taken control of commercial airliners. The Pentagon was similarly attacked, resulting in extensive damage and the deaths of 184 victims plus the five terrorists. A fourth aircraft crashed into rural Pennsylvania, near the town of Shanksville, after passengers in the aircraft tried to regain control from the terrorists. The Office of the Armed Forces Medical Examiner investigated the deaths of the Pentagon victims since the Pentagon was under exclusive federal jurisdiction. The victims at the Pentagon, the aircraft crash victims, and the five terrorists were transported to the Dover Port Mortuary for the identifications. The office also assisted in the identification of the Pennsylvania crash victims and terrorists on that aircraft. Also, AFDIL was requested by the Office of the Chief Medical Examiner, New York to assist their investigation by sequencing mitochondrial DNA for some of the victims of the crashes into the World Trade Center.

Captain Craig Mallak became the Armed Forces Medical Examiner in 2002, soon after the beginning of the Iraqi and Afghan Wars. He capably supervised the identification and postmortem examinations of the more than 4,000 fatalities from those wars. In addition,

forensic pathology teams travelled to Iraq on approximately 35 occasions to perform autopsy examinations.

The OAFME added new technology to autopsy examinations in 2005 by adding CT scans to the autopsy process. The scans provided detailed and permanent three-dimensional records of combat injuries. The first forensic CT scanner replaced the clinical CT scanner in 2008. This specially built scanner is designed to accommodate deceased military members wearing full combat protective gear. The forensic CT scanner has been very useful in identifying injuries, missile fragments and wound tracks.

Base Realignment and Closure (BRAC) Decision

Congress is mandated to review military bases for closure every five years. In November 2005, Congress passed the 2005 BRAC law that mandated disestablishment of all elements of the AFIP except the National Museum of Health and Medicine, and the Tissue Repository. The law also stipulated that the Department of Legal Medicine would be relocated to the new Walter Reed National Military Medical Center, and the Armed Forces Medical Examiner System (including AFDIL and the AFRSSIR, and the Toxicology Division) would be relocated to Dover Air Force Base, adjacent to the Dover Port Mortuary.

A new, state of the art facility, covering 117,000 square feet on two floors, and costing $52 million was designed for the AFMES and its components. Staff members completed the move from the temporary facility in Rockville to the new facility at Dover Air Force Base in December 2011.





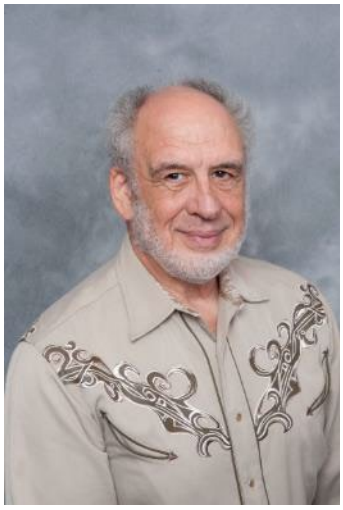
Current Status of the Armed Forces Medical Examiner System – May 2014

Captain Craig Mallak, who served as the Armed Forces Medical Examiner for 10 years, retired from the Navy in 2012. He served as the Armed Forces Medical Examiner from soon after the terrorist attacks in 2001, until the end of the Iraqi War. He also supervised many technical enhancements, including the forensic CT scanner, and the relocation to the Dover Air Force Base. He was replaced by Colonel Ladd Tremaine, another experienced forensic pathologist, who completed his fellowship training through the AFMES program.

The AFMES has evolved remarkably from its original predecessor, the Division of Military Environmental Pathology in the last 55 years. Currently, the staff assigned to the Dover Air Force Base facility number approximately 280, and consist of military, civil service and contract civilian employees. At Dover, the AFMES has been reorganized into three divisions: OAFME Division, the Toxicology Division and the AFDIL Division. The OAFME Division has 30 employees including 8 military board certified forensic pathologists, and 1 fellow in forensic pathology. In addition, there are 19 regional and associate medical examiners located at military bases throughout the United States, Europe and the Pacific region. The Toxicology Division has 45 employees, while the remainder of the staff are assigned to AFDIL and its component AFSSSIR.

Arizona

History of Medical Examiner Offices in Arizona

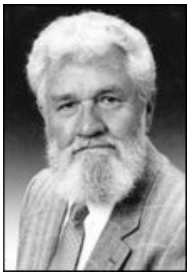


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April 2013

Maricopa County

Prior to September 1975 Arizona operated under the coroner system with the local justice of peace serving in the capacity of coroner in the various counties. Despite this practice there were instances where a pathologist essentially functioned as the medical examiner doing all of the cases referred to him by the coroner. One of the earliest medical examiners dating back to approximately 1957 in Phoenix (Maricopa County) was Donald Condon. There were, as there often are, funding issues and this hard working man was grossly underpaid, and in an effort to get proper attention focused on the needs he walked out of the office. The local hospital pathologists attempted to "pick up the slack" so there were in effect rotating 'medical examiners' for a few months. This system clearly was not going to work, and the county (Maricopa County) contacted Dr. Condon and hired him back. While he was away from the office the county came to the office and placed property identification tags on all furnishings they could find including a handsome wooden file cabinet that was the personal property of Dr. Condon. He was so insulted by this action that when he later retired he refused to take the cabinet with him. When the later office was dismantled in 2002 I returned the cabinet to his widow.



Dr. Condon was followed by Thomas Jarvis, MD. Tom was a board certified general pathologist who also became disenchanted with the disrespect the county tendered the office and so went back to his ranch in St. Johns Arizona where he was riding on horseback when officials came to plead for his to return. For several years he would fly into Phoenix from Globe and perform the duties of the medical examiner.

Tom was joined by Heinz Karnitschnig, MD in the early 1970's. Heinz, a native of Austria, had trained in Virginia under the late Dr. Geoffrey Mann. Heinz was named the medical examiner by virtue of his formal forensic training and remained chief medical examiner until he retired in 1992. During Heinz' tenure as chief Maricopa County built a medical examiner office. Prior to this time the pathology examinations, toxicology, histology and clerical functions were conducted at different sites.

This building was approximately 11,000 square feet, and during its construction someone in county administration decided to cut construction costs by reducing the cooling capacity of the building. Remember, this is Phoenix where the desert son is notoriously hot. In an effort to compensate for the decreased A/C capacity the county initially ran the units at higher speeds than normal. When this resulted in excessive wear on the system they reverted back to the manufacturer's specs and as a consequence the building was typically quite warm during the day. It was not uncommon for the interior building temperature to be above 80 degrees by 9 o'clock in the morning many months out of the year. In 1991 the office was inspected by NAME and found to be deficient in space and staffing.

The pathologists in the Maricopa County Office at varying times during the 1980's included: Dr. Karnitschnig (the chief, who had been in the Virginia offices prior to coming to Arizona); Dr. Tom Jarvis (who had now become forensic board certified); Dr. Fred Walker, Dr. George Bolduc, and Dr. Larry Shaw with some weekend and part-time coverage that Philip Keen provided between 1986-1992. After the retirement of Dr. Jarvis who moved to Oregon and of Dr. Karnitschnig, Philip Keen applied for the position of chief medical examiner and was given a five year contract beginning in June 1992. The stated goal with that hiring was to "bring the facility and operations into the 21st Century."

In November 1992 Dr. Walker left to work in the Ventura California Office and Dr. Shaw returned to hospital pathology practice. For a brief period of time I was the only pathologist on staff until I brought in Dr. Ann Bucholtz and brought back Dr. George Bolduc. We were joined on some weekends by Dr. Frances Owl-Smith who had trained in North Carolina and was working at the Indian Health Service Hospital in Phoenix.

Efforts to address the NAME deficiencies basically fell on deaf ears and there was less than enthusiastic support for either the physical plant or the staffing. The staff became so frustrated with the lack of administrative support that one by one they sought other positions. Dr. Bucholtz went to Nashville, TN; Dr. Bolduc went to Bakersfield, CA; and Dr. Owl-Smith devoted full time to the Public Health Service Hospital until she had an opportunity to practice in the

Four Corners (Farmington, NM). With the letters of resignation in hand for my staff I met with county administration to increase pressures for support of the office. The verbatim response of the county manager was to ask me, “When is your contract up?”

As a consequence of my continuing efforts in 1995 Maricopa County advertised an opening for the chief and one or two line pathologists. This was while I still had two years remaining on my contract. Despite two consecutive years of the county reneging on the terms of my initial contract, I applied for the advertised chief’s position. When all other candidates told the county that it was impossible to function at the budgetary and staffing levels then in place, the county reluctantly hired me as the chief again. By doing this I in effect became the only county department head whose employee status was backed by a breeched contract.

The pressures I was able to bring to bear upon administration resulted in the construction of the present 60,000 square foot free standing facility which opened in 2003. The staffing increased to 11 forensic pathologists and total staffing of the office to 80 persons. The county budget office was jealous of the medical examiner, and decided that since we had a new building we did not require any additional staffing. The quarreling over funding led to the dismantling of the heads of all the departments in the public health sector to which the medical examiner reported including the forced retirement of the public health director, Dr. Weisbuch. The medical examiner’s office was removed from the public health sector of the county and was assigned to the stadium district. The specific funding requests included establishing a deputy chief position and requests for sufficient staffing to meet NAME accreditation standards with a target date for accreditation of 2007.

My administrator was placed on paid administrative leave amid accusations that the office had not adhered to county hiring policies. The county manager assigned a deputy administrator to the office despite my written objections, and some seven months later my administrator was fired without cause while still officially reporting to me. The county then announced that the office was being reorganized under that deputy administrator and only the doctors would report to me. I advised the county that they might wish to read the existing state law which clearly indicated that such organization was contrary to law and I would not accept the plan. So when the county placed their reorganization in writing and I promptly filed a lawsuit seeking court injunction to require adherence to the law. I was then demoted, placed on paid administrative leave while the county went to the legislature to rewrite the law.

Concurrent with my demotion Maricopa County increased the funding of the department by $1.5 million and approved the addition of two pathologists and 25 additional staff positions.

With the passage of new legislation there were no prospects of obtaining the injunction so I then agreed to settle the dispute by resigning in exchange for my legal fees to which the county agreed but which to this date have never paid.

Incidentally, although the toxicology lab has been accredited the Maricopa County office itself still is not NAME accredited. The Maricopa County Office is the only office in Arizona that performs in house toxicology testing. This toxicology laboratory was initially directed by Raymond Morano, who had been a toxicologist in the Virginia system during the time of Dr. Mann.

Initially forensic anthropology services were provided by Dr. Charles Merbs at Arizona State. Since the mid-1990's Dr. Fulginiti, who trained with Dr. Birkby at the University of Arizona, provides these services and forensic odontology is currently provided by Dr. Piakis. Both of these individuals have their respective forensic board certifications.

Regionalization Efforts in Arizona

Those familiar with Arizona's political landscape can identify with the problems encountered with the initial attempts to organize a statewide medical examiner system. I will defer to Bruce Parks who was later chief in Tucson for the details of the Tucson (Pima County) office. The Tucson/Phoenix rivalry which had emerged in full bloom in the legislature in 1960 with the establishment of the state medical school re-emerged during the early efforts to create the system. There was general disagreement as to "who should be in charge." When the Arizona legislature agreed to fund a state medical school they chose the University of Arizona which at the time was the only "University" in the state. As an offset Arizona State was allowed to become Arizona State University and Northern Arizona was also granted university status. Unlike other states like Indiana where the undergraduate campus maybe in one community (Bloomington) and the medical school in a larger population area (Indianapolis) Arizona placed the new school in Tucson thus setting the table for the traditional "town/gown" strife when academia competes with the private sector for a pool of patients. The same Tucson/Phoenix rivalry emerged in the fight for control of the medical examiner system. Maricopa County had approximately half of the state's population but Tucson had the medical school.

In 1975 the legislature finally agreed on a compromise with each county responsible for its own medical examiner. This meant that there were numerous counties whose population would not support a medical examiner office, so Pima County contracted with 9 other counties to provide these services.

During my efforts to compel the county to provide an adequate state of the art facility commensurate with the mission statement under which I was hired I was advised that the county would not be able to afford the requisite construction, and that I should approach the state. I then met with the chairman of the public health committee at the state legislature and presented a draft design for a state wide regional system that would have kept the existing offices in place and combined other counties in a regional plan. The bill came up for a hearing, but Maricopa County who had suggested the action in the first place opposed it, so it was never adopted.

The medical examiner statute became effective September 12, 1975. The law served the state well with only two modifications until the re-write in 2007. The law was modified once again in 2012. The current law as written is legally in conflict with the medical practice act in Arizona. Specifically, if defines a "forensic pathologist" as anyone who has been trained in forensic pathology. The medical practice act requires ABMS board certification prior to advertising one as a medical specialist, and this also applies to forensic pathologists.

Yavapai County (Prescott)

I was hired as chief of hospital pathology in Prescott beginning Labor Day 1975. On the 12th of September 1975 the new medical examiner law went into effect. I became the first chief medical examiner for Yavapai County. I continued in the dual capacity of chief medical examiner and chief of hospital pathology for 17 years. Then when I resigned to become chief in Maricopa County the hospital pathologists assumed those duties for three years, until the supervisors of Yavapai County asked me to resume duties as chief medical examiner in July 1997. I remained the chief in Yavapai County until the end of June 2009 when a new county manager upon advice of counsel claimed the county could provide medical examiner services at a cost savings of at least ⅓ if they hired a pathologist instead of contracting the services. In the four years since the county has had contract coverage from Phoenix two or three days a week (versus the five days a week I provided before) and at approximately ⅓ greater cost than before.

Coconino County (Flagstaff)

Coconino County services (Flagstaff) were initially provided by a non-forensically trained hospital pathologist who eventually grew tired of the demands, and the county decided to hire a pathologist for the medical examiner duties. One person who served briefly before being dismissed for workplace improprieties was Curtis Rollins, MD. The county then hired Joe Dressler, MD as their full time forensic pathologist. Joe had trained in Oklahoma under Fred Jordan, MD and A. Jay Chapman, MD, both of whom had trained in Virginia under Dr. Mann. Eventually Joe decided to devote full time to emergency room medicine and resigned as medical examiner for the county. The Maricopa County office provided some interim service following Dr. Dressler's departure until Coconino County hired Michael Iliescu, MD who had spent a year in the Maricopa County Office following his fellowship training. He was released after a little over a year and temporary coverage was again arranged through Maricopa County. The current medical examiner is Larry Czarnecki, DO who trained in New Mexico. He is assisted by Arch Mosley, MD who trained in Baltimore and worked in the Maricopa County Office prior to joining Dr. Czarnecki.

Mohave County (Kingman-Lake Havasu)

Mohave County with county seat in Kingman initially utilized the hospital pathologist for their medical examiner work. Then there followed a parade of pathologists, Donald Schieve, MD (board certified in AP and CP and subsequently board certified in ophthalmology); Donald

Nelson, MD, hospital pathologist in Kingman; Julie Jervis, MD (trained in AP/CP/FP and Pediatrics); and currently Ruby Rexene Worrell, MD (trained in AP and FP). In the past occasional high profile cases from this county have been referred for examination either in Yavapai or in Maricopa County.

Yuma County (Yuma)

Yuma County medical examiner functions are initially handled by the hospital pathology group headed by Victor Alvarez, MD with referral of homicides and extra-ordinary cases to Pima County for examination.

Cochise County (Sierra Vista)

Cochise County (Sierra Vista/ Bisbee) initially contracted with Pima County for their medical examiner services. When Guery Flores, MD became the hospital pathologist in Sierra Vista he sought the position of medical examiner, but was spurned because of his lack of formal forensic pathology training, so Guery took a year's sabbatical and did a forensic pathology fellowship. Upon his return he was named the chief medical examiner. Various other pathologists have worked with him from time to time including Dr. Ann Bucholtz, MD and Dr. Rebecca Hsu, MD both of whom later worked in the Maricopa office. Dr. Avneesh Gupta also worked with Dr. Flores. Just this last year Dr. Flores retired and the county re-instituted its contract with Pima County for medical examiner services.

Pinal County (Florence)

Pinal County was initially covered by Pima County, but for a couple years hired Dr. Hsu as their full time medical examiner. Presently they have returned to a contract with Pima County with non-autopsy patients being handled by Dr. John Hu, MD from the Maricopa County Office.

Pima County

Credit to Dr. Edward Brucker



Dr. Bruce Parks

Recognizing that living populations give rise to dying populations it should not come as any surprise that Tucson has shared many of the same evolving changes as did Phoenix. Under the coroner system in Arizona prior to 1975 the primary focus for forensic autopsies in Pima County was Dr. Louis Hirsch, whose practice also included general hospital pathology. Even prior to passage of the medical examiner statute smaller surrounding counties often relied upon Pima County and Tucson to provide the necessary post mortem examinations.

In addition to being a significant population center, Tucson is situated in the southern Arizona (Sonoran) desert and is the unfortunate recipient of heat related deaths and some traumatic deaths associated with illegal border crossings into the United States. Dealing with the mummified and often at least partial skeleton remains gave rise to reliance upon forensic anthropology for assistance. Dr. Walter Birkby at the University of Arizona was instrumental in this endeavor not only in performing examinations of skeletal remains from all over Arizona but also in training others including Dr. Laura Fulginiti in the Maricopa County Office. A Tucson oral surgeon George Bland assisted with early forensic odontology services.

In 1974 on the eve of the state medical examiner statute Tucson was already preparing for the transition with able assistance from Dr. Robert Joling from the University of Arizona, himself active in forensic sciences, and consultation from the late Dr. James Weston who had previously been the chief medical examiner for Utah and was then the chief medical examiner for yet another four corner's state, New Mexico. Among the forensic pathologists who were to practice in Pima County was Dr. Allen Jones who trained under Dr. Weston.

Following a custom of what was essentially the "Morgue of the Month" in which medicolegal autopsies were performed in the preparation rooms of local mortuaries on a rotating basis Pima County's first official "county morgue" was located in downtown Tucson conveniently close to the county and federal court facilities. Today the medical examiner occupies a modern Forensic Sciences Center in SE Tucson.

The Evolving Role of the Medical Examiner in Arizona and Its Position in the Practice of Medicine in Arizona

At least two or three events converged in the time line to establish what has become the basic medical examiner system in Arizona. Travelers' Insurance Company had been the primary carrier for medical malpractice insurance for physicians. They announced they no longer wished to be in the malpractice line of insurance following the first $1,000,000 judgment in California. Since Arizona and California were in the same risk pool, that meant they would no longer be providing malpractice coverage for Arizona. The only other major insurance carrier in the state at the time was St. Paul, and they only provided coverage for hospitals. The Arizona Legislature agreed to permit the start-up of a physicians' mutual insurance company while placing the taxpayers at risk for any umbrella coverage above $1,000,000.

The significance of this coincidental timing in the state legislature was that the county medical examiner offices were viewed as potentially the best venue for determining adverse consequences especially of surgical and anesthetic events. This helped shape the scope of reportable cases to the medical examiner. While it is customary for medical examiners to deal with unattended and unnatural deaths there is considerable variation between states regarding investigation of potential therapeutic mistakes. The Arizona legislature deemed this an important function of the public inquiry into death. With the retirement of Dr. Flores this year and of Dr. Bruce Parks in Pima County last year, none of the currently practicing medical

examiners have the same historical appreciation for this public health role of the medical examiner.

Partial Listing of Medical Examiners Who Have Practiced In Arizona

(*) designates more than one office although not necessarily simultaneously

Maricopa County

Donald Condon, d.
Thomas Jarvis, d.
Heinz Karnitschnig, d.
Fred Walker
Larry Shaw
Philip Keen
George Bolduc
Ann Bucholtz (*)
Charles Harvey
Michael Iliescu (*)
Mary Dudley
Jeffrey Nine
Frances Owl-Smith
Julie (Brown) Jervis
Udelle Zivot
Vladimir Shvarts
John Hu
Robert Lyon
John Cooper
Diane Karluk (*)
Susan Comfort
Leslie Wallis
Dan Davis
William Stano
Rebecca Hsu
Kevin Horn
Etoi Davenport
Ruth Kohlmeier
Mark Fischione
Archius Mosley
Marco Ross
Angela Chen
Jeffrey Johnston
Michael Ferenc

Pima County

Louis Hirsch
Edward Brucker
Joseph Halka
Richard Froede, d.
Allen Jones, d
John Howard
Cynthia Porterfield
Gregory Hess
David Winston
Bruce Parks
Eric Peters
Veena Singh
Jennifer Gardetto
Thomas Henry
Andrew Sibley

Coconino County

Curtis Rollins
Joe Dressler
Michael Iliescu
Lawrence Czarnecki

California – Los Angeles County Medical Examiner-Coroner



Lakshmanan Sathyavagiswaran, M.D.

September 2013

History of the Department

It is difficult to account accurately for the early history of this department. Our oldest records date from 1888, and the oldest budget record is for 1954.

1850 Coroner's Office was established. The law said little about jurisdiction or procedure, except that the Coroner must keep "records". The County population was 3,530.

1852 Coroner's Office was merged as an ex-officio office under the Public Administrator.

1888 The law defined what records the Coroner must keep and that the "Coroner's File" was to be a public record. The population of the County had grown to approximately 100,000.

1905 Death certificates became required by law. Embalming was established as a practice by morticians enabling bodies to be held longer before examination. Inquests were the principal method by which the Coroner determined the cause, manner, and responsibility of death. Occasionally, autopsies were done where cause of death was unknown or where the presence of heavy metals, cyanide, strychnine, morphine, opium, and other poisons was suspected. As a result, the coroner occasionally enlisted the services of a chemist. The population was now approximately 350,000.

1915 Paperwork began to mount (e.g., Coroner's file, inquest records, photographs, autopsy and chemical analysis records, reports of certain deaths to various public agencies, etc.). Population was now at 700,000.

1916-1930 This was a period of significant growth for the department. A Central Coroner's Office was opened with facilities to process cases in a more desirable scientific environment. In 1930 autopsy tables, embalming tables, instruments, cameras, dark rooms, refrigeration, vehicles, inquest room, and routine office spaces were provided. The full-time staff increased to include autopsy surgeons, inquest deputies, deputy coroners, technicians, and a clerical staff. Inquests were still the main method by which cause and manner of death were determined. Testimony was sought as to the autopsy, chemical, and police investigative findings. Toxicological tests were performed by the County Health Department. In 1930, the population was 2,208,492 and the number of Coroner's cases was 3,894.

1942 A toxicologist, his staff and laboratory were administratively transferred from the Health Department to the Coroner. Alcohol blood tests and other tests became almost routine for the Coroner to conduct. An increase in traffic deaths and occasional drug overdoses resulted in a growing workload for the department. Questions arose involving liability, insurance payments, etc., which called for careful investigation on the part of the Coroner's staff. Population was now approximately 2,800,000 and Coroner's cases now numbered about 5,500 per year.

1956 The coroner was not required to be physician until 1956. Los Angeles County voted a Charter Amendment which separated the Public Administrator's and Coroner's Offices. According to the new law the Coroner now had to be a pathologist and the department was designated "Chief Medical Examiner-Coroner". Due to the level of expertise increasingly demanded by the courts, the medical staff shifted from autopsy surgeons to forensic pathologists. Documentation of Coroner's work became more demanding as the judicial world changed. Identification, notification, and storage problems increased as larger and larger numbers of transient and migratory people began dying in the County. Narcotic and other deaths began to increase, calling for a large number of autopsies on unembalmed bodies. This necessitated bringing more bodies into the central facility from "outside" districts. Population was now more than 5,000,000 and Coroner's cases were about 10,000 per year.

1961 Drug deaths, suicides, homicides, and traffic deaths increased above normal population increases. A new state law took effect stating that a death was reportable to the Coroner when a physician had not been in attendance during the 10 days prior to death. As a result of this law, approximately one-third more cases became reportable to the Coroner. Population was now over 6,000,000 and there were approximately 11,000 Coroner's cases per year.

1962-1970 This was a period of civil disobedience and one in which the drug culture flourished. There occurred an alarming increase in homicides, suicides, and drug-involved deaths. Court time demanded by the District Attorney and Public Defender increased as well as their need, and the need of other agencies (e.g., law enforcement, insurance, etc.), for increased documentation of records, evidence, microscopic slides, tissue, photographs, x-rays, clothing, etc. Security and chain-of-evidence procedures were strengthened. In 1965 the department established specialists/professionals in the investigation of Coroner's cases. These positions were entitled Coroner's Investigators. During this time the department began

experiencing a new demand – a demand for information. Requests came from local, state, and federal agencies, the press, educational institutions, private citizens, etc. These demands have continued and increased to the present time. By 1969 the population had increased to over 7,000,000 and the number of Coroner's cases increased to over 14,000.

1970-1972 During this period, the department opened two substations—one in 1970 in Long Beach and a second in 1972 in the San Fernando Valley. In 1972 the department moved into the new Forensic Science Center (Central Facility) on the grounds of the LAC/USC Medical Center. At this time approximately 50% of the autopsies were performed in the Center and 50% in the mortuaries.

1973 The Scanning Electron Microscopy Laboratory was established and began full operation.

1974-1977 This was a period of increasing budgetary restrictions. As a result, the substations were closed in 1975. All autopsies in the County, with the exception of the upper desert, were now performed in the Forensic Science Center. The Coroner's Investigators were given authority to certify cause of death at mortuaries in those cases where an autopsy was not required. By law, the department became responsible for investigating nursing home deaths. A new State law took effect stating that a death was reportable to the Coroner when a physician had not been in attendance during the 20 days prior to death (in 1961 it was 10 days prior to death). Although the County population stabilized at its 1969 level, approximately 7,000,000, the number of Coroner's cases increased to approximately 16,000.

1977-1979 Homicides and traffic accidents increased 28% and 23% respectively over the previous two years. Drug deaths decreased by 28% during the same time period. Overall, the Coroner's workload increased primarily due to an increase in the number of complex cases, particularly those involving new and exotic drugs, and to the additional effort required to satisfy the demand of the courts.

1979-1981 Homicides increased 25% over the previous two years, while vehicle accidents increased only 2% over previous experience. Drug deaths decreased 19% during the same period. The Coroner's workload of complex cases continued to increase.

1981-1983 Homicides and traffic accidents decreased 9% and 11% respectively over the previous two years. Drug deaths increased 20% during the same period, which increased the toxicological workload 27%. The Coroner's workload continued to increase with the complex nature of cases.

1984-1992 Regional offices were opened in Antelope Valley, Sylmar, and South Central Los Angeles to improve response time for the department. In 1990, by ordinance, the Department's name changed from Department of Chief Medical Examiner-Coroner to Department of Coroner and the position of Director was created for all non-medical

Departmental operations in support of the Chief Medical Examiner-Coroner, whose position was retained to carry out statutory Coroner functions.

The department received the highest accreditation possible for the Forensic Resident Training Program and Continuing Medical Education at four and three years' accreditation respectively. The department was also accredited to teach Advanced Peace Officer Standard and Training. The department received the National Association of Counties awards for Expanding the Availability of Corneal and Other Tissues to the Community, Laboratory Robotic System, Visiting Foreign Physician Program, and the Mass Fatality Management Program (MFMP). The Mass Fatality Management Program also received the 1992 Challenge Award from the County Supervisors Association of California.

The Youthful Drunk Driving Program was implemented as a prevention tool for the court to use for youthful offenders sixteen year old and younger. Forensic Laboratories Division was automated by the installation of several systems including the Laboratory Robotic system and an automated solid phase extraction system. The Robotics System provided cocaine drug screening for Coroner cases.

In response to the department's designation as a lead emergency management department, the Disaster Service Division was established in 1991 as the planning unit for emergency and disaster response. A Research and Publication Committee was formed to study and prioritize all requests for research and present recommendations to the Director.

In 1991, the department entered into a three year contract with Tissue Bank International (TBI) to provide funding to enhance tissue collection activity and allow for an increased availability of tissue for transplantation in the community.

1993-2002 During this period, new technology improved the Department's ability to transport and identify decedents, respond to public requests for information, and plan for future needs.

The Department purchased a scanning electron microscope with an automatic stage, increasing the speed of analysis. A Livescan system was installed for rapid identification of decedents. A computer network, initially installed in 1991, was upgraded substantially in 2000, providing easy access to Coroner's cases for public inquiries and statistical research. The laboratory improved its ability to detect new drugs, using new instrumentation such as a gas chromatograph-mass spectrometer-mass spectrometer and automated minilyser using ELISA technology. The Department Internet site provided rapid access to general information, as well as e-mail addresses for key staff members. A videoconferencing system was completed. This allowed for continuing medical education and interaction with other agencies and the criminal justice system.

The Department purchased two multi-decedent vehicles, capable of transporting 14 decedents at once. These vehicles have been valuable in mass disasters. The Department provided mass casualty training for hospitals, medical groups, and large corporations throughout the county.

The Department was accredited by the National Association of Medical Examiners until 2006, American Society of Crime Laboratory Directors until 2003, California Medical Association (continuing medical education) until 2004, and the Accreditation Council of Graduate Medical Education (residency) until 2005. The Department was also certified to provide credit under Peace Officers Standards and Training.

Skeletons in the Closet, the Coroner's marketing program, was very successful in generating additional revenue. The Department gave the annual West Coast Seminar, a regional conference covering topics of interest to the forensic community. The Youthful Drunk Driver Visitation Program provided classes for individuals at risk for drunk driving accidents. Access to this program was by court order.

The Coroner participated in the Interagency Child Abuse Network, working with other county agencies to improve child protective services. Regional offices were opened in the Santa Clarita Valley, Antelope Valley, and South Bay areas. These offices improved response time to calls in their respective areas.

The Department received recognition from the Los Angeles County Quality & Productivity Commission for performance measurement. The National Association of Counties recognized the Department for its achievements in videoconferencing.

2003 The Department worked with the County Chief Administrative Office to acquire the newly renovated Old Administration Building adjacent to the Coroner's Office. This building houses non-biohazardous Department functions. The Department prepared for mass disasters by screening all incoming decedents for radiation, training field response employees in Standardized Emergency Management System (SEMS), and offering smallpox vaccination to employees. With the Health Department, the Coroner instituted automatic reporting of incoming cases to Acute Communicable Disease Control. This system provides an early warning of outbreaks of contagious disease.

The Operations Division implemented an on-call investigator field response program to provide efficient regional response to cases, reduce overtime, and offset staffing shortages.

The Department worked with the California State Coroner's Association and Orange County Coroner to create an advanced training curriculum for Coroner's investigators throughout the state. In June 2003 the Department held the Forensic Skeletal Recovery Workshop, and in March 2003, the Department held a Disaster Symposium.

2004 The laboratory obtained re-accreditation by the American Society of Crime Laboratory Directors. The Department obtained re-accreditation of the Department as a provider of continuing medical education. The Coroner received an award from the National Association of Counties for the special operations response team and infectious disease surveillance program and completed an internal review of the Department's residency program to meet accreditation requirements.

2005 The Department received continued accreditation of the forensic pathology fellowship program until 2008, and sponsored the meeting of the National Association of Medical Examiners at the Biltmore Millennium Hotel. Work on the Department's Business Continuity Plan was started. The Coroner received recognition from the Board of Supervisors for participation in the MetroLink train disaster of January 26, 2005.

2006 The Coroner received funding from the Productivity Investment Board for the multi-year development of a DNA lab. The Department's phone system was replaced with Voice over Internet Protocol (VOIP). Staff members participated in formation of the County's elder death review team and implemented a Department wide quality assurance committee. The Department obtained re-accreditation of the Department by the National Association of Medical Examiners

2007 Neuropathologists affiliated with the Department published an atlas of neuropathology that presents Coroner's case material. Planning started for the renovation of the Coroner's building.

The Department obtained Board of Supervisors' approval to contract with forensic pathologists for as-needed services. Operations Bureau implemented a veteran's disposition program designed to expedite veterans' burials for eligible decedents. Forensic Laboratories began the process of developing an in-house DNA laboratory.

2008 The Department of Coroner worked with the State of California to implement EDRS, a statewide death certificate registration program. The Department's Business Continuity Plan was completed. The Coroner contracted with Rosalind Franklin University to arrange rotations for pathologist's assistant students. Medical Division implemented daily quality assurance review of autopsy reports by the senior pathologists.

2009 Planning continued for a major renovation of the Forensic Science Center, including a new crypt and improved ventilation on the autopsy floor, as well as an on-site DNA laboratory. The Department undertook projects to improve the cost-effectiveness of Coroner's services, including establishment of an Efficiency Committee, cellular telephone cost reduction, and paper reduction. The Department explored the availability of Federal grant funding for improvements in computerization.

2013 In 2013, the Board of Supervisors revised the County Code to reestablish the single department head structure of the Department. The Board renamed the Department to the Department of the Medical Examiner-Coroner, and gave the responsibility of administering the Department to the Chief Medical Examiner-Coroner.

Legislation

Legislation changes 1993 through 2002

• SB 297 (2001) - Requires Coroner to collect DNA samples from unidentified decedents and submit them to the California Department of Justice for possible identification (California Penal Code 14250).

• SB 1736 (2000) - Specifies procedures Coroner must use for identification of an unidentified body (California Government Code 27521, Health & Safety Code 102870).

• AB 1225 (1998) - Modifies procedures for Coroner's autopsy of victims of sudden infant death syndrome (California Government Code 27491.41).

• SB 1403 (1998) - Requires explicit consent for all postmortem tissue donation; implied consent may no longer be used for cornea procurement (California Government Code 27491.47).

• HR 3923 (1996) - Establishes a procedure for assisting families of aviation disaster victims (Title 49, United States Code, section 1136).

• SB 1230 (1995) - Establishes interagency domestic violence review teams (California Penal Code 11163.3).

• AB 3111 (1994) - Requires twelve-hour search for next of kin of tissue donors (California Health & Safety Code 7151.5).

• AB 1872 – Establishes procedures for the Coroner, in the event of a mass fatality, to submit a single petition to the Superior Court for an order to judicially establish the fact of, and the time and place of, the deaths of the victims. (California Health & Safety Code 103450).

• HR 3162 – Provides grants to state and local agencies in 2002 to 2007 to enhance preparation for and response to terrorist acts (Title 42, United States Code, section 3714).

Legislation changes in 2003

• AB777 – Establishes procedures for cases where the medical examiner or coroner is considering withholding permission for organ procurement. (California Health & Safety Code 7155.7).

• AB2811 – Includes competent adult children among those who may be responsible for disposition of human remains (California Health & Safety Code 7100).

Legislation changes in 2004

• SB 1313 – Changes certain provisions of child abuse reporting laws. Employers of mandated reporters are strongly encouraged to provide training in child abuse reporting (various Penal Code sections).

• SB1081 – A medical examiner or other physician may test a decedent for human immunodeficiency virus without consent if an autopsy is performed or body parts are donated (Health and Safety Code 120990(b)).

• United States Code Title 18, Ch 228A, Section 3600A – Requires the government to preserve biological evidence secured during investigation or prosecution of a Federal offense if the defendant is under sentence of imprisonment. Provides criminal penalties for failure to do so.

Legislation changes in 2005

• AB 268 – Requires Coroners to report deaths due to an osteopathic physician's gross medical negligence or incompetence to the Osteopathic Medical Board of California (Business and Professions Code 802.5)

• AB 299 – Permits child abuse reports to be made by fax or electronic transmission (Penal Code 11166)

• SB 630 – Extends law which establishes criteria for the Coroner for organ procurement (Health & Safety Code 7151.20)

Legislation changes in 2006

• SB 1562 – Coroner may recover certain costs related to patients at a state hospital (Penal Code 4758).

• AB 2156 – A certified pathologist's assistant is authorized to perform autopsies (Business & Professions Code 1269.3).

Legislation changes in 2007

• AB 682. Consent is not required for HIV testing during autopsy (California Health & Safety Code 120990)

• AB 1689. The Coroner may allow anatomical gifts under specified circumstances. Tissue may be used for research or education only if an anatomical gift has been made. The Coroner may disallow organ donation in Coroner's cases only under specified circumstances. (California Health & Safety Code 7150-7151.40).

• SB 1196. The Coroner must inquire into deaths where the decedent has not seen a physician or a hospice-associated registered nurse within 20 days of death. (California Government Code 27491). When requested by the next of kin, the Coroner shall perform an autopsy if there has been no previous autopsy on a decedent, and may perform an autopsy if there has been a previous autopsy (California Government Code 27520).

Legislation changes in 2008

• AB 1689: Restricts the circumstances where the Coroner may decline organ procurement for transplantation in Coroner's cases (Health & Safety Code Section 7151.20).

• SB 1196: Changes existing law on Coroner's jurisdiction to require the Coroner to inquire into deaths where the decedent has not been attended by either a physician or a registered nurse who is a member of a hospice care interdisciplinary team in the 20 days before death. (Government Code Section 27491).

Legislation changes in 2009

• AB 275: Requires California Coroners to collect DNA samples from unidentified decedents and submit them to the California Department of Justice for possible identification (Penal Code Sections 14250 and 14251).

• Melendez-Diaz v. Massachusetts, U.S. Supreme Court 07-591. Restricts admissibility of expert witness testimony in criminal cases under some circumstances

Los Angeles County Coroners

1850-1851	Alpheus P. Hodges, Physician
1852	Rafael Guirado
1853	J. S. Mallard
1854-55	T. Mayes
1856	Q. A. Sneed
1857	J. B. Winston
1858	A. Cook
1859	Henry A. Miles
1860-61	H. P. Swain
1862-65	J. S. Griffin, Physician
1866-67	J. L. Smith
1867-68	V. Gelcich

1870-73	J. Kurtz
1874-75	N. P. Richardson
1876-77	J. Kurtz
1878-79	J. Hannon
1880-84	H. Nadeau
1885-86	A. McFarland
1887-90	J. M. Meredith
1891-93	W. A. Weldon
1893-95	H. G. Cates
1895-99	H. G. Campbell
1899-1901	L. T. Holland
1901-1908	J. H. Trout
1908-20	Calvin Hartwell
1920-21	F. T. Williams
1921-45	Frank A. Nance
1945-53	Ben H. Brown
1953-57	E. A. Winstanley

Chief Medical Examiner-Coroners

1957-68	Theodore J. Curphy, M.D.
1968-82	Thomas T. Noguchi, M.D.
1982-90	Ronald N. Kornblum, M.D.
1990-92	J. Lawrence Cogan, M.D. (Acting)
1992-2013	Lakshmanan Sathyavagiswaran, M.D.
2013 to present	Mark A Fajardo M.D.

Directors

1990-93	Ilona Lewis
1993-2012	Anthony T. Hernandez
2012-2013	Lakshmanan Sathyavagsiwaran, M.D. (Interim)

Colorado – Denver

Chief Medical Examiners of Denver
and their Chief Medical Examiner Offspring



Randy Hanzlick, MD

April, 2014

Introduction

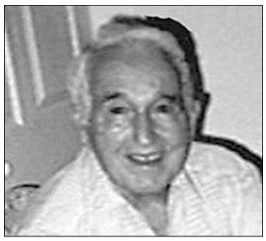
As part of NAME's history and annual e-book projects, this document is a summary of the Chief Medical Examiners in the Denver office since the elected coroner position was abolished in 1947 (see Page 7 of this report). Keep in mind that this change occurred prior to the 1954 Model Postmortem Examinations Act, but followed the 1928 and 1932 National Research Council Bulletins which recommended that coroner systems be replaced with medical examiner systems. Also included in this report are persons who trained or worked in the Denver office who went on to become a Chief Medical Examiner of Chief Forensic Pathologist either in Denver or elsewhere.

Specific Information

The succession of Chief Medical Examiners in Denver, Colorado is as follows:

Chief Medical Examiner	**Year Service Began**	**Year Service Ended**	**Persons who trained in Denver under this Chief ME. Those underlined went on to become a Chiefs ME or Chief FP in various places**
Angelo Lapi	1947	1955	George Ogura
George Ogura	1955	1986	John Feegel, Jill Cobb Gould, John Meyer, Robert Deters, William Galloway, Patrick Allen
George Thomas	1986	1988	Michael Arnall, Don Habbe
George Ogura	1989	1991	Alan Stormo
Thomas Henry	1991	2006	Thomas Beaver
Robert Whitmore	2006	2007	
Amy Martin	2007	2013	Michael Burson, Joseph White, Lindsey Harle, Garth Warren
James Caruso	2014	Incumbent	

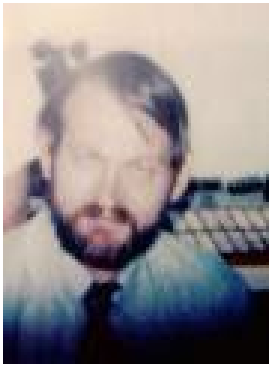
Chief Medical Examiners of the Denver Office



Angelo Lapi received his MD degree from the State University of New York in Buffalo, and became a fellow in the Department of Legal Medicine at Harvard with Allen Mortiz, who recommended that Denver needed a medical examiner system and that Dr. Lapi was qualified for the job. . He had been serving as an assistant medical examiner in Massachusetts when he was appointed Denver's first Medical Examiner in 1947 at age 34 with a salary of $866 per month. The coroner system was "junked" in 1947 leading to Dr. Lapi's appointment, and George Ogura was designated to act as medical examiner until Dr. Lapi arrived, and then served as Dr. Lapi's assistant. He eventually went on to be medical examiner for Kansas City, Missouri. He eventually retired and moved to Florida and died there in 2009.



George Ogura is a graduate of the University of Colorado and received his MD degree from the University of Colorado in Denver, where he also did his internship and pathology residency training. His forensic pathology training was in Denver with Angelo Lapi, and he then became Chief ME in Denver. In the 1960s and 1970s his associates included Ben Miyahara, Henry Toll, and Don Clark, all now deceased. Doctors Miyahara and Clark remained active with the office into the 1990s. Dr. Ogura still resides in the Denver area.



George Thomas was born in New Britain, Connecticut. He obtained his BA degree from Yale and his MD degree from the Medical College of Virginia in Richmond. He did an internship at Jefferson Medical College in Philadelphia and his pathology residency at the University of California-Davis in Sacramento. His forensic pathology fellowship occurred in Albuquerque under the late James Weston. He also did postgraduate work in forensic medicine at Guy's Hospital in London. He worked as an associate medical examiner in Miami-Dade with Joseph Davis, and then moved to Denver in 1982. He was Deputy Coroner and Forensic Pathologist there until he became Chief in 1986.



Thomas Henry is a South Dakota native and received his bachelor's degree from the University of South Dakota. His medical school years were divided between the University of South Dakota (2 years) and University of Colorado (2 years). Dr. Henry did his anatomic and clinical pathology training at the University of South Dakota in Sioux Falls, and his forensic pathology training was in Washington, DC with Jim Luke, Brian Blackbourne, and Roy Riddick. Dr. Henry spends retirement travelling, reading, studying, and following NAME-L.



Robert Whitmore received his MD degree from St. Louis University School of Medicine. His internship was at University of Kansas Hospital and his pathology residency was completed at Stony Brook University Hospital, SUNY Health Sciences Center. He did his forensic pathology training in San Diego. Prior to his coming to Denver, he worked as medical examiner in Brevard County, Florida. He served as Chief Medical Examiner in Denver in 2006-07. He then worked in Alaska with the late Dr. Frank Fallico where he served as acting Chief ME when Dr. Fallico became ill. He now works as a forensic pathologist with the Kern County Sheriff's Office in Bakersfield, California.

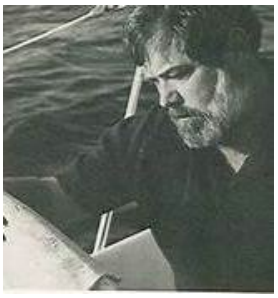


Amy Martin did her forensic pathology fellowship in Cincinnati with Harry Bonnell as her training director. She is a graduate of the Ohio State University College of Medicine and did her pathology residency at the Cleveland Clinic. She joined the Denver office as a forensic pathology in 1992, became Chief Medical Examiner and 2007, and retired in 2014.



James Caruso is from Chicago, spent his college years at the University of Illinois in Urbana-Champaign, and received is MD degree from the University of Illinois in Chicago. Duke University Medical Center is where he did anatomic and clinical pathology training. He did a transitional internship at the Naval Medical Center in Portsmouth, Virginia and trained as an undersea medical officer. His forensic pathology training occurred with the Armed Forces Medical Examiner in conjunction with the Maryland Medical Examiner's Office in Baltimore, with David Fowler as his training director. He has spent more than 25 years on active duty with the Navy, is board certified in not only forensic pathology but Diving and Hyperbaric Medicine. And was Chief Deputy Medical Examiner for the Armed Forces from 2003-2006. He is the current Chief ME in Denver and began his service there in 2014.

Chief Medical Examiners Spawned From the Denver Office



John Feegel received his forensic pathology training with George Ogura in Denver. He was Chief ME in Hillsborough County (Tampa), Florida, from 1974-1977. He also worked as a forensic pathologist in North Carolina and in the late 1970s and early 1980s, in Atlanta. Dr. Feegel also had a law degree and wrote multiple novels and after leaving Atlanta, and primarily worked as a consultant in the Tampa area. Dr. Feegel died in 2003.



Jill Cobb Gould is from Wichita, Kansas and received her undergraduate degree from Wichita State University. He MD degree was received from the University of Kansas Medical Center. Her internship and pathology residency occurred at Denver General Hospital and her forensic pathology residency was done at the Denver office. She then became Arapaho County, Colorado Coroner/ME and served there from 1989-1993. She is now retired.



John Meyer became Boulder County, Colorado Coroner/ME in 1986. He served in that position until 2002, but continues to work with that office and also works as a pathologist at Boulder Community Hospital. He received his medical degree from the University of Missouri in 1973 and completed an internship in Internal Medicine at George Washington University School of Medicine in 1973. After serving two years as a general practitioner in the Indian Health Services, he completed his residency in Anatomic and Clinical Pathology at the university of Colorado Health Services Center and a fellowship in Forensic Pathology at Denver General Hospital



Patrick Allen is now the Chief Medical Examiner in Larimer County, Colorado. He trained in Denver with George Ogura and others working in the office at the time including Don Clark and Ben Galloway. Dr. Allen received his BS degree and MD degree from the University of Louisville. Has pathology residency occurred at the Medical University of South Carolina in Charleston and University of Colorado in Denver.



Don Habbe is the Chief Forensic Pathologist for the Coroner in Rapid City, SD, and works with the Clinical Laboratory of the Black Hills. He received his BS degree from the University of South Dakota in Vermillion, and also received his MD degree there. His internship and pathology residency were done at the University of Colorado Health Sciences Center in Denver and he stayed on in Denver to also do his forensic pathology fellowship there. Don is one of the best golfers within the ranks of forensic pathologists.



Kenneth "Alan" Stormo . Referred to as "Stormy" by his friends and colleagues, Dr. Stormo was acting Chief ME in Milwaukee in 2008 between the terms of Russell Alexander and Christopher Happy. He had performed medicolegal autopsies in Fond du Lac, Wisconsin while in private pathology practice, then obtained additional forensic pathology training in Denver. He then was hired as an associate medical examiner in Milwaukee and continued to also do cases for Fond du Lac County. His work in Milwaukee began shortly before the Jeffery Dahmer cases. Dr. Stormo was originally from Deadwood, South Dakota, received his bachelor's degree from the University of South Dakota and his MD degree from the University of Nebraska College of Medicine. His internship and pathology residency were done at Denver General Hospital, and his forensic pathology training also occurred in Denver. Dr. Stormo died in 2013.



Thomas Beaver served as Chief ME in Daytona Beach (Volusia County), Florida and then later in Lubbock, Texas as Director of forensic pathology at Texas Tech University Health Sciences Center. Prior to his move to Florida, he had worked in Modesto and Stockton, California. He also served as Chief Forensic Pathologist in Alameda County (Oakland), California. After his tenure in Lubbock, he returned to California and worked as a forensic pathologist with the Kern County Sheriff in Bakersfield. He now works in Fair Oaks, California near Sacramento. He received his bachelor's degree from the University of California –Santa Barbara and obtained his MD degree from St. George's University in the West Indies. His pathology residency was at the University of Colorado Health Sciences Center and he did his forensic pathology fellowship in Denver.

All Chief Medical Examiner noted above are/were board certified forensic pathologists.



Denver Junks Obsolete Coroner System

Medical Examiner Replaces Gus Economy

By LEE CASEY

DENVER'S antiquated coroner system has been junked. Gus Economy has been relieved. Instead of a political deputy coroner with no training, the duties will be performed by medical examiners who are specialists in the field.

This action was taken yesterday by Dr. Solomon S. Kauvar, manager of health and charity and ex-officio coroner. It is in accord with one of Mayor Newton's campaign pledges and in line with suggestions in this column.

Lee Casey

Denver's first medical examiner will be 34-year-old Dr. Angelo Lapi, now assistant medical examiner for Massachusetts. He is a graduate of the medical school of the University of Buffalo, a pathologist, and a research fellow of the Department of Legal Medicine at Harvard. In addition to scientific training he has had practical experience.

Dr. Lapi's salary of $666 a month, beginning Oct. 1, was approved by City Council Monday night.

* * *

HE WILL BE assisted by Dr. George Ogura, also a graduate physician, who has completed five years of study in pathology at the C. U. Medical School. Until Dr. Lapi's arrival, Dr. Ogura will function as medical examiner. Mr. Economy, whose pension rights are being considered, will be transferred to some other department.

The offices of city morticion, which has paid $100 a month, and that of city pathologist, at $400 a month; will be abolished.

"This sets up the modern medical examiner system in Denver and represents the achievement of one of the primary objectives for which I took the mangership," Dr. Kauvar reported to Mayor Newton. "It gives the people the revision of the coroner system you promised in your election. This problem also can be written off as solved."

* * *

DR. KAUVAR began his study of the operation of the coroner's office when he took over his duties June 1 and after consultation with the city attorney, Police Department and district attorney, determined that the replacement of the deputy coroner by a medical examiner was badly needed.

Although the State Constitution requires every county to have a coroner, it was determined that the change would be in accord with its provisions.

Dr. Allen R. Moritz of Harvard, considered the leading authority on medical examiners, came to Denver at the request of Mayor Newton and Dr. Kauvar and conducted an independent examination. He agreed that Denver needed a medical examiner and that the coroner's work should be performed by a physician who was also a pathologist.

Subsequently he recommended Dr. Lapi, who came to Denver, reviewed the situation and agreed that there were adequate possibilities to do medical examiner work under existing laws. He accepted the appointment last week.

* * *

DR. MORITZ, in his report to Dr. Kauvar said:

"Incompetent performance of a medico-legal autopsy may and frequently does result in the non-recognition of homicide, in the unsuccessful or unduly protracted prosecution of criminals, in the unwarranted suspicion or prosecution of innocent persons, in failure to award monetary compensation to those deserving it, and in non-recognition of preventable hazards of health and life.

"It is of the utmost importance that the forensic pathologist be constantly on guard against being maneuvered into the position of a hostile witness. He must seek the truth regardless of its consequences and must be as assiduous in pursuit of facts that would tend to establish innocence as those that would tend to establish guilt. Loss of objectivity is a catastrophe that no pathologist doing medico-legal work can survive."

* * *

THE CORONER'S jury, which actually performs no useful function, will be abolished under the medical examiner setup.

It has been the custom to call a coroner's jury several times a week. There are six jurors, each of whom is paid $1.50 for attending a session lasting a few minutes.

"I see no excuse for continuing the coroner's jury, which is actually a holdover from the Middle Ages," Dr. Kauvar said. "It is a needless expense and the reports are of no value or legal standing."

Coroner's juries are no longer summoned in New York, Boston and other large cities that have adopted the medical examiner system Denver will now have.

TOMORROW: Denver has too few murders.

"We can have one more soda if you'll promise to eat your vegetables when we get home for dinner!"

'Twas a Gay Life In Ancient Pompeii

By ROBERT C. RUARK
Scripps-Howard Staff Writer

POMPEII, Italy, Aug. 26.—I have been stumbling around ruins and peering at the ancient stiffs in catacombs lately, in pursuit of culture, and I must say it is a very depressing business.

Ruark

After you gander at the dusty debris long enough, you come up with the thought that mankind always winds up in disaster, and that we have not progressed an inch since old Vesuvius coughed and buried the sinful citizens of Pompeii. We have merely contrived to complicate the process of extinction.

What I mean is, every time you get the plumbing to working good and the taxes paid up and a couple of bucks in the bank, along comes something like a volcano or an atom bomb to entomb the constituents in hot ashes. Two thousand years later the guide hails the rubber-necks and says: "Regard, what's left of the house of Lucretius Pronto," or "Regard, gentlemans, the remains of the Temple of Jupiter."

* * *

THEY HAVE begun to dig up new sections of Pompeii, again, and all they seem to unearth is another covey of wineshops and a villa where somebody high up in the political grab kept his cutie—outside the city and after the hours when the God-fearing folk had to be penned inside the walls.

I would say that we have nothing now that they didn't have then. Pompeii had more gimmills than Third ave., N. Y., and more houses of unsavory repute than prewar Paris.

Every temple had a convenient saloon around the corner, and the biggest business in town was the hot bath, where the roisterers came to sweat off the excesses of a rough night with the wine vats. The plumbing in them days was somewhat better than is enjoyed by the upper-classes of modern England, and the old boys knew things about air conditioning that we still haven't licked.

* * *

THE RICH kids had it all, as usual, while the poor folks slept in the alleys, because of the housing shortage. A couple of blooted bachelors named Vettii owned the showplace of the town. They had a room full of racy etchings to show their lady friends, and they seemed to have been of the neo-Tommy Manville persuasion.

The young man of Pompeii divided his time between the prize fights, the hot baths and the nightclub sector. Freedom of worship was assured, because you could pray to anything from Zeus to a billygoat.

The women all turned up in the Temples to show off their fancy new sandals and upswept hairdos.

Marshall Recovery Plan Is Stalled

By WILLIAM PHILIP SIMMS
Scripps-Howard Foreign Editor

LONDON, Aug. 26.—A "working economy" plan for Europe as suggested by Secretary of State Marshall won't be forthcoming—at least not on schedule.

American officials with whom I talked, especially on the continent, are pessimistic. Everybody, from Gen. Lucius D. Clay down, warns that a workable program must be presented or Congress will turn it down cold. And without American aid the world outlook is dark, indeed.

British critics, mostly Tories, blame the Attlee government for what they regard as less hopeful prospects for the recovery plan.

* * *

THEY advance two reasons: First, after seizing the Marshall proposals "with both hands," as Foreign Minister Bevin expressed it in mid-June, now London is accused of having "lost faith" in the scheme, preferring to deal along with Washington.

Second, they say that instead of fully sensing that a plan is required whereby the United States could help Europe help herself, London seems to be laboring under the impression that the United States must provide Europe with more billions in order to save herself.

These critics cite statements by British leaders to prove their point. The gist of these is that 60 million skilled American workers are producing more goods which the rest of the world wants than the world has dollars with which to buy. This creates "dollar scarcity" abroad and a glut of goods in America—which glut is fatal to American prosperity unless it is relieved by something like a peacetime lend-lease to Europe.

* * *

THUS, say opposition spokesmen in London, the government planners entirely miss the point: That it is not that America is producing too much, but that Britain and Europe are producing too little.

Every informed official, American, British or French, admits European recovery without German production put back into the scheme is wishful thinking. Yet the British and French are unwilling to do much until after the Big Four conference in November.

Rangely Will Get Its Roads

By ROBERT L. CHASE

HOT SPOT on the highway map is Rangely, where oil and more oil is coming from the ground.

The Rangely oil boom caught the highway planners flat-footed. Demands rose long and loud for traffic arteries far beyond the wildest dreams in Northwestern Colorado a few years ago.

Bob Chase

Democrats made political capital of John Vivian's inability to meet the situation. They wailed that Utah would get all the business because Colorado didn't have the roads.

Pressure groups pulled and tugged all over the lot to get their own favorite routes in the priority spot.

Now, at long last, it seems to me order is coming out of the highway chaos—traffic lanes are being pushed steadily through to Meeker, to connect with U. S. 40 on the north, and to the Utah border.

Surveys are going forward on projects east and west of Rangely to connect with stretches constructed last year.

There's a project under way between Meeker and Craig, on the Iles oil dome highway.

* * *

HERE is a breakdown on important projects for the Rangely highway arteries:

Northwest of Rangely, toward the Utah line, a $51,220 project completed and 2.1 miles of construction under way at a cost of $226,321.

On the Rangely-Meeker Highway, a $123,555 project finished. Two more projects for this highway are on the drawing boards. One, at $150,000, calls for 1.8 miles of highway west of Meeker and the other, at $100,000, calls for three miles of surfacing and oiling.

* * *

THE STINKING Creek Cut-off to U. S. 40, 11 miles of construction at $314,000, is underway.

At Maeadona, on U. S. 40, 19.8 miles of oiling has been completed for $87,000.

West of Craig on the same main highway, 1.2 miles of gravel surfacing is under way in a $48,000 project.

A 2.2 miles project west of Steamboat Springs, also under construction, is to cost $93,000.

A 6.8 mile $175,000 project south of Steamboat Springs is ready for advertising this month.

INCIDENTALLY, the Meeker-Rangely work is a prime example of how county co-operation helps push highway construction through. Rio Blanco County is using $500,000 in oil revenue anticipation bonds to help push this vital highway to early completion.

Rio Blanco shown up well on the county roads program. It has a three mill levy for county roads, raising $15,291 in 1945 to put with the $353,773 it got from the state for its highway work.

Fremont, Jackson and Delta Counties are using their own oiling equipment to push through projects which would otherwise be stymied by shortage of state equipment.

Jackson County had graded and graveled a project on Highway 127; the state was to do the oiling. But the state couldn't get the crews and the equipment. So now the county is finishing up the job, with state oil and materials.

Drive and co-operation—that gets jobs done against a lot of obstacles.

1947 Newspaper article about replacement of the Denver Coroner with a Medical Examiner

Acknowledgements

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Connecticut

The History of the Office of Chief Medical Examiner of the State of Connecticut



James Gill, MD

September 2015

The medicolegal investigation of death in Connecticut was first documented in 1662. It involved a suspected death due to witchcraft.

Although the Salem Witch Trials are more famous, New England's first "witch" execution occurred in Connecticut when Alice Young was hanged in 1647 (the Salem trials occurred 45 years later in 1692). Over the next 50 years, ten more suspected witches would be executed in Connecticut. During 1662, nine people were tried for witchcraft (a capital offense).

The Blue Laws of the Colony of Connecticut refer to the 1650 orders of the Connecticut General Court and later the Code of Laws of the Colony of New Haven enacted in 1655. These were enacted by the Puritans to control morality. Some believe the Blue Laws got their name because they were printed on blue paper. Others believe that the word "Blue" came from its use to denote a rigidly moral position.

The original Connecticut Blue Laws stipulated the death penalty for witchcraft: If any man or woman be a Witch that is hath or "consulteth" with a familiar spirit they shall be put to death. It was in this social context that the first recorded medicolegal autopsy in Connecticut occurred in 1662. The General Court in Hartford ordered an autopsy on 8 year-old Elizabeth Kelly who had died from suspected witchcraft performed by Goody Ayres.

Bryan Rossiter of Guilford Connecticut and founder of the Windsor colony was called to perform the autopsy. His medical training is unknown but he was granted permission to act as a physician. The first medical school in America (actually the 13 colonies) was founded in Philadelphia in 1765 (over 100 years later). He performed the autopsy five days postmortem at the graveside. He made the following report:

"Upon the opening of John Kelly's child at the grave I observed:
The whole body, the muscular parts, nerves and joints were all pliable without stiffness or contraction, the gullet only excepted. Experience of dead bodies renders such symptoms unusual.
From the *costall* ribs to the bottom of the belly in the whole latitude of the womb, both the scarf skin and the whole skin with the enveloping or covering flesh had a deep blue tincture, when the inward part thereof was fresh, and the bowels under it in true order, without any discoverable *pecaney* to cause such an effort or symptom.
No quantity or appearance of blood was in either venter or cavity as belly or breast, but in the throat only at the very swallow where was a large quantity as that part could well contain, both fresh and fluid no way congealed or *clodded* as it comes from a vein opened, that I stroked it out with my finger as water.
There was the appearance of pure fresh blood in the backside of the arm, affecting the skin as blood itself, without bruising or congealing.
The bladder of gall was all broken and curded, without any tincture in the adjacent parts.
The gullet or swallow was contracted like a hard fish bone that hardly a large *pease* could be forced through ("The First Postmortem Recorded in the Country." JAMA 21:661-662. October 28, 1893).

Although the autopsy of Elizabeth Kelly occurred in 1662, the General Court of the Colony of Connecticut adopted a Code of Laws in 1650 for investigations into accidental and violent deaths. The provision included "that whensoever any person shall come to any very sudden, untimely, or unnatural death, some Magistrate or the Constable of the *Towne* shall forthwith summon a Jury of Jury of *sixe* or twelve discreet men to inquire of the cause and manner of *theire* death." Medicolegal death investigation in Connecticut developed slowly into a coroner system over the next two centuries. In May 1883, an "Act Concerning Coroners" was approved by the Connecticut Senate and General Assembly [Chapter CXVIII]. It provided the following (condensed):
The judges of the superior court at their annual meeting shall appoint for each county for a term of 3 years, upon the recommendation of the state's attorney for such county, a coroner who will be an attorney residing in the county, familiar with "criminal practice and medical jurisprudence".
Every coroner must give bonds with surety of $3000 to the State, conditioned for the faithful performance of all the duties of said office.
The coroner shall appoint for each town an "able and discreet" person, learned in medical science, to be medical examiner (also bonded with surety to the coroner for $1000). They will hold the office at the pleasure of the coroner.
When any person shall come to "sudden, violent, or untimely death," and when any person shall be found dead, the manner of whose death is not known, anyone who is aware of such death shall forthwith report the same to the medical examiner for the town in which the dead body lies, who shall pay the person first reporting such death fifty cents, and who shall without delay repair to view and take charge of the dead body.

Whenever after such view, the medical examiner shall be satisfied that the death was not caused by a "criminal act, omission, or carelessness of another or others," he shall make out and sign a certificate of death and leave with the town's registrar of births, marriages, and deaths.

Whenever a medical examiner shall see reason to suspect that the person whose body he has viewed came to his her death by the criminal act, omission, or carelessness of another or others, he shall as speedily as possible by telephone (the first commercial telephone exchange in the world was started in New Haven, Connecticut with 21 subscribers in 1878), telegraph, or otherwise, notify the coroner. The coroner will then proceed to view and take charge of the body, and make all proper inquiry regarding the cause and manner of death.

If the coroner has reason to suspect that the death was caused by criminal act, omission, or carelessness of another, he may cause an examination or autopsy to be made of the body by the medical examiner or by some other competent surgeon or physician, who shall write every fact and circumstance found by such examination or autopsy which tends to show the identity or condition of such dead body and the time, manner, and cause of such death.

Should the coroner deem it necessary, he may by warrant cause a jury of 6 judicious men to be summoned to assist him in his investigation. For the purpose of securing evidence, the coroner may enter any and all places in his county; shall have the power to compel testimony; and shall have the power to cause any person whom he has good reason to suspect of having criminally caused the death to be arrested and committed to the county jail.

If it is necessary to have a chemical or microscopic analysis, or other scientific investigation, for the purposes of ascertaining the cause of death, he shall report it to the state's attorney who may order such analysis which will be paid by the state.

The coroner fees are: $15 for each day necessarily employed and 40 cents for each legal page of records and copies necessarily made after the termination of an inquest.

If a coroner has notice that a person has been "dangerously wounded or injured by criminal act, omission, or carelessness of another or others, and who is likely to die from such wounds" he shall take statement of such person concerning the manner and the person by whom such injuries were inflicted.

In coroner cases, the medical examiner shall take and deliver to the coroner all the property found upon or near the deceased person, or which in his judgment will aid in the investigation of death. Whenever the deceased person shall not have left property to defray the expenses of burial, then the same shall be paid by said town.

The 1950 Public Health Statutes of Connecticut detailed the fees paid coroners. These included:

$5 Recovery: "to bring to land a dead body of a person found in any of the waters"
$10 External Examination
$30 Autopsy
$.50 To the first person to report a sudden, violent, or untimely death to the medical examiner

It also described provisions for bodies to be used for anatomical purposes. Any person in control of an unclaimed body shall immediately notify the relatives, if known, and if unclaimed shall within 24 hours give notice to the department of medicine of Yale University, and "upon the expiration of 48 hours after death, or after such body shall have come into his control, shall deliver such body to said department."

In May 1968, Connecticut State Senator Jay Jackson, proposed to eliminate the coroner system in Connecticut and replace it with a Commission on Medicolegal Investigation (COMLI), headed by a Chief Medical Examiner (*Hartford Courant*, May 22, 1968). During discussion of the OCME bill, Senator Jackson stated the following:
"…it abolishes the present coroner system as we know it in the state of Connecticut. It abolishes the coroner's inquest and replaces it with a chief medical examiner who is of necessity a qualified pathologist."

He continued:

"The extent of the investigation made, in each case, will depend upon the nature of the circumstances involved. However, unlike the present system, the Chief Medical Examiner will not make a finding that a specific individual is or is not criminally responsible for any death. I feel that in death cases just as in other cases that claim criminal conduct, such a determination of criminal responsibility should be made only by a proper constituted court after full protection of the rights of the parties."

In 1970, Connecticut established the Commission on Medicolegal Investigations (Public Act 69-699) and in 1971 the Office of Chief Medical Examiner (OCME). The agency operated under the authority of Connecticut General Statutes 19a-400 et seq. The OCME was placed under the control of the Commission on Medicolegal Investigations. The Commission, composed of nine members, are appointed by the Governor of the State of Connecticut. The Commissioners each represent various groups and include the following (see Table 1):
Commissioner of the Department of Public Health (Ex Officio member)
Professor of Law (2)
Professor of Pathology (2)
A representative of the American Bar Association
A representative from the American Medical Association
Two members of the general public

Table 1. Chairs of the Commission on Medicolegal Investigation

Name	**Years of Service**
Irwin H. Lepow, MD, Ph.D	1969-1971
Thomas L. Archibald, LL.B	1971-1972
Henry S. Gaucher, JD	1972-1982
Douglas S. Lloyd, MD, MPH	1982-1987
Steve E. Downing, MD	1987-2006
Todd Fernow, JD	2006-present

The COMLI had its first meeting on November 7, 1969. They agreed to start a search for a chief medical examiner offering an annual salary of $35,000 and voted to have the Office located at the University of Connecticut School of Medicine. They considered an additional office at Yale University School of Medicine. They decided to invite forensic pathologists to Connecticut to provide advice to the COMLI.
At the November 24, 1969, Dr. Milton Helpern, the Chief Medical Examiner of New York City attended the meeting. He made the following comments recorded in the meeting's minutes:

Doctor Helpern offered congratulations on the passage of Public Act 699 saying that Connecticut, because of its size, was ideal for this type of program.

Doctor Helpern commented: You need good people for this job. If a medical examiner makes a mistake it can have a serious impact on many people. An organization is one thing but unless you have people who have the interest to do it and sensitivity to what is involved, it will not work. This is not merely an autopsy program. Autopsy work is the ultimate performance but the preliminary work is just as important. Of all the deaths in New York, one-third are reported to us initially. About one-fourth of these cases would really come up for investigation. Of that number, as long as they are looked into carefully, many can be disposed of without an autopsy.

The difficulty in non-medical people evaluating this is that you have agency problems on annual reports of how many cases are reported, autopsies, and how many suicides and homicides. This is fine when you get through but you never know at the beginning so you have to comb through a lot of material where a case may appear suspicious.

<u>Budget directors in our town will make an official remark at a luncheon, asking if we aren't doing too many autopsies. You don't begin to discover all significant cases unless you have wide coverage</u>. You miss a lot of things if you do not properly screen. If an unattended person is found dead you should ask for an autopsy. As a general rule people who are found dead without a history of illness and other possibilities are to be considered an autopsy should be done.

Doctor Foote: How about [autopsies for] sudden infant deaths?

Doctor Helpern: All should be done unless the family objects strongly for religious reasons, etc. But even there, the doctor in charge has to handle the situation tactfully and do what he feels is needed. The medical examiner has terrific responsibility in some situations where there is going to be a little objection. It is up to him to explain why he is doing it. All you have to do is see what happened in Massachusetts [Chappaquiddick Island, Massachusetts on July 1969, Mary Jo Kopechne car crash with Senator Kennedy] you had a medical examiner who had the authority to do it and yet did not and I think that Mr. Kennedy was destroyed by his not doing it. No one doubts that the girl drowned but in a case like that an autopsy should have been done.

Doctor Lepow: For the kind of projected load that we just talked about what sort of staff do you think would be required?

Doctor Helpern: My staff has too much to do, so much that today we are doing yesterday's unfinished load. I would say I would like you to have a system where a man doesn't have to do more than a case a day, 250 a year should be sufficient. But I would say a man who works out one case a day does very well. You would need at least six or seven pathologists with a staff of eight people. You would need at least eight other medical investigators to make the preliminary screening of cases.

Doctor Helpern suggested the chief medical examiner salary should be $35,000 to $40,000.

In May of 1970 the COMLI started searching for candidates for the Chief Medical Examiner position. Dr. James Luke was considered for the position. He insisted that the "Office of Medical Examiner" should be an integral part of the University. The COMLI believed that this was not legally realizable based on the statute and the charge of the Commission. Dr. Luke withdrew his name from consideration. Dr. Elliot Gross also was a candidate and ultimately accepted the appointment. Dr. John Kriz (a pathologist at McCook Hospital in Hartford where the autopsies were being performed) was the acting chief from July 1, 1970 until Dr. Gross started.

In December of 1970, Dr. Gross reported that 2,882 deaths and 240 autopsies were done in the first 5 months of the Office. Dr. Lepow "estimated that there would be about 8,000 cases and between 2,000 and 2,500 autopsies and felt that the 24 hour coverage, when Dr. Gross is located in the trailers, will give a better picture of the situation."

Dr. Elliot Gross left Connecticut in 1979 to become the Chief Medical Examiner of New York City. He was succeeded by Dr. Catherine Galvin who served until 1986. It was under Dr. Galvin's leadership that the Office applied for NAME accreditation in August 1985. Dr. Galvin stepped down in March 1986 after complaints of delays for autopsy results and a former employee in the medical examiner's office told the state police that dogs were allowed in the autopsy room. Dr. H. Wayne Carver II became the acting Chief Medical Examiner until a new Chief was appointed. In September 1986, the COMLI reported that 35 applications had been

received for the Chief Medical examiner position. Dr. James Luke was appointed Chief in 1987. During his time, he worked on creating information-sharing relationships with the CDC and implemented a new case manager computer system. Dr. Luke was succeeded by Dr. Carver in 1989 who remained chief for the next 24 years (see Table 2). During this time, the OCME changed from using local physicians as regional medical examiners to employ full time OCME investigators to assist with investigations including scene examinations.

The facilities for medicolegal death investigation were centralized to the University of Connecticut Health Center in Farmington in 1973. Prior to that autopsies were done at McCook Hospital in Hartford and/or local hospitals. Initially, the work was done in trailers and Quonset huts on the campus. A new building was completed in 1987 and it included toxicology and histology laboratories. This is the current facility of the OCME.

Table 2. Connecticut Chief Medical Examiners

Name	**Years of Service**
Elliot M. Gross, M.D.	1971-1979
Catherine A. Galvin, M.D.	1979-1986
H. Wayne Carver, II, M.D.	1986-1987
James L. Luke, M.D.	1987-1989
H. Wayne Carver, II, M.D.	1989-2013
James R. Gill, M.D.	2013-present

Table 3. Medical Examiners

Name	**Years of Service**
Elliot M. Gross	1971-1979
Catherine A. Galvin	1977-1986
H. Wayne Carver, II	1982-2014
Malka Shah	1981-2008
Arkady Katznelson	1983-2004
Edward McDonough	1986-2009
Ira Kanfer	1986-2015
James L. Luke	1987-1989
Kurt Nolte	1988-1990
Thomas Gilchrist	1990-2003
Susan Williams	2004-present
Frank Evangelista	2004-present
Thomas Gilson	2010-2011
James Gill	2013-present
Maura DeJoseph	2014-present
Gregory Vincent	2015-present
Angela McGuire	2015-present

Table 4. 1971-1988 Part Time Medical Examiners

Celedonio M. Asuncion
Martin M. Berman
Frank Braza
Edward S. Breakell
Thierry J. Hufnagel
Leslie S. Kish
David J. Krugman
Moses K. Lieberman
David M. Lowell
Ronald M. Maenza
Jon S. Morrow
Dennis G. O'Neill
Gary R. Pasternak
Jeffrey Sussman
Dean F. Uphoff

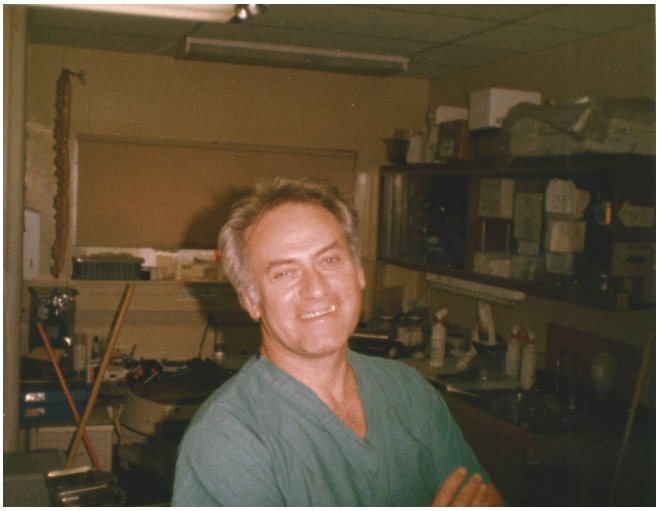


Image 1: Dr. Katznelson in the original OCME office.



Image 2: Breaking ground for the new OCME building July 1985 (from left: Dr. Shah, Dr. Katznelson, Dr. Carver, Dr. Pinder (toxicologist), and Dr. Galvin)

Georgia

Death Investigation in Georgia: From the Colonists to the Present



Randy Hanzlick, MD

September 2013

Forward

NOTE: The history presented here is derived in part from documents but much of it is based on memory, personal experience, and the memories and words of others. Some opinions are also expressed which are those of the author, who has practiced forensic pathology and served as a medical examiner in Georgia since 1982. If there are inaccuracies, omissions, or other offenses committed, please accept the author's apologies in advance. The author's best effort has been put forth to provide accurate facts and to describe relevant an interesting historical details about death investigation in the state of Georgia.

The author wishes to thank Terry Mills of the Georgia Bureau of Investigation's (GBI) Division of Forensic Sciences (DOFS) for providing historical documentation ("History of the GBI"), John Cross, JD of the Fulton County Medical Examiner's Office for conducting statute and historical research , Joe Burton, MD and Gerry Gowitt, MD for recounting the events concerning County Medical Examiner systems in Cobb, DeKalb, and Gwinnett counties, Wallace Vaughn for his excellent memory of events and people from the 1960s in Fulton County, and Kris Sperry, MD for his continual insights into Georgia death investigation in his role as the DOFS Chief Medical Examiner since 1997. Some information was also derived from a Supplemental Brief for Respondent, Case 35714, in the Supreme Court of Georgia, which dealt with the role and functions of the coroner on the basis of common and state law.

From the Days of the Colonists

In reading Georgia's first Constitution of 1777, it seems clear that the term "coroner" was already quite familiar and in general use in Georgia. Article XI states "In case of absence of the chief-justice, the senior justice on the bench shall act as chief-justice, with the clerk of the county, attorney for the State, sheriff, **coroner,** constable, and the jurors." This is the only

mention of the coroner in that Constitution. "Coroner" is not defined, nor are the job duties associated with that position. Thus, one would surmise that everyone already knew what a coroner was and what the coroner did. Indeed – that is the case – and here's why.

Remember that James Oglethorpe was English and arrived in 1733 in what is now known as Georgia. Already, when Oglethorpe arrived in what became Savannah, "coroners" had existed in England for more than 600 years. They were "old hat" in England and part of English common law. In 1194, the Articles of Eyre required that 3 knights and a clerk in each district attend each death in the district. These elected agents were referred to as "custos placitorum coronae," or "keepers of the pleas of the crown." They were called "crowners," and the term "coroner" obviously grew from the Latin word "coronae." The crowners had several missions. One was to determine how the death occurred. A second had to do with investigating possible suicides, which were prohibited and resulted in forfeiture of estate assets to the Crown. A third task was to serve in a fiduciary capacity to appropriately dispose of assets of the estate and ensuring the Crown got its share. They could hear and try pleas of the Crown.

21 years later in 1215, however, the Magna Charta restricted coroners and other individuals from holding pleas of the Crown. In 1276, the Parliament's Statute de Officio Coronatoris described coroner's duties to "enquire when anyone dies in prison, or comes to a violent or sudden end, and by what manner he came to his end." These provisions continued to be regarded as common law. By the 1400s, justices of the peace had assumed the fiduciary duties formerly conducted by coroners. So, 332 years before Oglethorpe left England to head toward North America, coroners were defined, their duties were known, and their efforts were concentrated on death investigation. The colonists brought these concepts to New England in the early 1600s, and Oglethorpe followed suit in his trek to Georgia in 1732-33. By the time Oglethorpe arrived, autopsies had already been performed in New England, such as an autopsy in Hartford, Connecticut in 1632 to determine whether a young child may have died from witchcraft. A Rembrandt painting of 1656 titled "The Anatomy Lesson of Dr. Joan Deyman" depicts an autopsy being performed. Thus, death investigation is certainly not new.

Early Georgia

From the time Oglethorpe founded Savannah in 1733 under the Charter granted by King George II, through the time Oglethorpe had his final departure back to England in 1743, and further still while Georgia was a Crown Colony and the British withdrew in 1782, Georgia followed English Common law. Thus, coroners probably existed during all these times, and almost assuredly after 1755 when the Royal Government was established in the Crown Colony. An Act of April 11, 1768 describes the fees allowed for the coroner for holding inquests. In 1784, it was reaffirmed that the common laws of England that were in force in Georgia in 1776 were still in full force and that coroners were governed by the common law of England. However, good documentation of the English common law and statutes was hard to come by, and in 1823, the Georgia General Assembly enacted legislation which set forth the duties and functions of the coroner. Such provisions carried forth in all revisions of Georgia Code into the 20th Century.

The only time the word "coroner" appears in any of the 10 Constitutions of Georgia that have been in effect since 1777 is in the original Constitution as discussed above. Coroners in Georgia have not been considered constitutional offices; rather, they have been regarded as public officers. Coroners did have judicial-like authority. They could hold inquests, impanel a jury, compel the presence of witnesses, examine witnesses under oath, issue warrants for arrests of alleged perpetrators of homicides, and require witness to appear at criminal trials.

Of course, as the English settlers came to Georgia and other parts of America, they didn't all just stay here. Some went back and forth, and as new emigrants came, emerging concepts in England came along with them. In England, for example, changes to coroner laws in 1836 and 1887 improved coroner death investigations by providing for a physician's presence at inquests and allowing for the coroner to order an autopsy. Such concepts were brought to New England and other colonies. These were important events because it was recognized that death and dying involve medical issues, and medical professionals were brought into the death investigation processes of coroners. It is important to realize that there was no requirement for coroners to have medical training. This is still true today in Georgia and in most other parts of the United States which still have coroners. In Georgia, specifically, it was not until the mid-1900s that medical doctors began to be more involved in death investigation, and it was not until the late 1980s the medical doctors trained in death investigation began to play a significant role in state-wide death investigation in Georgia.

When the original Georgia Constitution went into effect in 1777, there were 8 counties. Through the 10 different Georgia Constitutions, 159 counties have emerged. The Constitution of 1877 allowed for no new counties. An amendment of 1904 limited the number of counties to 145. Additional amendments in 1906 and 1912 added 3 more. The current Constitution defines a ceiling of 159 counties which is how many there are today. Georgia has more counties than any other state except Texas. That means Georgia also has more coroners than any other state except Texas. At virtually every county courthouse in Georgia stands a historical marker which explains for whom the county was named, other famous locals, and important public officers including the name of the coroner when the county was established. This tells us that coroners have been ingrained in Georgia county government for a long time and are important. It makes sense. After all, dying is one of the only things that all people do, and somebody needs to address the issues when a death occurs. Preparing a complete report of all coroners in all counties since each county was formed would be an almost insurmountable, if not impossible task. The State of Georgia has not kept state records on these positions and necessary records may not even exist in many of the counties, especially back to the beginning of county history. An account of each coroner, their background, main occupation, and interesting death investigations would probably be enjoyable reading, but collecting the necessary information would probably fall upon county historical societies which may have other interests, different priorities, and insufficient resources to find and report this information. Just think about it. There are 159 counties. Many have existed for more than 100 years and some for more than 200 years, and a coroner's term has typically been 2 to 4 years.

It's conceivable that there have been 2000 to 4000 coroners or more in Georgia's history! What a biography that would be.

As previously mentioned, the Georgia Constitutions have not defined coroners or their duties. However, the Constitutions, such as the 1877 version, do define certain criteria for county governments, including provisions that there be certain county officers, and that there be uniformity in the types of county officers from one county to another. The nature of these county officers is, according to the Constitution, determined by the Georgia General Assembly (Legislature). The legislature has enacted laws that require certain county officers in each county such as sheriff, tax collector, coroner, and others, but this is a matter of statute, not a constitutional provision.

20th Century Georgia

For the first 53 years of the 20th century, coroners continued to operate under the principals of English common law as clarified and set forth by the General Assembly's act of 1823, and were codified several times after that date including Georgia Code 21-2 as established in 1933. When coroners needed a physician to perform a postmortem examination, they would have to rely upon whoever was willing and available to perform such examinations. Often, perhaps, medical examinations just didn't take place. The laws did not provide specifically for physicians to assist in death investigations. It occurred mainly by happenstance.

It was not until 1953 that the first major change in death investigation occurred in 20th century Georgia. In that year, Code Section 21-2 was repealed. In its place, a new Code 21-205 was enacted and titled "The Georgia Postmortem Examinations Act." It was substantially similar in many respects to the 1954 "Model Postmortem Examinations Act" put forth by the National Commissioners on Uniform State Laws. Obviously, Georgia had gotten early wind of the Model Act and was timely in including some its provisions, which concentrated on a move toward so-called "medical examiner systems" which could be developed in place of the time-honored coroner systems. By 1954, some regions of the country had already abolished the office of coroner and established a system in which physicians were appointed as "medical examiners", New York City being one example and having done so in 1918. Such systems spread in the mid-20th century, especially in the northeastern United States.

The 1953 Georgia Postmortem Examinations Act did not dramatically alter the law related to coroners. What it did do, however, was establish law for a system that would improve death investigation services state wide by providing for more organized availability of postmortem examinations. It also provided, in conjunction with other state laws, that a county could abolish the office of coroner and establishes in its place a county medical examiner system. County medical examiner systems are discussed in more detail below. Presently, the improvements having statewide implications will be discussed.

Many things were happening in the 1950s in Georgia as far as death investigation is concerned. We need to take a step back for a moment to lay a foundation for discussion.

In the late 1947s, Dr. Herman D. Jones was asked by the Fulton County Police Chief to establish and direct a Crime Lab for Fulton County, which he agreed to do. The lab opened in June 1947. Dr. Jones had the same viewpoint that many have today that a crime laboratory should be independent of politics. He had declined a former invitation from Georgia Governor Arnall in the 1940s for fear of political interference. Dr. Jones was not a medical doctor. He went to college at Auburn University and Vanderbilt University and had received a doctorate in physical sciences from Columbia University. He had worked in Alabama's toxicology laboratory until 1942 when he moved to Atlanta as Professor of Biochemistry at Oglethorpe University. He left that position to start up the Fulton County Crime Lab in 1947. There was a Fulton County Coroner at that time.

In 1951, Governor Tallmadge asked Dr. Jones to set up a State Crime Laboratory and promised him that such a crime lab would be free of political influence. In 1952, the Georgia General Assembly worked with the City of Atlanta and Fulton County and they agreed to transfer the Crime Lab to the Department of Public Safety and make it a State Lab. This was accomplished in 1952. At first, the state lab was a three-man operation, but it grew in subsequent years. Operations were housed at the Old Confederate Soldiers Home on Confederate Avenue.

In 1953, the General Assembly enacted the Georgia Postmortem Examinations Act. Concern had arisen about the quality of death investigation and the Act, among other things, established the Director of the State Crime Lab (Dr. Jones) as Georgia's Chief Medical Examiner and authorized the State Crime Lab to provide and conduct postmortem examination services. It is important to remember that Dr. Jones was not a medical doctor. He did, however, learn how to perform autopsies and did them as Chief Medical Examiner. Dr. Jones retired in 1969. He had been the mainstay of medical examiner services for the State for nearly two decades. During his watch, a new GBI Crime Lab was built in 1957 on Confederate Avenue near the site where the Confederate Soldiers Home had stood. This facility housed the Crime Lab until the current State Crime Lab and GBI Headquarters was opened on Panthersville Road in Decatur in the fall of 1984.

By 1969, Dr. Larry Howard had worked at the Crime Lab for 13 years. He held a PhD degree and had worked as a toxicologist but had also learned how to perform autopsies while working at the lab and had taken some courses in pathology. He was named Director of the State Crime Lab in 1969 and became Georgia's second Chief Medical Examiner as provided for in State statute.

In 1980, the "State Crime Lab" was renamed the "Division of Forensic Sciences (DOFS)." It remains a division within the Georgia Bureau of Investigation (GBI). Although the Director of the GBI was typically appointed by the Governor and had changed numerous times since the GBI began in 1938 (Joseph Bray 1938; Arthur Hutchins 1940; WS Roper 1941; William Spence 1943; Joseph Bray 1946; George Bagby 1947; William McLemore 1947; Delmar Jones 1948; Barney Ragsdale 1963; Hugh Smith 1971; William Beardsley 1972; Beverly Ponder 1975; E.P.

"Phil" Peters 1980; J. Robert Hamrick 1985; Milton "Buddy" Nix 1992). Vernon Keenan is the current GBI Director. There had been only two Directors of the Crime Lab (Division of Forensic Sciences) between 1952 and 1989 when Dr. Howard retired as DOFS Director. Governor Tallmadge's promise of no political interference appears to have held up.

While Larry Howard was DOFS Director, by the early 1980s, two additional forensic scientists at DOFS learned how to perform autopsies while working at the lab. One was Dr. Byron Dawson and the other was Warren Tilman. The former had a PhD in science and the latter a Master's degree and both had worked as forensic scientists at the Crime Laboratory. Thus, until the mid-1980's there were three individuals performing postmortem examinations for the DOFS system, and none of the three were physician pathologists. All had learned their autopsy skills primarily while working at the GBI Crime Lab (DOFS).

Bringing Physician Pathologists to the GBI

Requests for postmortem examinations continually grew as coroners realized that such services were available and valuable. Further, there was no billing back to the counties so these postmortem examinations were free to the counties. Body transport was also provided by the state for the coroners. Demand exceeded the staff resources that were available. Further, Dr. Howard recognized that postmortem examinations involved medical issues and that it would be preferable to have postmortem examinations performed by physician pathologists. Thus, in the mid-1980s, Kenneth Alonso, MD, was hired to provide postmortem examination services. Dr. Alonso was a pathologist in hospital-based practice but became a board certified forensic pathologist. His hiring marked the first time that a medical doctor (and certified pathologist) had been hired to perform postmortem examinations in the DOFS system. In 1998, Dr. Alonso returned to private practice and the DOF hired Janet Pillow, MD, who had just completed her forensic pathology training at the Fulton County Medical Examiner's Officer in Atlanta. She worked with DOFS for one year and then accepted an offer to work in northern Florida.

Fulton County Medical Examiner Assistance to the GBI

It was July 1989 and DOFS needed help to meet demand for postmortem examinations. Dr. Larry Howard had retired, and Dr. Byron Dawson was named as the third DOFS Director and retained the title of Chief State Medical Examiner. The medical examiners who worked at the Fulton County Medical Examiner's Office had a sincere interest in assisting with the improvement of death investigations throughout Georgia. Thus, the DOFS and Fulton County entered into a contract that provided for the Fulton County Medical Examiners to perform postmortem examinations for the DOFS, at the DOFS, along with the DOFS personnel who were also performing them. The Fulton County medical examiners who provided such services included Saleh Zaki, MD (then Chief Medical Examiner and now retired), Randy Hanzlick, MD (then Associate Medical Examiner and now Chief Medical Examiner for Fulton County), Gerald Gowitt, MD (then Associate Medical Examiner and now Chief Medical Examiner for DeKalb County), Thomas Young, MD (who had just completed forensic pathology training at Fulton County, had become an Associate Medical Examiner, and is now is practicing forensic pathology

in Kansas City, Missouri), and Steven Dunton, MD (then in Forensic Pathology Fellowship Training and now working in Montgomery, Alabama). All of these forensic pathologists, except Dr. Zaki, had trained in Fulton County.

By late 1989, it became apparent that the medical examiner staff at Fulton County would need to enlarge to adequately perform postmortem examinations at both Fulton County and DOFS. In late 1989, Kris Sperry, MD, a forensic pathologist who had trained in New Mexico, wished to relocate and had called to see if there were any employment opportunities at the Fulton County Office. The answer was "man, do we have a job for you." He was interviewed and hired as an Associate Medical Examiner for Fulton County in December 1989. So, by the end of the 1980s, there were six forensic pathologists performing postmortem examinations for the DOFS system. All of these examinations were performed at the DOFS Crime Lab in Decatur, in addition to the examinations they performed at Fulton County. Between the two offices, about 2000 postmortem examinations were being performed per year. These forensic pathologists were very busy.

Expansion of the GBI Medical Examiners

The DOFS Crime Lab system by 1971 had two branch crime labs—one in Savannah, and one in Columbus. Each of these had a small morgue where autopsies could be performed, but no pathologists were hired to work there. By 1977, two additional branch labs had been built in Augusta and Moultrie. These also had small morgues but no pathologists to work in them. Cases continued to be sent to the DOFS lab in Decatur if an autopsy was needed. Branch labs were eventually added in Macon and Trion near Summerville, Georgia, making a total of 6 branch labs. In the early 1990s, John Parker, MD, who had trained in forensic pathology in Dallas, Texas, was hired to work in the Macon DOFS branch. He was the first medical examiner to occupy and work in a branch lab. He was replaced in 2000 by Melissa Sims, MD, who trained in forensic pathology at the Medical University of South Carolina in Charleston. When Dr. Parker left Macon, he continued to work as a forensic pathologist on a part time basis for Fulton County, DeKalb County, and in the DOFS lab in Decatur. In 1994, Anthony "Tony" Clark, MD, also a graduate of the Fulton County forensic pathology training program, was hired to work in the Moultrie DOFS lab. That lab eventually closed its forensic pathology services and Dr. Clark now works in Tallahassee. In 1999, Cameron Snider, MD, another pathologist who trained in forensic pathology at Fulton County, was hired to work in the new branch lab in Trion. He worked there for about a year and then returned to his home in Pennsylvania, and he was replaced by Vania Revell, MD and then later, William Oliver, MD. The Trion lab also subsequently was closed because of state budget issues. Snider now works as a medical examiner in Louisiana, Revell in Oklahoma (not forensics), and Oliver as a medical examiner in North Carolina at Brody School of Medicine at East Carolina University.

Mark Koponen, MD, had done his basic pathology training in New Mexico and came to Atlanta in 1990 to do his forensic pathology training with the Fulton County Medical Examiner. After completing training, he stayed on as a medical examiner there assisting in both Fulton County and DOFS cases. Anthony Clark, MD, came from Connecticut in 1991 to do his forensic

pathology training and likewise stayed on after completing it to work with the DOFS and assume duties in Moultrie in 1994. Geoffrey Smith, MD, had trained in pathology at Emory University and did a forensic pathology training year at the Fulton County Medical Examiner's office also went to work as a medical examiner for the GBI. For a period of time, Fredric Hellman, MD, who had come from North Carolina, served as a medical examiner for both Fulton County and the DOFS lab, but moved to Pennsylvania in 2000 to become the Medical Examiner in Delaware County. Dr. Hanzlick left the Fulton Office as an Associate Medical Examiner in 1991, but continued to work on a part time basis doing postmortem examinations for the DOFS and later, for Fulton County. Between 1991 and 1998, most of his professional time was spent working at Grady Hospital and for the Centers for Disease Control and Prevention. He later became Chief Medical Examiner for Fulton County in 1998 and remains in that position today.

In 1997, the DOFS decided to end the contract with Fulton County and hire its own medical examiners as employees. Doctors Sperry, Koponen, Hellman, and Smith became medical examiners solely for the DOFS in Decatur. Law changes in 1990 (see below), had created a State Medical Examiner position, and Dr. Sperry became the State Medical Examiner in July 1997 and was in charge of Doctors Koponen, Smith, and Hellman.

As additional funding became available, positions were added for forensic pathologist medical examiners at the DOFS. In 1999, Keith Lehman, MD, from North Carolina and another graduate of the Fulton County forensic training program, was hired in 1999 and remains today. Similarly, Kris Podjaski, MD, who came from Connecticut, also trained in the Fulton County program and was hired by DOFS in 2000 when he completed his training. He eventually left to work in Florida.

In 2000, Andrew Falzon, MD was hired by DOFS to work in the Decatur lab. This completed the group of DOFS medical examiners who were working as of year 2001. The group at that time consisted of Doctors Sperry, Falzon, Lehman, Smith, Podjaski, and Koponen at the Decatur DOFS, Clark in Moultrie, and Sims in Macon. Eric Eason, MD joined the GBI staff in 2004. As of 2013, Smith is working as a medical examiner in DeKalb County, Georgia after spending about 10 years in Fulton County. Koponen now works in North Dakota, Podjaski in Florida, Eason in Cook County, Falzon in New Jersey, and Clark in Tallahassee.

Since 2004, additional forensic pathologists have been hired within the GBI system. As of July, 2013, the GBI medical examiner staff includes:

Atlanta:
Kris Sperry, Chief
Jacqueline Martin (did FP in Rochester NY and had worked in Syracuse)
Lora Darrisaw (did FP at GBI)
Keith Lehman (did FP in Fulton County)
Douglas Posey (trained in Detroit and Army)
Jonathan Eisenstat (did FP in New York City)

Steven Atkinson (did FP in Fulton County)
Stacey Desamours (did FP in Fulton County)
Cassie Boggs (did FP in Baltimore)

Augusta:
Daniel Brown (did FP in Baltimore)

Macon:
Melissa Sims (did FP in Charleston)
Maryanne Gaffney-Kraft (did FP in North Carolina)

Savannah:
Jamie Downs (did FP in Miami and had worked in Charleston and Alabama)
Edmund Donoghue (did FP at AFIP and Detroit, former Chief ME in Cook County, Illinois)

Around the state in other locations, the 1953 Postmortem Act also allowed for the appointment of medical examiners throughout the state to assist coroners in their death investigations. Many times these were physicians but not necessarily pathologists, and almost always, they had other jobs as physicians and did only occasional work for the coroners. A typical scenario might be the pathologist at a local hospital who could examine bodies for the coroner or perhaps do an autopsy in selected cases. Through the history of the DOFS system, however, it has been fairly routine for autopsies in homicide and other difficult cases to be done in Atlanta by the DOFS medical examiners.

Other board certified forensic pathologists who have served the state in some capacity include James Metcalfe, MD; David Rydzewski, MD; Jerome Tift, MD; and James Whitaker, MD. The first two trained at Fulton County. Doctor Metcalfe then moved to the Dalton, Georgia area and did some forensic cases for coroners, and is now doing forensic pathology in Chattanooga. Doctor Rydzewski moved to Carrollton, Georgia and does some autopsies for the coroner in the area but most does hospital-based pathology. Doctors Tift and Whitaker came from out-of-state and have provided some forensic pathology services for coroners, but for the most part, practiced general pathology in the Macon and Warner-Robbins areas, respectively.

GBI/DOFS constructed a new autopsy facility adjacent to GBI headquarters in Decatur in 2001. It was also renovated several of the older branch laboratories. The long term plan was to place forensic pathologist medical examiners in each of the branch labs. This was accomplished in all branch labs except Columbus, but due to budget problems, came to an end. In 2013, forensic pathologists were working in Decatur, Augusta, Macon, and Savannah, and the Trion and Moultrie autopsy service had been closed. In 2013, Vernon Keenan is the GBI Director and Paul Kirk is the Director of the Division of Forensic Sciences. The State Medical Examiner, Dr. Sperry, reports to these individuals.

Major Changes in Georgia Death Investigation Statutes

The Georgia Postmortem Examinations Act of 1953 was a pretty good one. It described the types of deaths that needed to be investigated by coroners and medical examiners; provided for the Director of the Division to serve as the State's Chief Medical Examiner; detailed the requirements to run for the office of coroner; described procedures for coroner's inquests and the other duties coroners could perform; detailed the roles and interactions of the coroner, medical examiner, law enforcement agencies, and DOFS; and included provisions for counties that wished to abolish the office of coroner and establish a medical examiner system. The Act was modified slightly through the years and was renumbered and retitled to Georgia Code Title 45, Chapter 16. Georgia Code 45-16-1 began with the laws related to coroners, and section 45-16-20 began the section formally titled "The Georgia Postmortem Examinations Act" which described all the specific of death investigation procedures in Georgia.

A major change occurred in the Act in the 1989. At that time, there was much interest in child abuse and neglect. There was also much interest in clarifying some of the details about the death investigation system, including the need to more clearly define certain words, terms, and phrases that were in general use or mentioned in the Act. There was also interest in formalizing a medically-oriented State Medical Examiner system for DOFS to enable continued improvement in death investigation services throughout the state.

The medical examiners working in the Fulton County Medical Examiner's office took the lead in writing proposed law changes to address these issues. Those most directly involved included Saleh Zaki, Randy Hanzlick, and Gerald Gowitt. These three worked closely with Joseph Burton, who was medical examiner in DeKalb and Cobb counties, along with representatives from the Division of Forensic Sciences, GBI, and State Representatives Steve Thompson and Mary Margaret Oliver who were major sponsors of proposed legislation. The work in late 1989 and early 1990 was feverish, and the proposed changes specified in Act Number 1385 (HB 1323) ultimately passed the General Assembly and were signed into law by Governor Harris on April 16, 1990.

The revised 45-16-20 and subsequent sections of Chapter 16 fully defined terms such as "medical examiner", "scene investigation", "autopsy", "inquest", and many other related terms in common use. It also made clearer the duties of specific individuals, second, the law called specific attention to the need to investigate deaths of children. Third, and very importantly, Act Number 1385 also included revisions of Chapter 3, Title 35 (which covers the GBI) provided for the creation of a State Medical Examiner which was required to be a board certified forensic pathologist with formal training and experience.

The real interest among death investigators was to establish a medically-based, professional State Medical Examiner's Office that was run by forensic pathologists and was independent from the GBI (a law enforcement agency) and its Division of Forensic Sciences (DOFS). Neither the GBI nor DOFS favored this and did not support the concept of an independent State Medical

Examiner's Office. The GBI did support the establishment of a State Medical Examiner Office within the DOFS, so long as the State Medical Examiner was appointed by the Director of GBI.

One aspect of the revised 35-3 was the enabling of a Medical Examiner Commission which was to consist of the Commissioner of Human Resources, a district attorney, a defense attorney, two physicians (one of which had to be serving as a full time medical examiner in Georgia), a coroner, a superior court judge, a layperson, a sheriff or local law enforcement officer, and a licensed funeral director. The purpose of this Commission was to make recommendations for improving death investigation services, and to recommend candidates for appointment as the State Medical Examiner. This was an important concept, because it: included the stakeholders involved in death investigation; provided for evaluation and recommendations from outside the GBI system; created a quality assurance mechanism to thoroughly evaluate potential candidates to serve as the State Medical Examiner; and assisted the State Medical Examiner, GBI, and DOFS in the establishment of death investigation policy and procedure. In essence, it provided a non-law enforcement oversight to the death investigation system.

Another important aspect of 35-3 was that the State Medical Examiner would appoint, after consultation with the local coroner and other officials, local medical examiners who could assist coroners on a local basis. This provision was included to provide a mechanism to evaluate the credentials of physicians who wanted to serve as local medical examiners, to ensure that such local medical examiners met some minimum qualification, and to ensure that the best qualified people locally were considered. Unfortunately, this portion of the Act, although passed into law, was never implemented. A State Medical Examiner, consistent with the spirit of the revised statute of 1990, was not hired until 1997.

Another important aspect of revised 45-16 was that it had language that effectively prohibits non-physicians to serve as medical examiners. This was a major advancement. The statute contained language that grandfathered the last remaining non-physician medical examiner. That person was permitted to continue until leaving services, after which said time non-physicians could no longer continue to serve as a medical examiner. This paved the way for improving death investigation by requiring medical examiners to be physicians.

All of this was well and good, and implementation of all new provisions in 45-16 and 35-3 could have made good strides toward a high quality, professional death investigation system that was at least partially influenced by sources other than the GBI and DOFS. However, further revision of 35-3 occurred after 1997. These changes were proposed by the GBI.

First, the entire Section of 35-3-15, which created the State Medical Examiner and Commission, was struck. In its place, a much shorter 35-3-153 was created. This section, which passed the General Assembly and was signed into law, created a "Chief Medical Examiner" to be appointed by the GBI Director. It allows the DOFS Director to serve as Chief Medical Examiner if there is a vacancy in the position. Related changes in 45-16 removed the requirement that the Chief Medical Examiner approve the appointment of local medical examiners working for coroners.

The good side of the 1997 statute changes was that a board certified forensic pathologist was hired as Chief Medical Examiner. Kris Sperry, MD, who had worked in the Fulton County Medical Examiner's Office applied for he position and was selected. In July 1997, Dr. Sperry became the State's first Chief Medical Examiner. The actual appointment of a forensic pathologist Chief Medical Examiner for the state, and funding of professional staff, were major advances in the history of death investigation in Georgia, but didn't happen to almost the end of the 20th century.

A recent change in the law has placed some deaths which occur in/near state-owned buildings under the jurisdiction of the GBI and DOFS Chief Medical Examiner. Formerly, they were investigated by the county coroner or medical examiner in the county where the incident occurred. Practically, the GBI accepts jurisdiction in suspicious deaths and apparent homicides, while the county coroner or medical examiner investigates other types of death in/near state-owned buildings.

Today, all persons doing full-time medical examiner work for the GBI or the four counties with a county medical examiner office are physician pathologists. Twenty of 23 such persons are board certified forensic pathologists. This is a major change since the 20th century. In comparison, in 1985, there were only about five board certified forensic pathologists doing medicolegal autopsies in the state.

The requirements to serve as elected coroner in Georgia are much the same as they have been throughout recent Georgia history. The candidate must be a registered voter, at least 25 years of age with a high school diploma or equivalent, have no felony conviction, and must undergo initial and annual training. There are no term limits for coroners in Georgia.

Development of County Medical Examiner Systems

At present, 5 Georgia Counties have abolished the office of Coroner to establish a County Medical Examiner. These are, in order, Fulton (1965), Cobb (1973), DeKalb (1981), Gwinnett (1989), and Clayton (2001). The first three were systems in which forensic pathologists had worked and in which the Coroners were supportive of a change to the medical examiner system. The impetus for change in the fourth county (Gwinnett) grew out of concern from the District Attorney and Director of Public Safety. The most recent followed the indictment and arrest of the incumbent coroner on charges mainly related to financial improprieties. A brief summary of the events in each county is presented below. In Georgia, the usual procedure to abolish the coroner is to hold a county referendum on the issue and then have the office formally abolished by an act of the state legislature.

Fulton County (1965)

Some of the history in Fulton County is taken from written records, but much is taken from the personal memory of Wallace Vaughn, who was working as a morgue attendant in Fulton County

in the Coroner's system of the early 1960s, and who remained a morgue attendant for Fulton County until his retirement in 1992. Thanks to Wallace for his excellent memory and willingness to recount it. He was a painter working for the county when the Steiner facility (the first "county morgue') was being constructed near Grady Hospital, and was hired as the first morgue attendant because of his military experience in the medical/mortuary services.

In the late 1950s, Tom Compton was the elected County Coroner for Fulton County. He was an attorney who worked with the State Court. The Coroner's Office was on the 9th floor of the County Courthouse. In 1960, Tom Dillon, MD, originally from Georgia, and a medical examiner in the Boston area, was recruited and returned to Georgia to work in the Fulton County Coroner's Office as a coroner's pathologist. Tom Compton himself recognized that the needs of the county were outgrowing the abilities of the coroner system and he not only advocated a switch to the medical examiner system as had occurred in other major cities in the United States. It was basically his idea. Thus, the non-physician coroner advocated change to a medical examiner system. Most assuredly, Dr. Dillon's experience played a facilitating role. Tom Compton had been critically involved in getting the first facility built for coroner's operations in 1961, in the renovated basement of the Steiner Building near Grady Hospital. It has been an animal research lab prior to that time.

The Office of Coroner was abolished at the end of Tom Compton's terms and Dr. Dillon became the first Fulton County Medical Examiner in 1965. Two younger physicians, Dr. Kenneth Snell, and Dr. Robert Stivers, worked with Dr. Dillon. Dr. Snell was drafted, and Dr. Stivers continued to work there while in medical training. Upon Dr. Dillon's death, Dr. Stivers became the next Medical Examiner for Fulton County (1970). He served until 1988 when his Associate Medical Examiner, Saleh Zaki, MD, was named Chief Medical Examiner following Dr. Stivers' retirement. Dr. Zaki served until 1998, when Randy Hanzlick, MD, an Associate who had worked with the office either full-time or part-time since 1982, was appointed as Chief Medical Examiner.

The facility in the Steiner Building was used until 1974, when the Medical Examiner moved to a new 8800 square feet facility constructed at 50 Coca Cola Place. There it remained until the current 33,000 square feet facility opened in April of 1999.

In Fulton County, the Medical Examiner is appointed by the County Commissioners. At first, investigators were Atlanta Police Officers provided by the Atlanta Police Department (a pre-existing Fulton County Police Department had been abolished in the 1950s). Later, when Fulton County re-established its own Police Department, investigators were Fulton County Police Officers assigned to the Medical Examiner. In the late 1980s, as the various police officers retired or left employment the vacated investigator positions were filled with civilians.

The Fulton County Medical Examiner's Office has always been run with county employees. It has never been privatized, and has always operated in facilities provided for by the County. The FCME has an ACGME-Accredited Forensic Pathology Fellowship training program and is accredited by the National Association of Medical Examiners.

The entire staff-past and present- of the Fulton County Medical Examiner's Center is listed on the FCME web site at www.fultoncountyga.gov/me-home

Today, the medical examiner staff includes Randy Hanzlick (Chief), Michele Stauffenberg (Deputy Chief, trained at FCME), Karen Sullivan (Associate ME, trained in Fulton), Michael Heninger (Associate ME, trained in Hennepin County), and Melissa Pasquale (Associate ME, trained in Miami and Detroit, had worked in New York City before coming to FCME). Other forensic pathologists who have worked at FCME in the 21st Century include Eric Kiesel (former Deputy Chief ME and now in Tacoma), and Carol Terry (former Associate ME, FCME-trained, who then worked for DeKalb County and is now Chief Medical Examiner for Gwinnett County, Georgia.)

Cobb County (1973)

Prior to 1973, the Cobb County Coroner relied upon a local hospital pathologist, Dr. Scherer, to perform autopsies for the county. Dr. Stivers, who was Medical Examiner for Fulton County, eventually provided autopsy services for the coroner, replacing Dr. Scherer. There was no serious opposition to the abolition of the office of coroner and the idea had support of the District Attorney and others. In 1973, Cobb County abolished the Office of Coroner and Dr. Stivers became the Medical Examiner on a contract basis. Subsequently, Dr. Stivers made a choice to concentrate his efforts in Fulton County, and he recruited William Anderson, MD, who had trained in North Carolina, to become the Medical Examiner in Cobb County around 1977. Dr. Anderson eventually moved to Florida. Dr. Joe Burton, who had trained in Miami, was also performing some autopsies for Cobb County. About one year later, in 1978, Dr. Burton acquired the contract to serve as Cobb County Medical Examiner. He remained in that role until February of 1999 when his associate, Brian Frist, MD, assumed the contract as Chief Medical Examiner. Dr. Frist had gained his forensic pathology experience working with Dr. Burton in the DeKalb County Medical Examiner Office (see below). Originally, autopsies were performed in Kennestone Hospital in Cobb County, but in the mid-1980's, a free standing medical examiner complex was constructed near the police department in Marietta. Today, Dr. Frist uses part-time services of other Georgia forensic pathologists to perform some autopsies.

DeKalb County (1981)

Dr. Stivers also provided pathology services to the Coroner of DeKalb County. About the same time Dr. Stivers ceased providing services to Cobb County, he did so in DeKalb as well and Dr. Anderson also assumed the pathologist duties for DeKalb County. When Brian Cavan (an attorney) was the coroner, he ultimately spearheaded a move toward a medical examiner system in DeKalb. Dr. Burton had also provided autopsy services for DeKalb and eventually acquired the contract as Chief Medical Examiner. Dr. Burton remained Chief Medical Examiner until March of 2000, at which time Gerald Gowitt, MD, who had trained at Fulton County and had become an associate of Dr. Burton, acquired the DeKalb contract as Chief Medical Examiner. Through the years, pathology services were provided to Dr. Burton by Randy Hanzlick

(early 1980s), Wayne Ross (who trained at Fulton County and eventually returned to the Northeast, Emily Ward (who later moved to Mississippi), Jan Garavaglia (who later moved to Texas), Gerald Gowitt, and Steven Dunton (both of who trained at Fulton County-- Dunton later became Chief Medical Examiner for Gwinnett County; see below); and Brian Frist, who worked with Dr. Burton for several years and later became Chief Medical Examiner in Cobb County as described above. The late John Parker provided regular coverage in DeKalb for Dr. Gowitt, and other local forensic pathologists also provide occasional coverage there. Originally, autopsies were done in a small morgue at the police station and offices were maintained in rented commercial office space. In the late 1990s, DeKalb County constructed and opened a stand-alone medical examiner facility with autopsy and office areas. Today, Gowitt remains Chief Medical Examiner and Geoffrey Smith is Associate Medical Examiner. Carol Terry worked as an Associate Medical Examiner in DeKalb after 2003 until she became Chief Medical Examiner in Gwinnett County. Dr. Gowitt also uses some part-time services of other Georgia forensic pathologists.

Gwinnett County (1989)

Prior to 1989, the Gwinnett County Coroner was Randy Simpson. Gerald Gowitt had a contract with the coroner to provide forensic pathology services. Prior to that, the coroners (Randy Simpson and earlier, Billy Wages) had used the pathology services of Dr. Tom Orourke and Dr. Dove, respectively. In 1989, the Director of Public Safety, the District Attorney, and local forensic pathologists advocated a move to the medical examiner system which occurred in 1989. At that time, Joe Burton acquired the contract with Gwinnett County to serve as Chief Medical Examiner. He held the contract until May of 1999 when Steven Dunton, MD (who trained at Fulton County and had worked as an associate of Dr. Burton) assumed the contract as Chief Medical Examiner. Autopsies are performed in an autopsy facility in the county police department complex, which was constructed with federal grant funds in the 1970s. Carol Terry, MD is now the Chief Medical Examiner and uses part-time services of other Georgia forensic pathologists to do some autopsy cases. Plans are underway for a new autopsy facility.

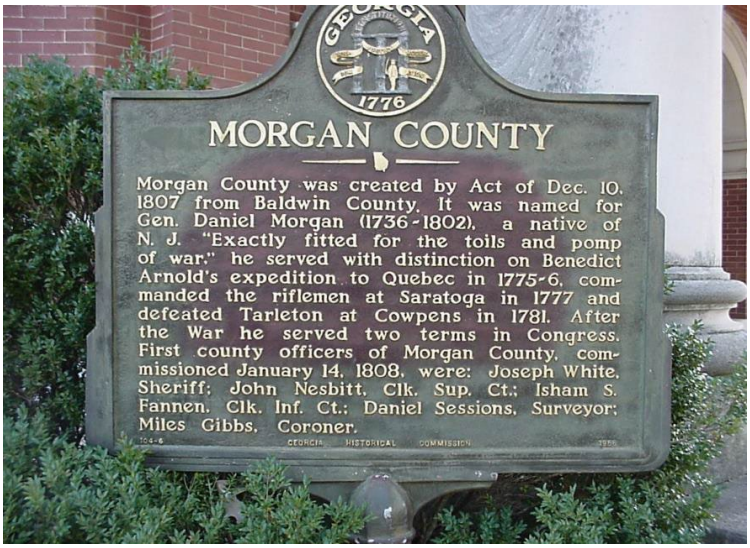
Clayton County (2001)

The Coroner serving in Clayton County prior to 2001 was indicted for alleged financial improprieties. In 2001, the state legislature approved the abolishment of the Office of Coroner in Clayton County. However, the County has not made plans for its own medical examiner system and, in the meantime, is using the DOFS medical examiner system to perform its autopsies. At present, Clayton County does not have its own autopsy facility.

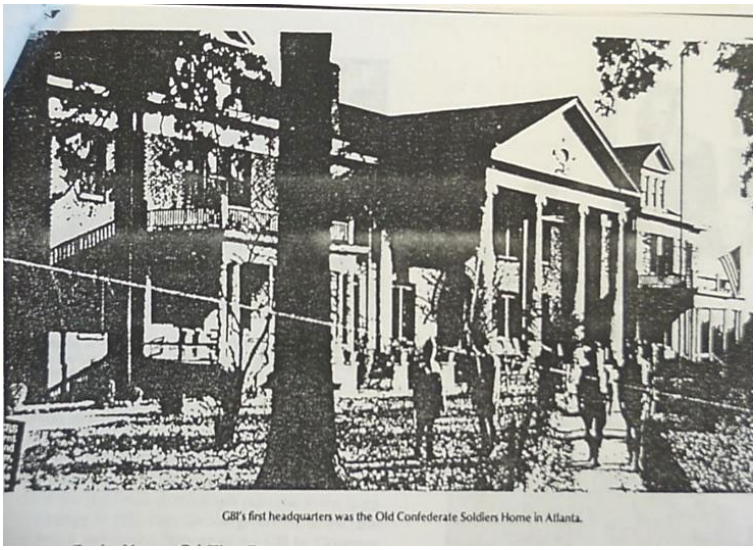
Accreditation

The Fulton County Medical Examiner was the first system in Georgia to be fully accredited by the National Association of Medical Examiners and remains fully accredited. The GBI/DOFS medical examiner has also become NAME-accredited. DeKalb County and Gwinnett County are making plans to seek NAME accreditation.

Photographs



Typical County Historical Marker in Georgia, describing the formation of each county and including the name of the original coroner.



The Old Confederate Soldiers Home. Site of the first state crime lab in Georgia, the original Georgia Bureau of Investigation, prior to 1957.



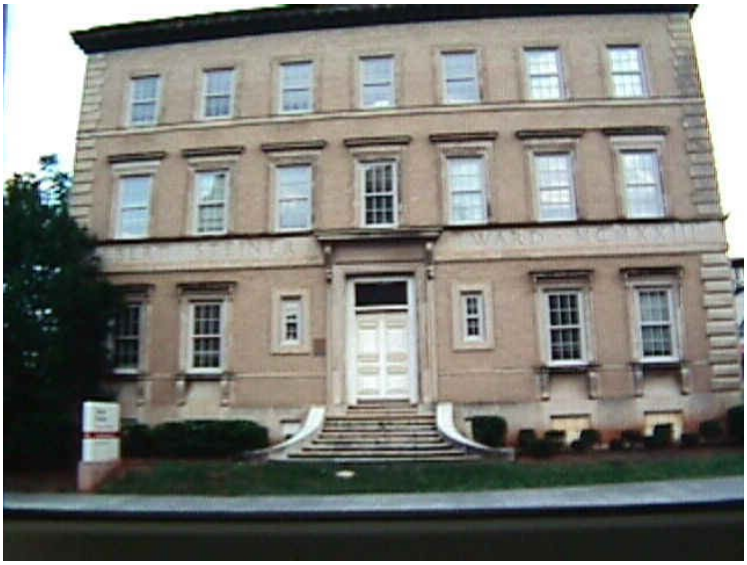
2nd Home of the GBI DOFSD Crime Lab on Confederate Avenue.
The lab was housed here from 1957 to 1984.



GBI and DOFS Headquarters constructed in 1984. Panthersville Road, Decatur.



New lab space and autopsy area being constructed adjacent to GBI main building in 2002.



The Fulton County Medical Examiner was first housed in the basement of the Steiner Building near Grady Hospital, and operated there until 1974. The buidling still stands today.



The Fulton County Medical Examiner moved into this newly constructed, 8,000 square foot facility on Coca Cola Place (near Grady Hospital) in 1974. They operated there until 1999. The building still stands today.



In April 1999, the Fulton County Medical Examiner moved to this newly constructed 33,000 square foot building on Pryor Street, just south of downtown Atlanta.

Georgia – Fulton County Medical Examiner

History of the Fulton County Medical Examiner

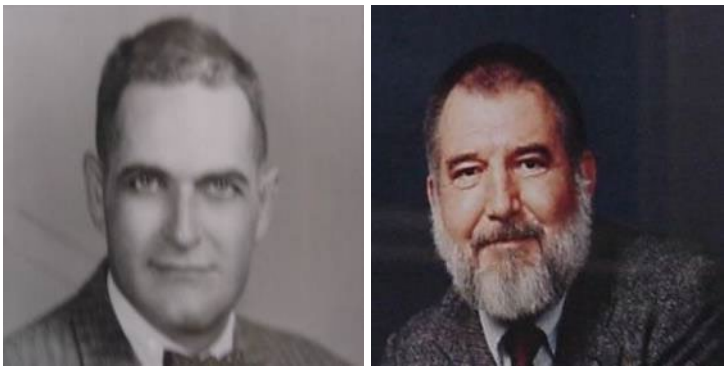


Randy Hanzlick, MD

March 2012



The Steiner Building on Butler Street near Grady Hospital was the first home of the Fulton County Medical Examiner. The Medical Examiner was located there from 1965, when the coroner's office was abolished and the Medical Examiner established, until 1974.



Thomas Dillon (left) was the first Medical Examiner, then Robert Stivers (right) became Chief in 1970 after Dillon died. Stivers served as Chief in the Steiner Building until the new facility was opened in 1974.



At 50 Coca Cola Place SE, still only a block from Grady Hospital, the 9000 square feet, two story building opened in 1974. The offices were upstairs and the morgue was downstairs.



Robert Stivers (left) served as Chief in this building from 1974-1988 when he retired. Saleh Zaki (middle) served as Chief from 1988 through 1997 when he retired. Randy Hanzlick (right) served as Chief in this building from July 1998 until April 1999 when the newest of the Fulton County Medical Examiner buildings was opened, where he remains Chief today. Eric Kiesel served as Acting Chief in the time between Zaki's retirement and Hanzlick's appointment as Chief.



In the 1980s, the medical examiners were Robert Stivers (top photo left; photo taken in the early 1980s in the Coca Cola Place building), John Feegel (top photo, right), and Saleh Zaki (lower photo taken in 1997 just before his retirement).

Other staff medical examiners who worked in the Coca Cola Place facility were:
Gerald Gowitt, now Chief ME in adjacent DeKalb County.
David Rydzewski, now in Carrolton, GA.
Steven Dunton, went on to DeKalb County and now Buffalo, NY.
Thomas Young, left to work in the Kansas City area.
Cliff Nelson, now with State Medical Examiner in Portland, OR.
Frederick "Rick" Hellman, now in the general Philadelphia area.
Mark Koponen, went to GBI and now in North Dakota.
Anthony Clark, went to GBI and now in Tallahassee, FL.
Kris Sperry, now Chief ME for the GBI Medical Examiner System.

Geoffrey Smith, went to GBI and now back at FCME.
Michael Heninger, remains at FCME.
Carol Terry, now Chief ME in nearby Gwinnett County.
Eric Kiesel, now in the Tacoma, Washington area.

Some of the above staff were paid by the GBI via a contract with Fulton County, and the staff did autopsies for both GBI and FCME. In 1997, the GBI went to having its own medical examiner staff. Hellmann, Koponen, Clark, Smith, and Sperry left FCME and went to work in the GBI system. Thus, in 1997, the following remained at FCME:
Saleh Zaki
Eric Kiesel
Michael Heninger
Carol Terry

Photos of previous staff are shown later in this report.



1997 Ground breaking for the new FCME facility to be built at 430 Pryor Street SW, Atlanta. Saleh Zaki (third from right) wields a shovel at the ceremony.



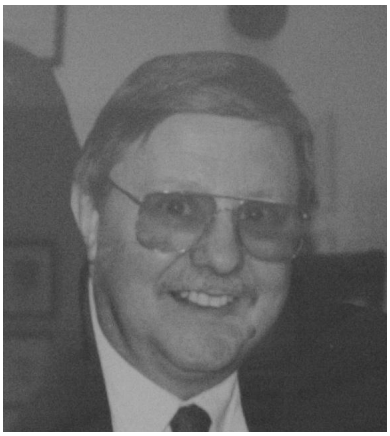
33,000 square feet, 3-building Fulton County Medical Examiner's Center which opened in April of 1999. Randy Hanzlick has been the only Chief ME to serve in this facility.



Current forensic pathologists at the Fulton County Medical Examiner's Center. From left, Randy Hanzlick (Chief ME), Deputy Chief Medical Examiner Michele Stauffenberg, and Associate Medical Examiners Geoffrey Smith, Michael Heninger, and Karen Sullivan. Kim Collins, not pictured, provides part-time services on some weekends.

Smith trained at FCME and returned to FCME from the GBI when Carol Terry left FCME to work in DeKalb and Gwinnett Counties. Heninger trained in Minneapolis (Hennepin County) and has worked at FCME since 1995. Stauffenberg trained at FCME (2001) and remained on staff. Sullivan trained at FCME (2002) and continued to work part-time, then returned full time when Eric Kiesel left for Tacoma.

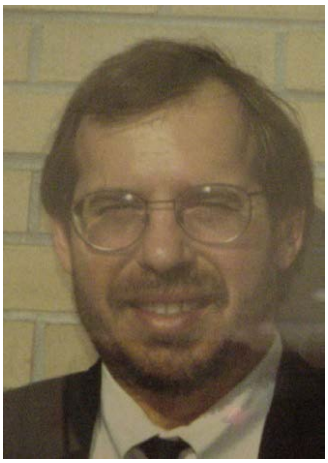
Previous FCME Forensic Pathologist Staff: 1985 – 2011



Gerald Gowitt did his forensic pathology fellowship in 1986. He remained on staff until the mid-1990's when he went to work in adjacent DeKalb County, where he later became Chief ME. His forensic pathology group has, and still does serve several other counties in Georgia which still have coroners in the greater Atlanta Metro Area. He, along with Steve Dunton, Thomas Young, and Randy Hanzlick, were the first of the Fulton County Medical Examiners to perform autopsies for the GBI, beginning in 1989.



Thomas Young trained at FCME in 1988 and stayed on staff until 1995 when he went into forensic pathology practice in Kansas City, Missouri.



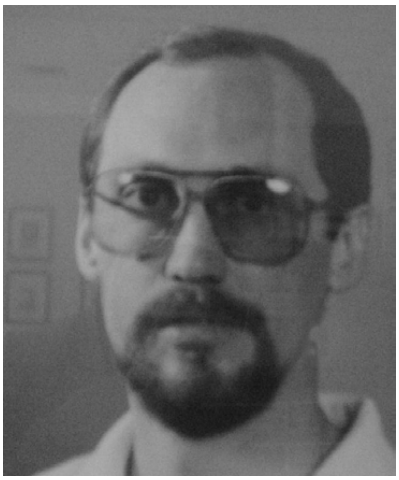
David Rydzewski began his fellowship at FCME in 1988 and he remained on staff until 1990 when he moved to Carrolton, Georgia where he practices forensic pathology.



Steve Dunton, shown here in the obviously cramped facility at 50 Coca Cola Place, trained at FCME in 1989 and stayed on staff until 1996 when he went to work in adjacent DeKalb and Gwinnett Counties. Recently, he has continued his forensic pathology practice in Montgomery, Alabama. Dunton, along with Gerald Gowitt, Randy Hanzlick, and Tom Young were the first FCME medical examiners to do autopsies for the GBI, helping with the GBI's efforts to cease the performance of autopsies by non-physicians.



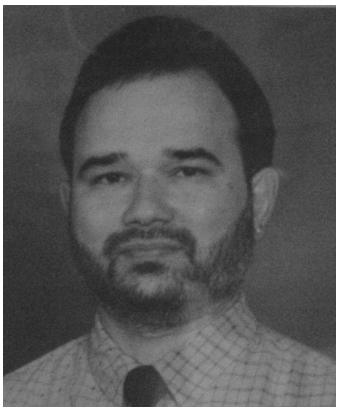
Kris Sperry trained and worked in Albuquerque, then joined the FCME staff in 1990. He remained on staff at FCME until 1997 when he became Chief Medical Examiner for the GBI Medical Examiner system. He still holds that job today.



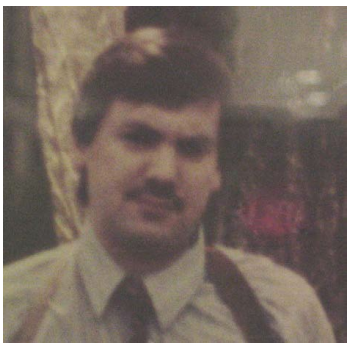
Mark Koponen started his FCME fellowship in 1990. He remained on staff until 1997 when several FCME medical examiners (Sperry, Hellman, Koponen, and Smith) were hired as medical examiners in the GBI Medical Examiner System. Mark has now returned to his home state of North Dakota where he continues to practice forensic pathology.



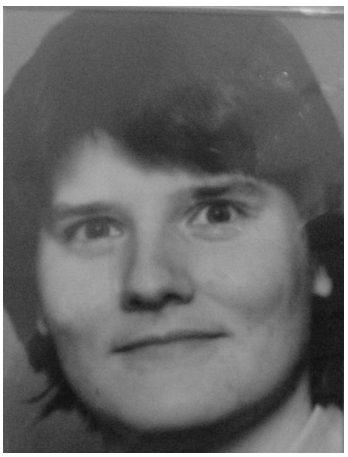
John B. Parker trained in Dallas and then joined the FCME staff on a part-time contract basis in 1990, and he worked with FCME until 2004. He then moved to Boston where he works in the Medical Examiner's Office.



Anthony "Tony" Clark trained at FCME in 1991 and stayed on Staff until 1994 when he went to work for the GBI Medical Examiner system. He worked at the branch lab in Moultrie, GA for many years and then joined a hospital-based pathology group in Tallahassee, Florida.



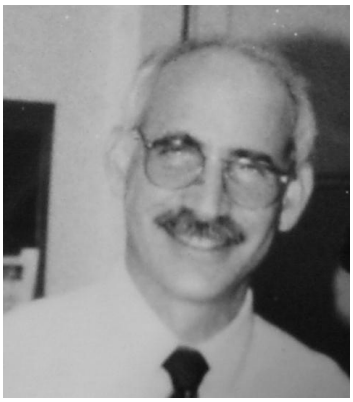
Cliff Nelson came to Atlanta from Oregon to do his fellowship at FCME in 1993. He remained on staff until the end of 1994 when he returned to Oregon where he now works for the State Medical Examiner in Portland.



Carol Terry started her forensic pathology fellowship at FCME in 1995. She remained on staff at FCME until 2004, when she went to work in nearby DeKalb and Gwinnett Counties. She now is Chief ME for Gwinnett County.



Fredrick "Rick" Hellman trained in Philadelphia and joined the FCME Staff in 1996. In 1997, he was one of the forensic pathologists to leave FCME and work with the GBI. He later returned to the Philadelphia area.



Eric Kiesel trained in Seattle, practiced forensic pathology in Washington State, and then joined the FCME staff as Deputy Chief ME in 1997. He served as Acting Chief Medical Examiner in 1998. Eric left FCME in 2007 when he returned to Washington State (Tacoma).

FCME Pathologists of the 70s

In reviewing old log books, it appears that the following were among pathologists who did autopsies for the Fulton County Medical Examiner during the 1970s:

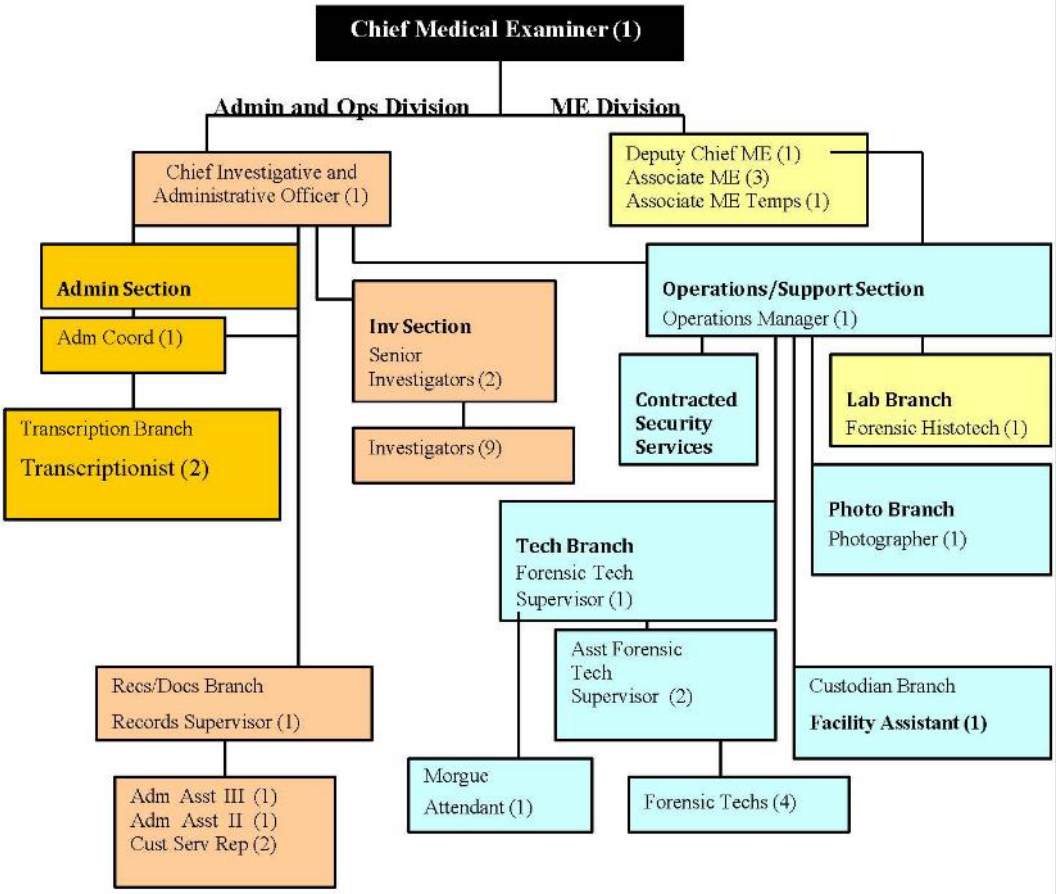
Robert Stivers (deceased)
Saleh Zaki
Lawrence Alligood
Eugene McNatt
Joseph L. Burton (late 1970s)
Jack Bechtel
Charles P. Garrison (late 1970s)
Steve Phillips (late 1970s)

None of the above practice forensic pathology today, except for Joseph Burton who does private consulting. Among the above, Stivers, Zaki, Alligood, and Burton did the most autopsies. Zaki and Phillips are board certified in forensic pathology.



The “Wall of Fame” at the Fulton County Medical Examiner’s Center bearing photographs of the nearly 40 people who have trained formally or informally in forensic pathology at FCME since 1979. James Metcalf was the first official fellow in 1979.

Fulton County Medical Examiners Center
Organizational Chart 2012



Based on the model:
Center
Division
Section
Branch

36 Full-time employees, 1 temporary employee.
1 Forensic Pathology Fellow (not shown) paid for by Emory School of Medicine

Forensic Pathology Fellows

James Metcalfe, MD, Signal Mountain, TN (1979-80)
Randy Hanzlick, MD, Atlanta, Georgia (1982-1983)
Larisa Reifman, MD (1983-84)
Wayne Ross, MD, Bethlehem, PA (1985)
Beyla Galanter, MD (1985)
Donna Franco Jove, MD
Gerald Gowitt, MD, Atlanta, GA (1986)
Janet Pillow, MD, Leesburg, FL (1987)
Keith Norton, MD, Columbus, OH (1987)
David Rydzewski, MD, Carrolton, GA (1988)
Thomas Young, MD, Kansas City, MO (1988)
Steven Dunton, MD, Montgomery, AL (1989) Mark Koponen, MD, Grand Forks, ND (1990)
Anthony Clark, MD, Moultrie, GA (1991-92)
Brenda Reames, MD, Bossier City, LA (1991-92), (Deceased 1999)
Cliff Nelson, MD, Portland, OR (1993-94)
Tom Parsons, MD, Washington, DC (1994-95)
Carol Terry, MD, Atlanta, GA (1995-96)
Geoffrey Smith, MD, Atlanta, GA (1995-96)
Delbert Van Deusen, MD, Houston, TX (1996-97)
Cameron Snider, MD, LaFayette, LA (1997-98)
Mario Mosunjac, MD, Atlanta, GA (1998-99)
Keith Lehman, MD, Atlanta, GA (1998-99)
Joyce deJong, DO, Lansing, MI (1998-99)
Kris Podjaski, MD, Leesburg, FL (1999-2000)
John Younes, MD, Winnipeg, Canada (1999-2000)
Kay Fellows (2000-2001), Palatka, Florida
Allan Bennett (2000-2001), Charleston, South Carolina
Christie Elliott (2001-2001), Reno, Nevada
Michele Stauffenberg (2001-2002); Remained on staff at FCME
Steve Sgan (2002-2003), Tallahassee, FL
Karen Sullivan (2002-2003), Atlanta, GA
Eric Eason (started July 2003), Atlanta, GA
Susan Lee Anne Martin, MD (Started August 2004), Birmingham, AL
Jason K. Graham, MD (2005-2006), New York, NY
Stacey L. Smith, MD, (2006-2007), Houston, TX
Steven P. Atkinson, MD (2007-2008), Atlanta, GA
Stacey Tate, MD (2008-2009), Atlanta, GA
Kelly Rose, MD (2009-2010), Newberry, SC
Rhome Hughes, MD (2010-2011), San Antonio, TX
Anindita Issa, MD (2010-2011), Atlanta, GA
Jennifer Gardetto, MD (2011-2012) Tucson, Arizona
Emily Gorman (Birmingham, AL) will begin July 2012

Office Information

Fulton County Medical Examiner's Center 430 Pryor St SW
Atlanta, GA 30312

Phone: 404-613-4400
Fax: 404-730-4504

Website: www.fcmeo.org or http://www.fultoncountyga.gov/me-home

Fully Accredited by NAME since 2002. Population served = 1,000,000

2012 Annual Budget = $3,784,793

Historical Office case Load Information

Year	Homicides	Suicides	Traffic Fatalities	Other Accidents
1988	243	76	147	182
1989	275	98	149	193
1990	252	85	130	159
1991	237	87	104	161
1992	219	105	109	156
1993	244	86	128	171
1994	233	86	151	170
1995	211	78	124	171
1996	235	99	139	190
1997	185	81	122	170
1998	188	73	157	222
1999	183	100	127	207
2000	172	76	143	192
2001	171	87	125	265
2002	203	83	125	221
2003	181	79	113	276
2004	159	90	137	240
2005	145	78	130	262
2006	149	77	132	245
2007	182	86	121	275
2008	156	84	119	255
2009	129	86	111	233
2010	146	101	80	266

* Indicates on-site scene investigation
**Indicates cases in which body was examined by an investigator and/or medical examiner

Procedural Statistics

Year	Total Cases	Certified	Autopsies	External	Scenes*	Total Bodies Examined**
1997	2109	1380	812	160	776	1180
1998	2234	1497	966	248	888	1424
1999	2199	1407	885	304	842	1357
2000	2098	1349	784	331	832	1331
2001	2014	1361	831	355	885	1406
2002	2063	1326	843	302	930	1322
2003	2298	1312	860	412	960	1554
2004	2254	1324	874	310	883	1312
2005	2171	1322	887	369	896	1427
2006	2212	1401	921	436	890	1495
2007	2238	1403	1002	365	921	1482
2008	2271	1386	940	303	894	1420
2009	2371	1418	893	456	856	1441
2010	2477	1416	910	367	848	1414

* Indicates on-site scene investigation
**Indicates cases in which body was examined by an investigator and/or medical examiner

Illinois – Chicago

History of the Office of the Medical Examiner of Cook County 1976-2016



Edmund R. Donoghue, MD
Retired Chief Medical Examiner of Cook County

May 2016

Prior to 1976, all 102 counties in Illinois had coroner systems, an office established by the Illinois Constitution of 1870. The idea of eliminating the Office of the Coroner in Cook County and establishing a medical examiner system had been talked about since at least the early 1930s. Because the Office of Coroner was a constitutional office, the abolition of the office would require a constitutional amendment which would apply to all counties in the state. The Illinois Coroner's Association was very effective in lobbying against such an amendment.

At least two incidents did eventually bring about the demise of the coroner's office in Cook County. The first was the Federal Bureau of Investigation's Operation COINTELPRO, a program aimed at discrediting and disrupting domestic political organizations. The FBI encouraged local police departments to carry out raids on Black Panther homes with scant evidence of law violations. In the early morning of December 4, 1969, Chicago police officers working as investigators for the Cook County State's Attorney's Office executed a search warrant for illegal weapons against the known Black Panther home at 2337 W. Monroe Street in Chicago. The raid resulted in the killing of Black Panther chairman Fred Hampton and Panther member Mark Clark.

An autopsy performed by the Cook County Coroner's Office and a second autopsy performed by an independent pathologist at the request of the Hampton family both failed to correctly identify all of the gunshot wounds sustained by Fred Hampton. A third autopsy performed by Charles Petty, MD, chief medical examiner of Dallas County, TX, at the request of the federal government finally correctly identified all of the gunshot wounds. The outcry and litigation involving Cook County as a result of the investigation of the Black Panther raid went on for nearly 20 years and was one of the principal reasons that the Office of the Coroner was

abolished and the Office of the Medical Examiner was established. The second reason was a scandal concerning the employment of unlicensed pathologists by the coroner's office.

In 1970, Illinois held a constitutional convention in which the "home rule" powers were extended to any county with an elected chief executive. Under "home rule" any county office could be created or eliminated and the term of office and manner of selection changed by county-wide referendum. In the 1972, the Chicago League of Women Voters brought a referendum to abolish the Office of Coroner in Cook County. The referendum was approved by a 7 to 1 majority. The Office of the Coroner was abolished and the Office of the Medical Examiner of Cook County was established December 6, 1976. The office is the only medical examiner system in Illinois and covers half the population of the state.

The President of the Cook County Board of Commissioners with the advice and consent of the Board of Commissioners appoints the medical examiner. The medical examiner must be a physician licensed to practice medicine in Illinois and certified by the American Board of Pathology in anatomic and forensic pathology. The medical examiner is charged under a Cook County ordinance modeled on National Association of Medical Examiners accreditation standards to investigate deaths that are sudden and unexpected, without medical attendance, or due to violence. The office investigates all homicides, suicides, and accidents, as well as numerous natural deaths. The office plays a vital role in the administration of justice and protection of public health.



Cook County Board President George W. Dunne announced the appointment of Robert J. Stein, M.D., as the Cook County's first chief medical examiner about a year before scheduled start of the medical examiner system on December 6, 1976. Because the Office of the Coroner was still functioning under the Andrew J. Toman, M.D., the last coroner of Cook County, Dr. Stein had little opportunity to plan the transition.

Just after midnight on December 6, 1976, the Office of the Medical Examiner came into existence and took over the coroner's scientific laboratories at 1828 W. Polk Street, directly south of the old Cook County Hospital and across the street from the University of Illinois College of Medicine. They also took over the coroner's administrative office in the downtown Civic Center where Dr. Toman maintained his office. On the lower level of the Polk Street location were the autopsy facilities, body refrigeration units, fluoroscopic unit, and a small office for the Chicago Police Crime Lab and Missing Persons Units. On the first floor was the receiving desk. Three large inquest rooms became the investigation section, medical records, and a large conference room. Unique features on the first floor were a holding cell for prisoners who were attending coroner's inquests and an elevator to take bodies from the loading dock to the lower level. On the second floor were the chief medical examiner's office, pathologists' offices, toxicology, histology, photography, a dark room, and administrative offices. The chief medical examiner

and department head, Dr. Stein, now had his office in the medical center rather than the distant downtown Civic Center.

Assistant medical examiners with Dr. Stein at the inception of the office were Tae Lyong An, MD, Lee F. Beamer, M.D., Eupil Choi, M.D., Jack Frost, M.D., Yuksel Konacki, M.D., and Helen C. Young, M.D. Douglas Childress, the chief autopsy technician for the coroner's office stayed on in that position until his death in 2002. He was highly skilled and exceptionally efficient in performing autopsies and willing to share his knowledge with physicians and fellows who cared to learn. On July 1, 1977, Edmund R. Donoghue, M.D., was appointed deputy chief medical examiner and co-director of residency training. Shaku Teas, M.D., became the first forensic pathology fellow on the same day, and Mitra Kalelkar, M.D. began her fellowship, six months later, on January 1, 1978. Robert H. Kirschner, M.D., was appointed as assistant medical examiner on July 1, 1978.

With little time for planning, the office had to quickly innovate. It borrowed heavily from other medical examiners offices in creating a first call sheet, investigative forms, body diagrams, and the daily case ledger sheet. As time progressed a computerized system for storing death certificate information was installed and balanced staffing of the autopsy service seven days a week was instituted.

When a new medical examiner office starts or a new chief is appointed everyone wonders whether they will survive. It wasn't long before Dr. Stein and the new Cook County Medical Examiner's Office were challenged. On December 21, 1976, fifteen days after the inception of the medical examiner system in Cook County, Mayor Richard J. Daley collapsed and was taken to his cardiologist's office at 900 N. Michigan Avenue in Chicago where he died. Because the mayor was known to have heart disease and there was a physician willing to sign his death certificate, the case was released by the medical examiner's office. Although, Dr. Stein received some criticism for this decision, it was probably the correct one for the fledging medical examiner's office.

On February 4, 1977, a Chicago Transit Authority elevated train rear-ended another train on the northeast corner of the Loop at Wabash Avenue and Lake Street during the evening rush hour. The collision forced the first four cars of the rear train off the elevated tracks and onto the street below, killing 11 people and injuring over 180. On August 12, 1978, a delta wing British Vulcan bomber with a crew of four, visiting for the Chicago Air and Water show, crashed in a landfill just outside Naval Air Station Glenview.

On December 21, 1978, the Des Plaines Police Department served a search warrant on the Norwood Park Township home of John Wayne Gacy at 8213 W. Summerdale Avenue and discovered 26 bodies buried in the crawl space beneath the house. Three bodies were found elsewhere on the property and the last four victims were disposed of in the Des Plaines River. Dr. Stein worked with Cook County Sheriff's Police for nearly a month excavating the cold and damp crawl space beneath the Gacy home.

On May 25, 1979, American Airlines Flight 191 dropped an engine on its take-off roll and crashed next to a mobile home park in Elk Grove Township just north of O'Hare airport. The office worked at O'Hare for nearly a month identifying the 273 victims while still carrying on business as usual at the Polk Street office. Two visiting hospital residents, Daniel DelBoccio, M.D., and Joanne Richmond, M.D., were given medical examiner badges by Dr. Stein and sent to the airport. Both ended up being recruited as fellows in forensic pathology. Anthropologist Clyde Snow worked for the Federal Aviation Administration at the time. He later became the office's forensic anthropology consultant and worked with Dr. Stein on the Gacy cases. Drs. John P. Kenney, Lowell Levine, and Stephen Smith were among the dentists who worked on identifying the victims. Dr. Kenney later became a consultant for the office as did Cook County Hospital radiologist John J. Fitzpatrick, MD.

Within two years of its inception, the Office the Medical Examiner attained accreditation by the National Association of Medical Examiners and approval of its residency training program in forensic pathology by the Accrediting Council on Graduate Medical Education (see Appendix 1). The residency training program came to be essential for the survival of the office. The office found it difficult to recruit staff forensic pathologists from outside of Illinois and viewed forensic pathology fellows as potential future employees. This turned out to be beneficial for both the office and the fellow.

In 1979, the Cook County Board authorized the construction of a new facility for the medical examiner. Ground was broken in August 1979, at a 2121 W. Harrison Street in the Illinois Medical District directly across the street from the headquarters of the American Society of Clinical Pathologists. The building took four years to complete and the Office of the Medical Examiner moved in 1983. The building gave the office a state of the art facility with 100,000 square feet of space. The autopsy facilities including radiology, the receiving desk, photography, investigation and administration offices, police offices, and a comfortable and attractive public lobby were all located on the first floor. The chief medical examiner's office, pathologists' offices, library, toxicology and histology laboratories, and a large storage area were located on the second floor. A large multipurpose conference room seating more than 100 people was located on the lower level as well an additional large storage area. Building systems occupied a portion of the lower level and the entire third floor. The construction of this building was overseen by Roy J. Dames, the office's administrative assistant. He attended building meetings with the engineers and architects and caught many construction errors before they occurred.

In the early morning hours of March 14, 1981, a fire broke out in the laundry room of the Royal Beach Hotel at 5523 N. Kenmore in Chicago. The building was an apartment-hotel (SRO) with many long term residents who were in drug and alcohol rehabilitation programs and had little contact with their family members. The office worked with police, a forensic radiologist, and forensic odontologists to identify the 19 fire victims, 13 of whom were badly burned.

On September 29, 1982, Barry Lifschultz, M.D. and Dr. Donoghue became involved in the Tylenol-Cyanide poisoning cases in which seven persons in Cook and DuPage counties died. Drs. Donoghue and Lifschultz suggested to the police and emergency room personnel that because of the rapidity of the deaths cyanide was the likely agent. The paramedics and public health nurse involved in the deaths suggested that the vehicle might be the Tylenol present at the death scenes and brought the containers to Medical Examiner Investigator Nick Pishos at the hospital in Arlington Heights. Dr. Donoghue asked the investigator to smell the contents of the container and the investigator replied that he could smell cyanide. Investigator Pishos then brought the containers to the medical examiner's office and Michael Schaeffer, Ph.D., chief toxicologist, was requested to come to the office in the middle of the night and analyze the capsules. By the early the next morning, Dr. Schaeffer found lethal quantities of cyanide in the suspect capsules. Since, Dr. Stein was out of town, it fell to Dr. Donoghue and Executive Officer Roy Dames to schedule a press conference and inform the world that Tylenol had been contaminated with cyanide.

During his time with the office, Dr. Robert Kirschner gained renowned as an expert in human rights violations, police brutality, torture, and child abuse and was an outspoken opponent of the death penalty. Dr. Kirschner was promoted to deputy chief medical examiner in 1987. At the beginning of 1995, Dr. Kirschner retired from the office to devote his time to international human rights pathology. Eupil Choi, MD, was promoted deputy chief medical examiner following Dr. Kirschner's retirement. In 2001, Dr. Kirschner received the American Academy of Forensic Sciences Pathology/Biology Section's Milton Helpern Award.

On November 25, 1987, Harold Washington, Chicago's first black mayor, collapsed in his city hall office in the presence of press secretary Alton Miller. Paramedics called to the mayor's office attempted unsuccessfully to revive him and transported the mayor to Northwestern Memorial Hospital where he was worked on before being pronounced dead. The case was reported to the Office of the Medical Examiner and because there was no physician to sign the death certificate, the body was ordered to the medical examiner's office for examination. Dr. Stein planned to examine the mayor's body the following morning which was Thanksgiving Day. Both Dr. Donoghue and Executive Officer Roy Dames suggested to Dr. Stein that it might be better to examine the mayor immediately and release the body to the funeral home that evening. Dr. Stein performed the autopsy that evening and immediately did a press conference revealing that Mayor Washington had died of coronary artery thrombosis due to coronary atherosclerosis with hypertrophic cardiomyopathy as a significant contributing condition. Straightaway rumors began that the mayor had been poisoned or died of cocaine intoxication. When toxicology testing was completed, the only drug in the mayor's blood was lidocaine which was administered during his attempted resuscitation.

On January 8, 1993, a mass murder occurred at the Brown's Chicken restaurant in Palatine, Illinois, when two assailants robbed the restaurant and then proceeded to murder seven employees. Drs. Donoghue and Kalelkar performed the autopsies finding that all seven victims

died of gunshot wounds and one victim's throat was cut. The case went unsolved for nine years, until a girlfriend implicated one of the assailants.

In the early morning hours of March 16, 1993, a fire occurred at the Paxton Hotel at 1432 N. LaSalle Street in Chicago, an apartment-hotel (SRO). The fire burned for hours and the building collapsed with many victims still inside. The building was unsafe to enter following the fire and had to be demolished. Medical examiner personnel examined the spoils both at the scene and at a City of Chicago sanitation facility looking for the victims. Twenty one persons died in the fire. The identification operation was made more challenging because of uncertainty about who was in the building at the time of the fire and difficulty in locating victim relatives.

On April 1, 1993, Dr. Stein who had been in poor health retired and Dr. Donoghue was appointed chief medical examiner in July after a nationwide search. Shortly afterward, Mitra Kalelkar, MD, was promoted to deputy chief medical examiner. In July 1995, Dr. Donoghue and the office were challenged in the form of heat wave that killed more than 800 persons. The office was astounded when Chicago's Mayor Richard M. Daley suggested that the number of heat deaths was being exaggerated. Office personnel were in a bit of dilemma because they were confident that they were right but understood that they could not confront the mayor directly. Dr. Donoghue acknowledged the mayor of Chicago's authority to ask questions about the determination of heat related deaths. He also asserted that the office was confident of the figures, welcomed a review, and was sure that it would be upheld. At a critical press conference during the heat wave, Dr. Donoghue shared heat death mortality figures from Kenosha, Racine, and Milwaukee counties supplied Jeffrey Jentzen, MD, chief medical examiner of Milwaukee County, indicating that Wisconsin was having a similar or greater problem with heat deaths. The incident has been written about in a very interesting book entitled "Heat Wave: A Social Autopsy of Disaster in Chicago," by sociologist Eric Klinenberg.

On October 31, 1994, during a severe rain storm American Eagle Flight 4184 from Indianapolis to Chicago flew into severe icing conditions, lost control, and crashed into a soybean field in Roselawn, IN. All 68 people aboard were killed in the high speed impact. Scott A. Wagner, MD, a forensic pathologist from Fort Wayne, IN, who was working on the crash contacted Dr. Donoghue and requested the assistance of the Cook County Medical Examiner's Office. Drs. Tae Lyong An, Thamrong Chira, Eupil Choi, Lawrence Cogan, Edmund Donoghue, James Filkins, Mitra Kalelkar, Cynthia Porterfield, Adrienne Segovia, and Lary Sims along with pathologists and anthropologists from the Armed Forces Institute of Pathology worked at the Indiana National Guard Armory at Remington, IN, to identify the badly fragmented but unburned remains. Executive Officer Roy Dames, Chief Investigator Patrick Angelo, and Investigator Sharon O'Connor also ably assisted in this mission.

On November 19, 1996, the United Express Flight 5925 a Beechcraft 1900 turboprop collided on landing at Quincy, IL, with a private Beechcraft King Air, that was taking off from an intersecting runway. All occupants of both planes, twelve on board the 1900 and two on board the King Air, died. The Coroner of Adams County requested the assistance of the Cook County Medical

Examiner's Office in identifying the victims. Drs. J. Scott Denton, Edmund Donoghue, Aldo Fusaro, and Mitra Kalelkar worked with Armed Forces Institute of Pathology pathologists in examining the bodies. Executive Officer Roy Dames assisted the coroner with administrative and logistical details.

Chicago was fortunate in not having to handle a large numbers of celebrity deaths, but a least two did occur. On December 18, 1997, comedian Chris Farley died is his apartment in the John Hancock Building in Chicago. Dr. Edmund Donoghue performed the autopsy and determined that Chris Farley died of cocaine and morphine intoxication with coronary atherosclerosis as a significant contributing condition. On June 22, 2002, St. Louis Cardinal pitcher Darryl Kile was found dead in his room at the Westin Hotel in Chicago when he failed to appear at practice for a game with the Chicago Cubs at Wrigley Field. Dr. Donoghue performed the autopsy and found that Kile's heart was enlarged and that he had 80-90% occlusions of both the left anterior descending and right coronary arteries. No press conferences were held in these cases and the causes of death were revealed by press releases to media.

On March 15, 1999, an Amtrak train, the City of New Orleans, hit a semi-truck loaded with steel that was blocking a grade crossing in Bourbonnais, IL, killing eleven passengers aboard the train. The Coroner of Kankakee County and Cook County Medical Office alumnus Dr. Brian Mitchell requested assistance from the Cook County Medical Examiner's Office. Executive Officer Roy Dames along with Drs. J. Scott Denton, Edmund R. Donoghue, and Aldo Fusaro assisted Kankakee authorities in processing the victims.

On February 17, 2003, the first day of the American Academy of Forensic Sciences annual meeting in Chicago, a stampede occurred when a security guard used pepper spray to break up a fight at the E2 nightclub located at 2347 S. Michigan Avenue, killing 21 persons. This incident was less complicated than most mass fatalities because the bodies were intact with personal effects in place. The office identified and autopsied all 21 victims in a single day.

On a beautiful summer night, June 29, 2003, a third floor porch behind an apartment building at 713 W. Wrightwood Avenue in the Lincoln Park neighborhood of Chicago collapsed under the weight of an estimated 114 people, killing 13 and injuring more than 50. The fatalities were processed over two days by the Office of the Medical Examiner.

In 1955, Emmett Louis Till, a 14-year-old black youth from Chicago, was kidnapped and lynched in Mississippi for whistling at a white woman. The body was returned to Chicago and displayed in a glass covered casket through which thousands people viewed Till's decomposed and mutilated remains. At the time of his death no autopsy was performed in Mississippi and no attempt was made to identify Till by scientific means. In September 1955, Roy Bryant and J.W. Milam were tried and acquitted of Till's kidnapping and murder. In 2004, the United States Justice Department and Federal Bureau of Investigation reopened the investigation of Till's death. On June 1, 2005, the body of Emmett Till was exhumed from Burr Oak Cemetery in Alsip, IL, and transported to the Office of the Medical Examiner of Cook County. X-rays of the

body were taken and reviewed by John J. Fitzpatrick, MD, of the Cook County Hospital. Next, Sanford Block, DDS, forensic odontology consultant, examined the mouth and teeth. The body was then transported to Cook County Hospital for computerized tomography examination and subsequently returned to the medical examiner office. On June 2, 2005, Drs. J. Scott Denton and Edmund R. Donoghue assisted by Smithson Institution Forensic Anthropologist Douglas Ubelaker, Ph.D., autopsied the body of Emmett Till. The body was mummified and in a fairly good state of preservation. The cause of death was a gunshot wound of the head. Other Cook County Medical Examiner personnel participating in the exhumation included Leroy Martin, Chief Investigator; Christopher J. Morris, Executive Officer; Maurice Carlton, Business Manager; Katherine P. Krupela, Chief Photographer; Sherry L. Davis, Photographer; and Cecili Tomilson, Autopsy Technician.

On December 31, 2005, Dr. Eupil Choi retired and Dr. J. Scott Denton was promoted to deputy chief medical examiner. Dr. Denton also became co-director of residency training in forensic pathology.

In the fall of 2006, after four years of repetitive 5% budget cuts, Dr. Donoghue was informed that he would have to cut his 2007 budget by 17%. He realized that a cut of this size would leave the office without the resources needed to perform its duties. Dr. Donoghue retired on December 31, 2006, and took a job with the Georgia Bureau of Investigation in Savannah, GA.

Dr. Robert Stein served as president of the National Association of Medical Examiners in 1983-1984. He was selected for the Milton Helpern Award of the American Academy of Forensic Sciences Pathology/Biology section in 1995. Although Dr. Stein was alive at the time the award was announced, he died before he could receive it. In 1999, Dr. Edmund Donoghue served as the president of the National Association of Medical Examiners and presided over the annual meeting in Minneapolis, MN. In 2001-2002, he served as president of the Chicago Medical Society and was the president of the American Academy of Forensic Sciences in 2005-2006. Dr. Donoghue received the Milton Helpern Award of the Academy of Forensic Science Pathology/Biology section in 2008.

In 2007, Dr. Nancy L. Jones was selected to be chief medical examiner following Dr. Donoghue's retirement. Dr. Jones was plagued with continued budget cuts and reduced staffing that created backlogs in the disposition of unclaimed bodies and completion of pending death certificates. The number of forensic pathologists declined from 14 to six.

In February 2012, the office received unwanted publicity when photographs of the body cooler were leaked to the media. These photographs depicted bodies that were piled on the floor. This tragedy was largely result of the loss of state funding for burial of indigent remains as well as a lack of local support and funding for the office. This event was followed by an Illinois Department of Labor inspection which identified over 20 safety violations. In June 2012, after five year as chief medical examiner, Dr. Jones retired.

Following the Dr. Jones retirement, Dr. Stephen Cina was appointed as chief medical examiner for Cook County in September 2012. At that time, Cook County had committed to adequately fund the office and increase staffing. Shortly after Dr. Cina's appointment, Dr. Ponni Arunkumar was promoted to deputy chief medical examiner. Many of the safety violations had been corrected by that time and the remainder were abated by January 2013. The office hired a permanent safety officer later that year to ensure that the workplace remained safe and compliant with state, local, and federal regulations.

The office spent 2013 reviewing and rewriting all policies and procedures with the goal of obtaining National Association of Medical Examiners accreditation in 2014, its accreditation having been lost in 2011. Staffing, which had reached a low in 2012 of 76 employees, including six forensic pathologists and one fellow, began to increase, with 125 employees budgeted for 2014. Designs were drafted for a new, state-of-the-art, $1.1 million cooler with an automated body lift which became a reality in January 2014. One month later the office regained provisional accreditation with National Association of Medical Examiners. In August 2014, voluminous log books were replaced with a cloud-based case management system. The office was now in the 21st century.

By 2016, the office had obtained full accreditation from the National Association of Medical Examiners, resulting in a press conference at which NAME President David Fowler gave an address. The office is now funded for 15 forensic pathologists and three fellows, with all vacancies expected to fill by July 2016. It is hoped that the mistakes of the past, including progressive budget cuts, will not repeat themselves; for the time being, the office is once again a great place to work and train.

Appendix 1.

	Cook County Medical Examiner Fellows in Forensic Pathology	**Years**
1	Shaku Teas, MD	1977-1978
2	Mitra B. Kalelkar, MD	1978-1979
3	Daniel P. DelBoccio, MD	1980-1981
4	Joanne M. Richmond, MD	1980-1981
5	H. Wayne Carver, MD	1980-1982
6	Barry D. Lifschultz, MD	1981-1982
7	William J. Moffett, MD	1982-1983
8	Hans Dolz, MD	1983-1984
9	Hugo Romeu, MD	1983-1984
10	Diane M. Scala-Barnett, MD	1985-1986
11	Michael J. Chambliss, MD	1985-1986
12	Nancy L. Jones, MD	1986-1987
13	Mary I. Jumbelic, MD	1987-1988
14	Margarita Arruza, MD	1988-1989

15	Ethel S. Dijamco, MD	1990-1991
16	Thamrong Chira, MD	1992
17	Cynthia M. Porterfield, MD	1993-1994
18	Lary Sims, MD	1993-1994
19	James Filkins, MD	1994-1995
20	Adrienne Segovia, MD	1994-1995
21	Brian R. Mitchell, MD	1995-1996
22	Mary T. Uckerman, MD	1995-1996
23	J. Scott Denton, MD	1996-1997
24	Aldo J. Fusaro, MD	1996-1997
25	Donna M. Skinker Hunsaker, MD	1997-1998
26	Matthew L. Areford, MD	1998-1999
27	Darinka Mileusnic, MD	1998-1999
28	Rexene R. Worrell, MD	1999-2001
29	Clare H. Cunliffe, MD	2000-2001
30	Kendall V. Crowns, MD	2000-2002
31	Tasha L. Zemrus, MD	2001-2002
32	Ronald J. Knoblock, MD	2002-2003
33	Ponni Arunkumar, MD	2003-2004
34	Valerie Arangelovich, MD	2004-2006
35	Michel Humilier, MD	2004-2006
36	Wendy Lavezzi, MD	2004-2005
37	Michelle A. Jorden, MD	2005-2006
38	Tera Jones, MD	2006-2007
39	John Ralston, MD	2007-2008
40	Hisham Hashish, MD	2008-2009
41	Hilary McElligott, MD	2009-2010
42	Steve White, MD	2011-2012
43	Dawn Bradley Holmes, MD	2011-2012
44	Marta Helenowski, MD	2012-2013
45	Tonya Townsend, MD	2012-2013
46	Latanja Watkins, MD	2013-2014
47	Jon Gates, MD	2014-2015
48	M. Galicia, MD	2014-2015
49	Mathew Fox, MD	2015-2016
50	Stephanie Powers, MD	2015-2016



Steve Cina, MD

March 2016

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Indiana

History of Forensic Pathology in Indiana 1779-2012



John E. Pless, MD



Joseph A. Prahlow, MD

May 2012

Indiana, the pocket shaped Hoosier State, was literally created by the borders of Ohio and Illinois on the East and West, respectively, as well as Lake Michigan and the Ohio River on the North and South, respectively. Vincennes Indiana was the capital of the Northwest Territory established in 1779, including the present-day states of Wisconsin, Michigan, Ohio, Indiana and Illinois. The territorial government adopted the death investigation laws of Virginia that included a Coroner System, but the verbiage of this law limited investigation to deaths due to casualty, i.e. homicide, suicide or accident until 1963. There was no mention of sudden unexpected deaths or those occurring in suspicious or unusual circumstances.

The original coroner's statutes were adopted from the territorial constitution until 1852 when the same laws were inserted in the first Indiana constitution developed in a convention during that date. Payment for autopsies was not included in the law until the 1930's.

The first trained anatomic and clinical pathologist in Indiana was probably Virgil Moon who came to Indiana University School of Medicine with William Emerson from Johns Hopkins when Emerson became Dean in 1911. He set up a clinical laboratory at the Indianapolis City Hospital (now the Wishard Hospital) and started performing coroner's autopsies. There were no clinical laboratories at the University Hospital until 1931 because Dr. Emerson insisted that doctors should do their own laboratory work on the wards. The University Pathologists were morbid anatomists and they did not do coroner's autopsies.

The only well recorded forensic examination in the early years occurred in 1925 when David Curtis (DC) Stephenson, the Grand Dragon of the KKK in 22 states, was accused of killing a young secretary, Madge Oberholtzer. He apparently raped her and severely mutilated her with bite marks in his private railroad car on the way to Chicago. She subsequently went to a drug store in Hammond, IN and purchased bichloride of mercury, apparently as an abortifactant.

Distraught over the humiliation of the act and suffering the pain of the bites, she reportedly took the poison by mouth instead of using it as a douche. She became ill immediately, and the Stephenson people took her back to Indianapolis where D. C. Stephenson had an apartment above his garage. She remained there about a week and then was taken to her parent's house just a block away.

Madge Oberholtzer died a month later, after giving an affidavit concerning her attack. The Indianapolis Times was a prodigious critic of the KKK and took up her cause with the local prosecutor. The autopsy was performed by Dr. Virgil Moon and certified by the Marion County Coroner, O. D. Robinson, MD, who was a member of the KKK. Rolla Harger, PhD did the toxicology and he testified that Madge died from bichloride of mercury poisoning. Dr. Robinson listed mercury poisoning as the cause of death and suicide as the manner. Dr. Moon testified that the mechanism of death was pneumonia from the infected traumatic bites. He classified the death as a homicide. He reasoned that although she had damage to her kidneys from the mercury, she had survived over a month from that insult, so the mercury was not an issue in her death. A guilty decision and the national publicity of the rape and molestation destroyed the KKK in America. The organization went from a membership of 3,000,000 in 1924 to less than 3,000 by 1930.

Dr. Moon received several death threats and eventually had to leave Indiana for Pennsylvania where he became Chairman of Pathology at the Hahnemann Medical College. He was one of the first pathologists to become board certified in pathology in 1938. Autopsies for the coroners in Central Indiana continued to be done by pathology residents at City Hospital in Indianapolis following the loss of Dr. Virgil Moon.

The first board certified forensic pathologists in Indiana were Dr. Louie Sneider in Fort Wayne and Dr. William McFadden in Lafayette. Both were certified by the "grandfather rule" but both did take the national examination set forth by the American Board of Pathology in 1959. That examination was held at Indiana University because Dr. Edward B. Smith was the secretary of the American Board of Pathology. Dr. McFadden did a good number of coroner's autopsies in Lafayette and surrounding counties until his death in 1991. Dr. Sneider did most of the autopsies for Allen County until his death in 1992. Dr. Scott Wagner, who did a forensic fellowship with Dr. Pless at Indiana University in Indianapolis, replaced him.

Over the years, autopsy centers developed as various modern clinical laboratories developed in large communities around the state. Residents at the South Bend Medical Foundation did autopsies in South Bend and surrounding counties. This began in the 1930's when Dr. Gerald Giordano established a central not-for-profit laboratory that did clinical laboratory procedures for hospitals in South Bend, Mishawaka, Elkhart, and Goshen, Indiana as well as Three Rivers, Dowagiac and Niles, Michigan. The first forensic pathologist there came in 1984: Dr. Rick L. Hoover, who trained at the Southwestern Institute for Forensic Sciences in Dallas, TX with Chuck Petty. Dr. Joseph Prahlow, who also trained in Dallas (under Dr. Jeffrey Barnard) joined Dr. Hoover and the South Bend Medical Foundation in 1999.

Dr. Lall Montgomery started the clinical laboratory at Ball Memorial Hospital. Ball pathology residents did most of the coroner's autopsies in Muncie and several surrounding counties. Since 2002, Dr. Paul Mellen, a board certified forensic pathologist who trained in Philadelphia, now supervises the forensic autopsies in Muncie.

Dr. Philip Adler, based in Columbus, was the first board certified anatomic pathologist in Southern Indiana, arriving shortly after WWII. As an itinerant pathologist, he literally served most counties between Indianapolis, Louisville and Evansville. He had no formal forensic training.

Dr. Anthony Pizzo began his practice in Bloomington, replacing Dr. Adler in 1951. He covered hospitals in Bedford and Bloomington. He and his partners did most of the coroner's autopsies in South Central Indiana until the arrival of Dr. John Pless in 1971. Dr. J. Michael Jacobi in Bedford became board certified in forensic pathology in 1992 on the basis of experience. He continues to serve much of South Central Indiana, including Evansville.

Pathologists at the Clark County Hospital in Jeffersonville served the Jeffersonville and New Albany areas of the Southern Counties along the Ohio River. The two pathologists there, Drs. L. C. McCloud and Francis Masser were both certified in forensic pathology on the basis of experience and work that they did at the Kentucky State Medical Examiner's office in Louisville, KY across the river. Walter Jones, MD also board certified in the same way and continues to serve the counties along the river. The Kentucky State Medical Examiner now performs many forensic autopsies for Southern Indiana counties in Louisville (under the direction of Chief Medical Examiner Tracy Corey).

Evansville has always had a problem getting adequate forensic post mortem examinations. For many years a non-certified anatomic pathologist traveled around Evansville doing inappropriate examinations. This finally ended in 1984. A new morgue facility was built in 1988 and a board certified forensic pathologist, Dr. John Heidingsfelder, became the first full time coroner's pathologist. He continued in good stead until about 2000 when he had to leave the country because of problems with his federal income taxes. Dr. J. Michael Jacobi currently serves Evansville.

Dr. Jack Weinstein served Terre Haute throughout the 1960's and 70's until his untimely death in 1984. He was replaced by Dr. Roland (Rick) Kohr who became certified in forensic pathology by experience in 1994. Dr. Kohr serves most of the southwestern part of Central Indiana, including Bloomington.

In 1959, Dr. Edward B. Smith, Chairman of Pathology, at Indiana University wrote an article in the Indiana Medical Society Journal entitled "Indiana: One of the Best States to Commit Murder". In this article he deplored the status of death investigation claiming that non-physicians were doing autopsies and untrained coroners were missing proper investigations.

This was very true and one of the worst offenders was the head of the State Police Laboratory, Ed Davis, who was a trained police officer with literally no training in medicine. He would conduct examinations of bodies found dead especially if the body was found in a remote area and decomposed. He used the services of a physical anthropologist at Indiana University in Bloomington to back him up. That anthropologist, George Newman, PhD was later discredited on the basis of his findings in Native American Indians. Ed Davis wrote a contradictory article in the Indianapolis Star that emphasized the importance of the State Police in acting when no local expertise or facilities were available.

As a result of this controversy, thanks to Dr. Edward Smith, the State Legislature passed changes in the coroner statutes in 1963 that required that only a board certified anatomic pathologist be allowed to examine a dead human body. It was also stated that investigation of death should be done on all sudden unexpected deaths as well as those occurring under unusual and suspicious circumstances. There was also an effort to pass a law that would do away with the coroner system. It passed the legislature on two terms by 1972 and was included as a referendum in the 1973 election, but the inclusion of the elimination of the surveyor without providing alternatives for either position (coroner and surveyor) complicated the matter.

During this legislative effort, it was decided that Indianapolis and the State of Indiana needed a Forensic Pathologist, Chief Medical Examiner. Dr. Charles Petty was hired from the Maryland Medical Examiner System in 1968. He arrived about the same time that Dr. James Benz was returning from 6 years in the Air Force. Benz was stationed at the Armed Forces Institute of Pathology where he was responsible for setting up the Aircraft Accident Investigation Division. Dr. Benz was hired to be the Chief of Pathology at the Marion County General Hospital (formerly Indianapolis City Hospital). This is where Dr. Petty set up a new morgue for doing forensic autopsies. Dr. Petty trained Jim Benz, who was subsequently certified in forensic pathology by the ABP in 1969.

Unfortunately, a new coroner was elected in Marion County in 1970. He was determined that residents at Methodist Hospital would continue to do coroner's autopsies. Meanwhile, Dr. Petty was invited to move to Dallas, TX in order to head up a new forensic pathology institute. They built him a new building and gave him support through a law giving him complete control over death investigation in Dallas County and serving as a resource for several counties in central Texas.

Jim Benz continued as the forensic pathologist in Indianapolis and in the 1970's he set up a training program. Dr. James Swinehart was his first trainee. Dr. Swinehart had trained in general pathology at Indiana University, but following his forensic training, he returned to his hometown of Fairfield, Ohio. Dr. Benz also trained Higenio Esparza in 1970. Esparza became board certified in forensic pathology in 1972. Unfortunately, Dr. Esparza died in 1976 when the office assumed responsibility for doing all the medical legal autopsies from Lake County Indiana. Following the death of Dr. Esparza, Dr. Benz hired Jesse Aguilar from Cyril Wecht's

fellowship program. Dr. Aguilar created much legal and social controversy after less than two years and ultimately left the state for Alabama. John Eisele, who trained in Cleveland with Charles Hirsch, came to Indiana in 1978 and remained until 1981. He went to Seattle where he made an excellent review of the Mount St. Helen's disaster. Jim Benz continued to use residents to help him perform autopsies until February of 1983, when he left for Florida.

As the 1970's developed, two centers became important: Indianapolis and Bloomington. Dr. John Pless, a graduate of the South Bend Medical Foundation and the Oklahoma Medical Examiner System under the direction of Dr. James Luke, located in Bloomington in 1971. He did most of the forensic autopsies in Southern Indiana until he moved to Indiana University in Indianapolis in 1983 following the relocation of Dr. James Benz to Fort Lauderdale Florida and District #15.

In August of 1983, Dr. John Pless reorganized the forensic program at Indiana University. He immediately set up a forensic fellowship and Dean A. Hawley, MD was his first graduate in 1984. Dr. Hawley continues at Indiana University in Resident Training today. The second trainee was Dr. David Gauger, 1986. He was a graduate of the University of Iowa Pathology Residency and had been in the private practice of pathology. He continues in private practice today in Cedar Rapids, Iowa.

During Dr. Pless' time at Indiana University School of Medicine-Indianapolis, he trained a total of 14 forensic pathology fellows (see Table 1). Other forensic pathologists who assisted with autopsies and in the training of fellows, residents, and medical students, include the following: Dean Hawley, Michael Clark, MD, PhD (years of employment: 1987-2002, graduate of Ohio State University medical school, residency and FP fellowship via the AFIP and Baltimore), Richard Harruff (years of employment: 1990-1993, medical school: IU, residency: Baptist Hospital in Memphis, forensic training with Jerry Francisco in TN).

During a several year period in the 1990s, there was quite a bit of tension within the Marion County (Indianapolis) Coroners Office, with the coroner ultimately believing that the coroner's office should exert more "control" over the forensic pathologists. This tension ultimately resulted in the county severing official ties with the Indiana University forensic pathologists for the performance of autopsies for a period of approximately 18 months. During that time, the coroner hired several pathologists, one after the other, in order to attempt to perform the Marion County coroner's autopsies. The reality of the situation was that too few pathologists, several of whom were not sufficiently qualified, were attempting to match the expertise that had, for years, been provided by the forensic pathologist staff at Indiana University. At least one of the pathologists was not even licensed to practice medicine in Indiana. It soon became evident to most individuals that the coroner had made a terrible mistake in severing ties with Indiana University. With a newly-elected coroner, Marion County renewed its relationship with Drs. Pless, Clark, and Hawley, where they continued serving Marion County and other counties for several more years. Dr. Clark died in 2002. Following Dr. Clark's death, in 2002,

IUSM hired Dr. Steve Radentz, who had trained and worked at the Maryland State Medical Examiner's Office in Baltimore. Dr. Pless retired in 2003.

Some additional important notes of interest concerning Dr. Pless' tenure in Indianapolis include the fact that he held the prestigious Culbertson Chair of Pathology within the Department of Pathology of Indiana University School of Medicine, he served as President of the National Association of Medical Examiners (NAME) from September of 1997 through January of 1999, he served as Chairman of the Board for NAME in 1999, and he hosted the NAME Annual Meeting in 2000.

Following Dr. Pless' retirement, there was more turmoil in Indianapolis, but this time, not only did it involve the relationship between IUSM and the coroner's office, but it also affected the relationship between the forensic pathologists and IUSM. The ultimate outcome was that IUSM no longer provided FP services for the county, and the long-standing official relationship that existed between the FPs and IUSM was also severed. No longer were the FPs considered faculty members within the Pathology Department. As a result of this change of direction, Dr. Dean Hawley, who was a tenured professor at IUSM, remained on faculty and currently continues as a professor of pathology and is involved in residency training. Drs. Steve Radentz and Michelle Catellier initially continued to perform cases for the coroner, but this arrangement only lasted for about a year. The current group of the forensic pathologists in Indianapolis has a less formal affiliation with IUSM, and performs autopsies for the Marion County Coroner's Office, as well as numerous surrounding Indiana Counties. Dr. Joye Carter (fellowship training in Baltimore, MD, former Chief ME in Washington, D.C., and Houston, TX) is the chief of the group (hired in late 2006). Assisting Dr. Carter on a part-time basis when she first began performing autopsies for Marion County were pathologist Allen Griggs and forensic pathologist Kent Harshbarger. In 2008, Dr. Harshbarger's contracting firm brought 2 additional FPs (trained in Cincinnati) in on a part-time basis, with Dr. Carter remaining as the full-time FP and serving as chief. The FP fellowship was revived in 2009. The first fellow trained under Dr. Carter was Dr. Thomas Sozio, DO. Dr. Carter's company (J and M Forensic Consulting) took over as the full-time contractor with Marion County in 2009 and hired Dr. Sozio, as well as John Cavanaugh (trained at IU under Dr. Pless, and formerly serving in Lake County, IN). Jolene Clouse (medical school: IUSM, residency: Ball Memorial, fellowship: Wake Forest), who had worked in Marion County via Dr. Harshbarger's group, was hired as a part-time FP in 2010. Dr. Clouse has since moved to Muncie, where she teaches at the IUSM-Muncie campus and practices FP. Dr. Michelle Elieff (trained by Dr. Pless) joined Dr. Carter's group on a part-time basis, and plans to join full-time in 2012. J and M Forensic Consulting covers autopsies for Hamilton, Boone, and Marion County coroner's offices. Besides Dr. Sozio, other FP fellows who have been trained under Dr. Carter's leadership include: Dr. John Daniels (2010-11) (now working in Columbus, OH), and Dr. Den Obenson (2011-12), who plans to return to his native Canada following training. Prospective fellows have been accepted through the year 2014.

Over the years, the Marion County autopsies, as well as many coroners autopsies from several surrounding Indiana counties, were performed in a variety of locations. Foremost amongst

these locations were the basement morgue housed in the basement of the Marion County Jail in downtown Indianapolis, the Pathology Department morgue in the medical science building on the Indiana University School of Medicine campus, and a renovated building south of downtown Indianapolis that houses the Marion County Coroner's Office and the morgue. The latter facility continues to be used today for coroner's autopsies, under the direction of the Dr. Joye Carter.

Lake County, Indiana, which encompasses "the Region" of northwest Indiana encompassing Gary, Hammond, and several other communities, represents an area of the state that has always had a great need for forensic pathologist services. For many years, pathologists with no formal forensic training provided the only coroners autopsies. From September, 1988-August, 1992, Dr. Elliott Gross taught at IUSM-Northwest and provided part-time local FP expertise. John Cavanaugh, trained by Dr. Pless, became the area's first fulltime fellowship-trained, board-certified forensic pathologist. Dr. Cavanaugh provided FP autopsy performance services for Lake County and some surrounding counties for several years from the late 1990s into the 2000s, before returning to Indianapolis, where he currently works with Dr. Joye Carter. Currently, Lake County is without a fulltime FP. Most cases in Lake County are again performed by a non-forensically-trained pathologist.

As mentioned previously, the pathologists at the South Bend Medical Foundation have provided coroner autopsies for many decades. Dr. Rick Hoover (MD at Indiana University School of Medicine; residency at SBMF; FP training in Dallas with Charles Petty) returned to the SBMF as the area's first Board-certified FP in 1984. Joseph Prahlow joined Dr. Hoover in 1999, after completing his FP training in Dallas under Dr. Jeffrey Barnard. Dr. Prahlow now performs a bulk of the coroner's autopsies for the area. Following in Dr. Pless' footsteps as a Hoosier forensic pathologist in a national leadership role, Dr. Prahlow served as President and Chairman of the Board of the National Association of Medical Examiners in 2007 and 2008, respectively.

Although not organized at the state level, there are several "regional centers" around the state that currently offer forensic autopsies for county coroners in Indiana. Many of them are staffed by Board-certified forensic pathologists. Unfortunately, some are not.

Indianapolis (Marion County) – Joye Carter
South Bend – Joseph Prahlow
Fort Wayne – Scott Wagner
Muncie – Paul Mellen; Jolene Clouse
Terre Haute – Roland Kohr
Southeastern Indiana (Louisville, KY area) – Tracy Corey (Louisville)
Evansville – Michael Jacobi
Lake County –

Despite the presence of several "regional centers" that offer forensic autopsy services throughout the state, the reality of the current state of affairs in Indiana is two-fold:

Even when a regional center has a Board-certified forensic pathologist, not every center has *only* Board-certified forensic pathologists. In other words, if a coroner sends a case to certain regional centers, there is no assurance that the autopsy will be performed by a forensic pathologist.
Many coroners utilize non-forensic pathologists to perform many of their autopsies.

List of Fellows Trained in Forensic Pathology at Indiana University (Under Dr. John Pless, 1984-2003; Dr. Steve Radentz, 2004; Dr. Joye Carter, 2006-present)

Dr. Dean A. Hawley, 1984 – Indiana University Department of Pathology
Dr. David Gauger, 1986 – private practice, Cedar Rapids, Iowa
Dr. Joni McClain, 1988 – Associate Medical Examiner, Dallas, Texas
Dr. Jesse Giles, 1989 – Chief Medical Examiner, Jacksonville, Florida
Dr. Scott Wagner, 1992 – Chief Forensic Pathologist, Fort Wayne, IN
Dr. Amy Llewellyn, 1993 – Medical Examiner, Reno, NV
Dr. John Cavanaugh 1997 – Medical Examiner, Lake County Indiana
Dr. Romeo Pineda 1998 – General Practitioner, Indianapolis, Indiana
Dr. Jessica Bowman 1999 – Forensic Pathologist – Bloomington, IL
Dr. James Luter 2000 – General Practitioner, Indianapolis, Indiana
Dr. Donna Smith 2001 – General Practitioner, Indianapolis, Indiana
Dr. Dzuy Nguyen 2002 – AFIP - Armed Forces Medical Examiner
Dr. Mark Peters 2003 – Medical Examiner, Rockford, Illinois
Dr. Michelle Elieff 2004 – Medical Examiner, Colorado
Dr. Thomas Sozio 2009 – Indianapolis, IN
Dr. John Daniels 2011 – Columbus, OH
Dr. Ken Obenson 2012 - Canada

List of "forensic pathologists" in Indiana:

Name	**Location**	**Dates**	**Certification**	**Location of training**
William McFadden*	Lafayette	'59-90	experience	2 wks in Baltimore
Louis Sneider*	Fort Wayne	'59-92	experience	2 mo. New York
Charles Petty*	Indianapolis	'68-'70	experience	12 years in Baltimore
James Benz*	Indianapolis	'70-'83	training	6 yrs. at AFIP, 1 yr. Indy
John Pless	Bloomington/			
Indianapolis	'71-'03	training	1 yr. Jim Luke – Oklahoma	
Higenio Esparza*	Indianapolis	'72-76	training	1 yr. Jim Benz – Indianapolis
Jesse Aguilar	Indianapolis	'76-'80	training	1 yr. Cyril Wecht – Pittsburg
John Eisele*	Indianapolis	'77-'82	training	1 yr. Charles Hirsch - Cleveland
Richard McClure	Noblesville	'78-'05	training	1 yr. Charles Petty - Dallas
Dean Hawley	Indianapolis	'84-pres	training	1 yr. John Pless – Indianapolis
Albert Kaltenthaler*	Lafayette	'86-'09	experience	1 month – Cleveland
Michael Clark*	Indianapolis	'87-'02	training	1 yr. Russell Fisher – Baltimore
Richard Harriff	Indianapolis	'90-'94	training	1 yr. Jerry Francisco - Memphis
Rick Hoover	South Bend	'90-pres	training	1 yr. Charles Petty – Dallas
Scott Wagner	Fort Wayne	'92-pres	training	1 yr. John Pless – Indianapolis
John Heidingsfelder	Evansville	'93-'04	experience	12 yrs. practice in Louisiana
J. Michael Jacobi	Bedford	'94-pres	experience	2 weeks - Indianapolis
Michelle Catellier	Indianapolis	'90-'07	training	1 yr. Jeff Jentzen – Milwaukee
John Cavanaugh	Evansville, Lake Co.,			
Indianapolis	'97-pres	training	1 yr. John Pless – Indianapolis	
Roland Kohr	Terre Haute	'98-pres	experience	2 weeks, Indianapolis
Ruth Kohlmeier	Angola	'99-pres	unknown	
Joseph Prahlow	South Bend	'99-pres	training	1 yr. Jeffrey Barnard – Dallas
Paul Mellen	Muncie	'02-pres	training	1 yr. Haresh Mirchandani - Philadelphia
Steve Radentz	Indianapolis	'02-pres	training	1 yr. John Smialek – Baltimore
Jennifer Swartz	Indianapolis	'03-'06	training	1 yr. David Fowler – Baltimore
Jolene Clouse	Indianapolis	'09-'11;		
Muncie, IN	'11-pres	training	1 yr. Pat Lantz – Wake Forest	
Joye Carter	Indianapolis	'06-pres	training	1 yr. John Smialek – Baltimore
Elliott Gross	Lake Co.	'88-'92	experience	NYC
Kent Harshbarger	Marion Co.	'06-'08	training	1 yr. Dayton, OH
Thomas Sozio	Indianapolis	'09-pres	training	1 yr. Joye Carter – Indianapolis
Michelle Elieff	Indianapolis	'11-pres	training	1 yr. John Pless – Indianapolis

Iowa

Iowa Office of the State Medical Examiner



Julia C. Goodin, MD
(3/10/57-4/12/19)
August 2012

The Mission of the Iowa State Medical Examiner

To establish credibility in death investigation in a system that will operate efficiently and serve the needs of the citizens of Iowa.



History

In the late 1950s, several individuals got together and decided deaths would be better investigated if the persons determining the need for an autopsy and completing death certificates were local physicians. This idea prompted legislative action to replace coroners with county medical examiners in 1961. The original proposed bill (House File 260) also created the position of State Medical Examiner. However, the bill was amended before leaving the legislature returning all power back to the counties, and no State Medical Examiner position was created, essentially, creating a county medical examiner system.

The law passed by the legislature in 1959 required each County Board of Supervisors to appoint a county medical examiner whose term would begin January 2, 1961. The appointed person had to be a physician who was responsible for investigating deaths that occurred in their county, and the death had to fall under medical examiner's jurisdiction. The county medical examiner determined if an autopsy was necessary, and if not, certified the death by gathering information from the scene and medical history. The 1959 legislation established examination certificate fees on a county level: $15.00 per certificate plus expenses. Until the late 1980s, when an autopsy was needed, the county medical examiner arranged for a local pathologist or the University of Iowa to perform the autopsy.

In 1970, the Iowa legislature repealed the 1959 law and passed Senate File 585, establishing a State Criminalistics Laboratory and creating the position of State Medical Examiner. As stated at the time in Iowa Code Chapter 1280:

"SEC. 5. ...The state medical examiner shall be a physician and surgeon or osteopathic physician and surgeon and be licensed to practice medicine in the state of Iowa, and possess special knowledge in forensic pathology. The state medical examiner shall be appointed by and serve at the pleasure of the governor. The state medical examiner may be a faculty member of the college of medicine or the college of law at the University of Iowa, and any of his assistants or staff may be members of the faculty or staff of the college of medicine or the college of law at the University of Iowa.

SEC 6. The duties of the state medical examiner shall be:

1. To provide assistance, consultation, and training to county medical examiners and law-enforcement officials.
2. To keep complete records of all relevant information concerning deaths or crimes requiring investigation by the state medical examiner.
3. To promulgate rules and regulations pursuant to chapter seventeen A (17A) of the Code regarding the manner and techniques to be employed while conducting autopsies; the nature, character, and extent of investigations to be made in cases of homicide or suspected homicide necessary to allow a medical examiner to render a full and complete analysis and report; the format and matters to be contained in all reports rendered by medical examiners; and all other things necessary to carry out this Act. All county medical examiners and peace officers shall be subject to such rules and regulations."

The position of State Medical Examiner remained vacant, however, until 1983 when Thomas L. Bennett, M.D., began his term as the State Medical Examiner. Except for an approximately 1 1/2 year period in 1985-1986, Dr. Bennett remained in this position until 1997. Autopsies were performed at Broadlawns Medical Center in Des Moines, Iowa, and at other locations throughout the state. Until the mid-1990s, there was no provision for a salary for the State Medical Examiner, Dr. Bennett received payment on a fee-for-service basis from the counties. On July 1, 1996, the State Medical Examiner became a full-time salaried employee of the Department of Public Safety, and at that point, the State Medical Examiner needed to be a forensic pathologist and became directly responsible for forensic autopsies.



Thomas L. Bennett, M.D.



Broadlawns Medical Center

When the office of State Medical Examiner was established, it was administered under the Iowa Department of Public Safety. Despite repeated requests for funding, staffing, and a better facility, little changed until controversy occurred in the State Medical Examiner's office in 1997. At this time, a serious effort was made to look at the needs of the state office. The National Association of Medical Examiners (NAME) was asked by Paul Wieck, Iowa Public Safety Commissioner at that time, to perform a consultative evaluation of Iowa's medical examiner's office.

The NAME conducted a review of the State Medical Examiner's Office in 1998. Their recommendations included:
Moving the office from the Department of Public Safety so it would stand alone, or to another department.

Change the existing law to give subpoena power to the State Medical Examiner.

Increase the budget.

Noted the need for a facility.

The report produced by NAME is an important document and a milestone in the development of the Iowa Office of the State Medical Examiner (IOSME). NAME cited in their report that having the IOSME administrated under the Department of Public Safety, an arm of law enforcement, gave an appearance of bias toward the prosecution. To address this concern, Governor Thomas J. Vilsack signed a bill on May 27, 1999, moving the office from the

Department of Public Safety to the Department of Public Health, and creating the State Medical Examiner Advisory Council and the Interagency Councils.


Julia C. Goodin, M.D.

When Julia C. Goodin, M.D., was hired as the Chief State Medical Examiner in December 1999, there was only one other employee, an office worker, The office had no supplies, no instruments, and only rented morgue space. Over the last twelve years, the office has grown to a staff of 12 full-time employees and 31 part-time employees, including 4 full-time forensic pathologists. The office performs approximately 750 autopsies per year and reviews the reports from all cases that occur throughout the state. Not all autopsies within the county medical examiner jurisdiction, however, are performed by the state office. Some autopsies are still performed by local pathology groups and the pathologists at the University of Iowa. Dr. Gregory Schmunk, the Polk County Medical Examiner, also provides autopsies for Polk County.

The State Medical Examiner was given subpoena power by Senate File 2302 during the 2000 Legislative Session. The same Senate File gave the State Medical Examiner additional power to adopt rules relating to the duties, responsibility, and operations of the state office and the county medical examiners.

Dennis F. Klein, M.D., was brought on as Deputy Chief State Medical Examiner on August 1, 2000.

In 2008, the Iowa Office of the State Medical Examiner achieved accreditation by the National Association of Medical Examiners.

In 2001, funding of $51 million was appropriated to build a new facility to house four separate laboratories, including the State Medical Examiner's Office. The original estimated cost was $62 million. The firm of Henningson, Durham and Richardson (HDR) was contracted to perform the architectural engineering and design work of the entire complex, including the 24,000 square feet, $11 million medical examiner's section.





House File 2453, passed by the 2002 Legislature on March 18, 2002 and signed by Governor Vilsack on April 9, 2002, made autopsy reports confidential. An amendment was made to Iowa Code Chapter 22.7(41) requiring release of only cause of death and manner of death to the public, and only if doing so will not hinder an ongoing investigation. Administrative rules were written to determine which cases needed to be autopsied, and to establish responsibilities and qualifications for county medical examiner investigators.

The Iowa Office of the State Medical Examiner (IOSME) serves a population of 3,062,309 (2011 census). There are 99 counties in Iowa, and currently there are 105 appointed county medical examiners, with some larger counties sharing duties between two or more county medical examiners. Assisting them are 218 deputy county medical examiners and 243 county medical examiner investigators.

All county medical examiners and deputy medical examiners are physicians. County medical examiners (CME) are appointed for a two-year term by their respective county's Board of Supervisors per Iowa Code 331.321. The appointed CME may appoint deputy medical examiners and county medical examiner investigators, who must be approved by the IOSME.



Julia Goodin, M.D. Jonathan Thompson, M.D.
Dennis Klein, M.D. Michele Catellier, M.D.

First State Medical Examiner

Dr. Thomas Bennett served as State Medical Examiner of Iowa from 1983 to 1997, with a short break in service between 1985 to 1986, when he served as Mississippi's State Medical Examiner.



Thomas L. Bennett, M.D.

Dr. Bennett received his B.A. in Biology from Drake University. Following medical school at the University of Iowa College of Medicine in Iowa City, Dr. Bennett completed his a residency in Anatomic and Clinical Pathology at the Institute of Pathology, University Hospitals of Cleveland. After completing his fellowship in Forensic Pathology at in the Office of the Chief Medical Examiner in Chapel Hill, NC he completed additional a residency training in Clinical Pathology at Royal C. Johnson Veterans Administration Hospital in Sioux Falls, SD.

Dr. Bennett is certified by the American Board of Pathology, is licensed in the States of Montana, Wyoming and Iowa, and is currently affiliated with Pathology Consultants, P.C. in Billings, Montana. He is a member of the American Academy of Forensic Sciences (AAFS), the National Association of Medical Examiners (NAME), the American Society on the Abuse of Children (APSAC), the College of American Pathologists (CAP), the Montana Medical Association (MMA), and the American Medical Association (AMA).

During his time as State Medical Examiner, Dr. Bennett authored the original Iowa County Medical Examiners Handbook, which with revisions and updates is still in use today providing consistency in death investigation throughout the state. Dr. Bennett led the forensic team that autopsied the 111 victims of the United Airlines DC-10 crash at Sioux City Airport in July 1989.

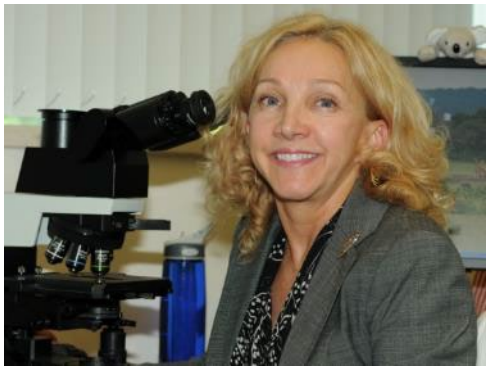
United 232 Air Disaster

On July 19, 1989, Iowa experienced its worst air disaster with the crash of United Airlines flight 232. On board were 285 passengers and 11 crewmembers; 110 passengers and 1 flight attendant died in the crash. Investigation of the accident revealed that a cracked fan disc in the tail-mounted engine of the DC-10 aircraft fragmented, causing damage to the hydraulic mechanisms that resulted in complete loss of control of all the flight control surfaces. Captain Alan Haynes, with the assistance of his crew and a flight instructor who happened to be riding as a passenger, improvised a method to control the plane by varying the thrust to the two wing mounted engines. The crew aligned the aircraft for landing and nearly made the approach when the right wing suddenly dipped causing the plane to skid, and the cabin to break up, invert and catch on fire. To this day aviation experts are unable to repeat in simulators what the United 232 crew was able to accomplish for 40 minutes in the air before the crash.

Dr. Thomas Bennett, State Medical Examiner, and Dr. Dennis Mallory, Tama County Medical Examiner, along with assistance from the Division of Criminal investigation and the Iowa National Guard responded to the mass disaster, ensuring victims of the accident were properly identified. Dr. Bennett also determined that approximately half of the deaths were caused by smoke inhalation and half were due to blunt force injuries. Survivors of the accident credit

their survival to the skills of the flight crew and to the Sioux Gateway Airport and surrounding communities, which had in place and practiced emergency plans.

Current State Medical Examiners



Julia C. Goodin, M.D.

Dr. Julia Goodin began her duties as Iowa Chief State Medical Examiner on December 13, 1999. She is Associate Professor of Pathology with the University of Iowa and Adjunct Associate Professor with Des Moines University.
Dr. Goodin received her B.S. in Biology and Chemistry from Western Kentucky University and an M.D. from the University of Kentucky in Lexington. She trained in both anatomic and clinical pathology at Vanderbilt University Medical Center followed by a one-year fellowship in forensic pathology at the Office of the Medical Examiner for the state of Maryland (Baltimore).
She was Assistant Medical Examiner, Office of the Chief Medical Examiner in Baltimore, Maryland; Assistant Medical Examiner and later Acting Chief Medical Examiner, Office of Chief Medical Examiner in Nashville, Tennessee; Associate Medical Investigator, State of New Mexico, Health Sciences Center; and a State Medical Examiner, Alabama Department of Forensic Sciences, Mobile Regional Lab, Mobile, Alabama.
Dr. Goodin is board certified by the American Board of Pathology in Anatomic, Clinical and Forensic Pathology. Dr. Goodin is an active member of the National Association of Medical Examiners and the American Academy of Forensic Sciences. She served six years on the Board of Directors for each. She is also a member of the Association of Military Surgeons of the United States and the Iowa Medical Society, and served on their board of directors for three years. She is a Captain in the Navy Reserve. She has a special interest in Cardiovascular Pathology and Sports Related Sudden Deaths.



Dennis F. Klein, M.D.

Dr. Dennis Klein began his duties as Iowa Deputy State Medical Examiner on August 1, 2000. He is Adjunct Clinical Assistant Professor with the University of Iowa School of Medicine and Adjunct Associate Professor of Forensic Pathology with Des Moines University in Des Moines.
Dr. Klein completed his fellowship in forensic pathology at the Office of the Medical Investigator in New Mexico on July 31, 2000. He received his B.S. in Chemistry, cum laude, from Bowdoin College in Maine and his M.D. from the University of Vermont College of Medicine. Dr. Klein completed a one-year internship in Internal Medicine and a four-year residency training program at Beth Israel Deaconess Medical Center. He completed a one-year fellowship in forensic pathology at the Office of the Medical Investigator, State of New Mexico.
Dr. Klein is certified by the American Board of Pathology in Forensic Pathology, and Anatomic and Clinical Pathology.

Dr. Klein is a member of the IOSME Interagency Council. He was involved in developing and implementing specialized training for Iowa county medical examiners and county medical examiner investigators. He is the Program Director for the Iowa Association of County Medical Examiners Fall Meeting.



Michele J. Catellier, M.D.

Dr. Michele Catellier began her duties as Associate State Medical Examiner at the Iowa Office of the State Medical Examiner on October 2, 2006. She is a Clinical Assistant Professor with the University of Iowa Carver College of Medicine and an Adjunct Assistant Professor of forensic pathology with Des Moines University.

Dr. Catellier received her B.S. from Indiana University in Occupational Therapy. She received her M.D. from Indiana University School of Medicine. She completed a five-year residency in anatomic and clinical pathology at Methodist Hospital of Indiana and also completed a one-year fellowship in forensic pathology at the Milwaukee County Medical Examiner's Office in Milwaukee, Wisconsin.

Following her training, she worked in general pathology for approximately ten years at Winona Memorial Hospital in Indianapolis, where she was Medical Director of the Laboratory. Prior to arrival in Iowa, she worked in the field of forensic pathology in Indianapolis, Indiana.
Dr. Catellier is certified by the American Board of Pathology in Forensic, Anatomic and Clinical Pathology.
Dr. Catellier is a member of the Strangulation Task Force and Child Death Review Team.



Jonathan G. Thompson, M.D.

Dr. Jonathan Thompson began his duties as Associate State Medical Examiner at the Iowa Office of the State Medical Examiner on December 12, 2008. He is an Associate Professor of Pathology with the University of Iowa and an Adjunct Assistant Professor of Forensic Pathology with Des Moines University.
Dr. Thompson received his B.S. from the University of Iowa in Exercise Science. He received his M.D. from the University of Iowa School of Medicine. His four-year residency training took place at the University of Minnesota Medical Center and his fellowship in forensic pathology was done at the Hennepin County Medical Examiner's Office. Dr. Thompson is certified by the American Board of Pathology in Forensic Pathology, and Anatomic and Clinical Pathology.

Prior to Iowa, he was Assistant Medical Examiner with the Hennepin County Medical Examiner's Office in Minneapolis, Minnesota.

Dr. Thompson coordinates medical students on rotation at the IOSME.

Assistant State Medical Examiners at University Of Iowa



Marcus B. Nashelsky, M.D.

Dr. Marcus Nashelsky has served as Assistant State Medical Examiner providing autopsies at the University of Iowa in Iowa City since 2009, and as Johnson County Deputy Medical Examiner since 2011. He is a Clinical Professor of Pathology at the University of Iowa Hospitals and Clinics in Iowa City.

Dr. Nashelsky received his B.A. from the University of Wyoming and his M.D. from the University of Nebraska-College of Medicine. He completed a five-year residency at the University of Missouri-Columbia Hospitals and Clinics, followed by a one-year fellowship in forensic pathology that took place at the University of New Mexico School of Medicine. Dr. Nashelsky is certified by the American Board of Pathology in Forensic Pathology, and Anatomic and Clinical Pathology.

Dr. Dennis Firchau has served as Assistant State Medical Examiner since 2010 and as Johnson County Deputy Medical Examiner since 2010. He is a Clinical Assistant Professor of Pathology at the University of Iowa Hospital and Clinics.



Dennis J. Firchau, M.D.

Dr. Firchau received his B.S. from Michigan State University. He earned his M.D. at Wayne State University of Medicine and completed his residency in pathology at the Medical College of Wisconsin. His fellowship in forensic pathology was completed at the Hennepin County Medical Examiner's Office, and an additional fellowship in cardiovascular pathology took place at Mayo Clinic. Dr. Firchau is certified by the American Board of Pathology in Anatomic and Clinical Pathology, and Forensic Pathology.

Previous IOSME Forensic Pathologist Staff

Dr. Jerri McLemore served as Associate State Medical Examiner from 2003 to 2010.



Jerri L. McLemore, M.D.

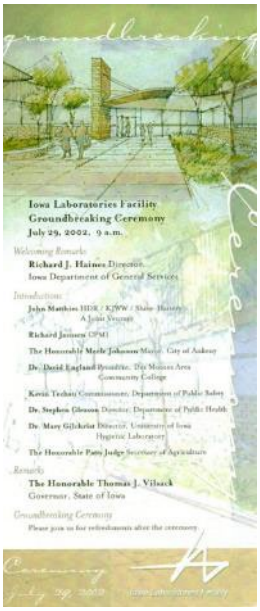
Dr. McLemore received her B.A. from the University of Kansas and graduated with Honors in Human Biology and with Highest Distinction. She received her M.D. from the Kansas University School of Medicine. Her five-year residency training took place at the University of New Mexico Health Sciences Center in Albuquerque, New Mexico as did her fellowship in forensic pathology. She was an instructor in surgical pathology and cytopathology at the University of New Mexico Health Sciences Center before beginning her fellowship in forensic pathology. Dr. McLemore is certified by the American Board of Pathology in Forensic Pathology, and Anatomic and Clinical Pathology.

While at the IOSME, Dr. McLemore was a member of the Child Death Review Team and coordinated the Des Moines University medical student rotations.
Dr. McLemore is currently an Assistant Professor at Wake Forest School of Medicine, Department of Pathology.

A New Facility



Artist's Rendition of the New Four-Laboratory Complex



A **Groundbreaking Ceremony** for the new facility took place on July 29, 2002, with more than 300 people in attendance. Several speakers were there to celebrate, including Governor Thomas Vilsack, who said the project is "an appropriate investment."



Governor Thomas Vilsack
(Currently U.S. Secretary of Agriculture)





Dr. Julia Goodin addresses the crowd at the Groundbreaking Ceremony.



Drs. Francis Garrity, Julia Goodin, Jerri McLemore, Marcus Nashelsky, and Dennis Klein on a visit to the site during construction of the facility.









The new facility was completed in 2005.

The 175,956 square foot facility houses both the IOSME and morgue, along with the Department of Criminal Investigation, Agricultural Lab, and Hygienic Lab.
The IOSME 24,000 square feet of space. The autopsy room has four stations and natural lighting. The main body cooler holds up to 24 bodies with room for 6 more in the special body cooler.
Remote electrical outlets are available for refrigerated trucks as a disaster contingency. In a power outage, the laboratory runs on a backup generator.
A drive-through garage accommodates receiving and releasing bodies. The IOSME is staffed 24 hours per day, 365 days per years, accepting phone calls, and receiving and releasing bodies 24/7.





The facility consists of four buildings connected by walkways.

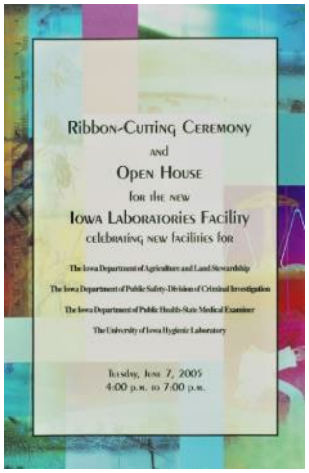




The main autopsy room during construction and after completion.

The **Ribbon-Cutting Ceremony** took place on **June 7, 2005**.





Each Laboratory represented in the new facility had a framed plaque for the ceremony.





Involvement and Education

Interagency Council

The Interagency Coordinating Council was created by the Iowa Legislature in 1999 with the purpose to advise the State Medical Examiner concerning the assurance of effective coordination of the functions and operations of the Office of the State Medical Examiner with the needs and interests of the Departments of Public Safety and Public Health (Iowa Code 691.6B). Members of the Interagency Coordinating Council include the State Medical Examiner; the Commissioner of Public Safety, the Director of Public Health, and the governor, or a representative designated by the member. The Interagency Coordinating Council meets biannually.

Advisory Council

The State Medical Examiner Advisory Council was established in 1999 via Iowa Code 691.6C. This Council was established to "advise and consult with the State Medical Examiner on a range of issues affecting the organization and functions of the office of the State Medical Examiner and the effectiveness of the medical examiner system in the state." The Advisory Council meets biannually and is currently holding meetings by ICN with origination at the Iowa Laboratory Facility. Membership is determined by Dr. Julia Goodin, State Medical Examiner, in consultation the Director of the Iowa Department of Public Health.

Current membership includes the State Medical Examiner, Deputy State Medical Examiner, and representatives from the University of Iowa–Department of Pathology, Attorney General's Office, Iowa Association of Pathologists, Iowa County Attorney's Association, Iowa Funeral Directors Association, Iowa Association of County Medical Examiners, Iowa Medical Society, Iowa Department of Public Health, Iowa Public Defender's Office, Iowa Department of Public Safety, and Iowa Emergency Medical Services Association

Child Death Review Team

The State of Iowa Child Death Review Team was established in 1995 by Statute 641-90.1. Functions of the Team were originally coordinated by personnel within the Bureau of Family Health in the Iowa Department of Public Health. In the spring of 2009, the Iowa Office of the State Medical Examiner (IOSME) was assigned the coordination of this multi-disciplinary team. The purpose of the Iowa Child Death Review Team is to aid in the reduction of preventable deaths of children under the age of 18 years through the identification of unsafe consumer products; identification of unsafe environments; identification of factors that play a role in accidents, homicides, and suicides, which may be eliminated or counteracted; and promotion of communication, discussion, cooperation and exchange of ideas and information among agencies investigating child deaths.

Fatality Assessment and Control Evaluation (FACE)

The Iowa Office of the State Medical Examiner is considered a principle investigator for the Iowa Fatality Assessment and Control Evaluation (FACE) Program, which collects basic

information on all occupational fatalities in the state of Iowa. This program is comprised of individuals who meet monthly from the Iowa Department of Public Health, the Iowa Office of the State Medical Examiner and the University of Iowa. The Program collects in-depth information on select fatal injuries, occasionally conducting detailed on-site investigations. The mission of the Program is to alert employers, employees, and those who are self-employed, such as farmers, by making recommendations and suggestions to help prevent similar fatalities. The National Institute for Occupational Safety & Health's state-based FACE program began in 1989. Currently, eight other state health or labor departments have cooperative agreements with NIOSH for conducting surveillance, targeted investigations, and prevention activities at the state level.

IMORT

The Iowa Mortuary Operations Response Team (IMORT) is a formal public health response team whose mission is to respond to mass fatality events within the State of Iowa and work under the direction of the state medical examiner. IMORT works closely with law enforcement agencies to help identify, collect and preserve evidence that will aid in determining the cause and manner of death; assist with scene documentation; assist with recovery and processing of remains; and provide family assistance. Each member of the team is a volunteer. A majority of the team is comprised of county medical examiner personnel and funeral service professionals.

Iowa Office of the State Medical Examiner's Commitment to Education

In addition to providing high quality death investigation for law enforcement and families grieving the loss of a loved one, the staff at the Iowa Office of the State Medical Examiner is dedicated to educating future physicians and physician's assistants through our affiliation with Des Moines University Osteopathic School of Medicine and the University of Iowa medical school. We have designed two forensic pathology programs for students at Des Moines University, a 3rd and 4th year elective rotation for medical students, and an elective rotation for physician's assistants. The medical student rotation has been very popular, and the students' evaluations have been enthusiastic. The IOSME is also a part of the University of Iowa medical school's community-based primary care clerkship, where the medical students learn about the office's role in the public health system. Staff at the Iowa Office of the State Medical Examiner considers education of health care professionals, law enforcement officials, legal representatives, and the general public an integral part of their duties.

County Medical Examiner Investigators Training

The IOSME has received Paul Coverdell Forensic Science Improvement Grants since 2004. The funds were applied toward sending Iowa county medical examiner personnel to the medicolegal death investigator training course in St. Louis, Missouri, sending IOSME personnel to continuing education conferences/seminars and various equipment items such as digital cameras for scene investigations, autopsy/morgue equipment and a computerized case management system.

As of August 2012, Iowa has 32 Registered Diplomates and 5 Board Certified Medicolegal Death Investigators.

ME 101 on the Road

ME 101 began in June 2007 and is a popular hands-on learning session offered prior to the Iowa County Medical Examiner Conference each November. The course is offered periodically during the year at different counties throughout Iowa. Traveling to the counties to provide instruction offers many advantages including wider participation and convenience for individuals involved with death investigation at the local level.
What is covered in ME 101 on the Road?
Review accurate completion of the ME-1 Form.

Describe how to conduct a thorough medicolegal death scene investigation.

Review the roles of the ME and the ME Investigator at a death scene.

Discuss the scientific basis of human identification.

Identify the necessary tasks at infant death scene investigations.

Describe the types of deaths investigated in Iowa.

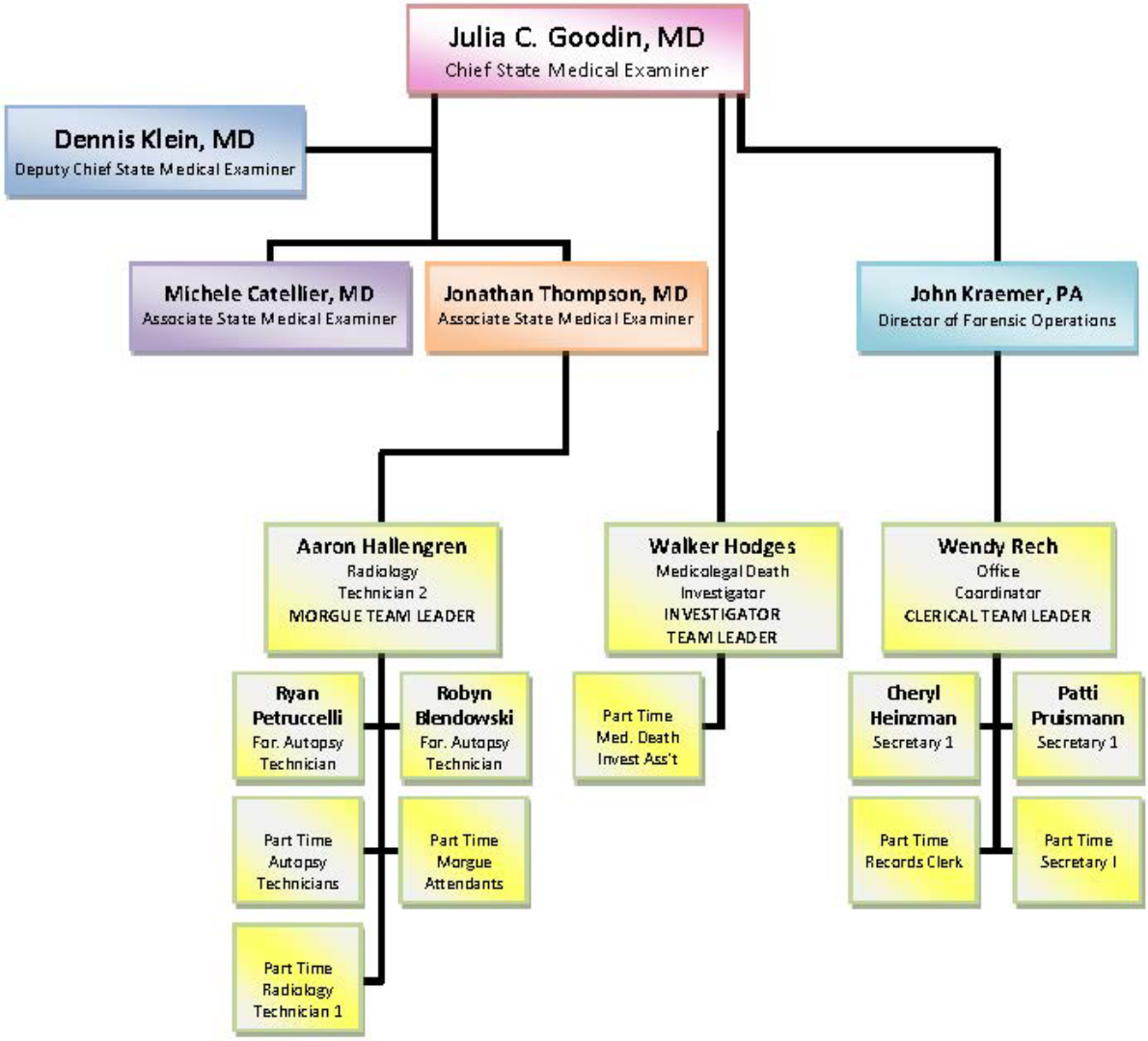
Discuss the Medicolegal system and administrative rules pertinent to death investigation in the state of Iowa.

Determine which cases come under medical examiner jurisdiction and which ones need to have an autopsy.

Discover strategies for establishing cost effective contracts for body transportation and reimbursement for medicolegal death investigation.

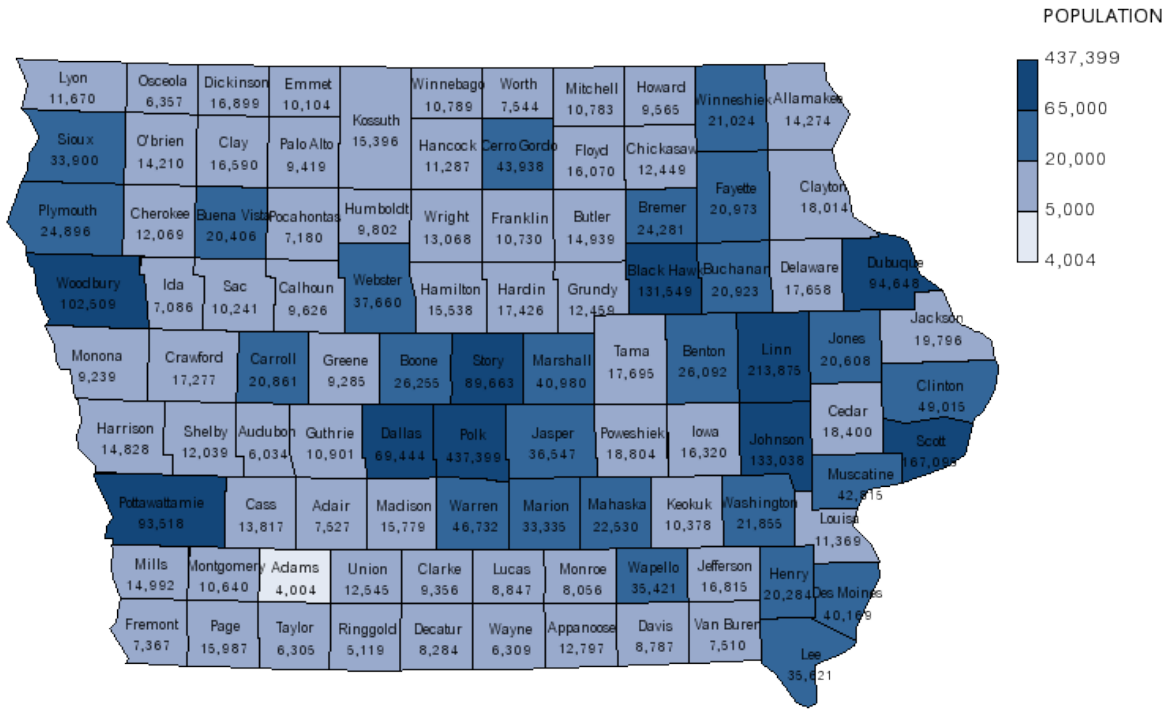
Organizational Chart

The IOSME currently has twelve full-time staff members: Four forensic pathologists, one director of forensic services, one medicolegal death investigator, three secretaries, one radiologic technician, and two Autopsy Technicians. In addition, the office employs sixteen part-time morgue attendants who staff the facility overnight, twelve part-time autopsy technicians, one radiologic technician, and two part-time secretaries. Full-time and part-time employees are cross-trained in other areas in order to maintain efficiency when the workload increases.



Office Information

Iowa Office of the State Medical Examiner
2250 South Ankeny Blvd.
Ankeny, IA 50023-9093
Phone: (515) 725-1400
Fax: (515) 725-1414
Website: www.iosme.iowa.gov
Fully accredited by NAME since 2008
Population served: 3,062,309 (2011 census).
2011 Annual Budget: $2,722,530 (including revenue) - $907,235 (General Fund)
2012 Annual Budget: $3,080,034 (including revenue) - $852,801 (General Fund)



HISTORICAL CASE INFORMATION

	Autopsied by IOSME						
Year	Homicide	Suicide	Accident	Natural	Undetermined	N/A	TOTAL
2000	28	27	79	41	8	6	189
2001	33	56	120	97	6	2	314
2002	34	43	120	123	9	3	332
2003	30	64	189	110	14	2	409
2004	21	71	153	112	18	1	376
2005	26	86	249	151	26	2	540
2006	39	108	228	146	41	4	566
2007	37	108	270	150	47	6	618
2008	48	163	311	178	56	1	757
2009	34	151	283	160	42	0	670
2010	41	143	311	145	62	1	703
2011	38	162	290	165	55	11	721

	State-Wide	
Year	# ME Cases	# Autopsied
2000	3418	972
2001	3030	1068
2002	3341	1238
2003	3489	1309
2004	3265	1378
2005	3386	1472
2006	3792	1505
2007	4230	1442
2008	5040	1538
2009	4608	1391
2010	4639	1480
2011	5044	1546

Public Artwork



"SLIDES"
Designed exclusively for the Iowa Laboratory Facility
By Seattle public artist Norie Sato

Framing the main entryway of the Iowa Laboratory Facility, glass slides, reminiscent of the glass slides used with specimens for microscopes, are set in metal grooves enabling them to be moved horizontally across a track. As the panels are moved, the southern sun shines through the panels, creating an ever-changing array of color and light.



The three separate displays contain forty painted and sandblasted glass panels. Each section includes five layers. A base layer is stationary and includes an image of an Iowa landscape. The four sliding glass panels in front of each landscape have images based on the work of each of the laboratories housed in the facility.

The glass was produced at Franz Mayer Studios in Munich, Germany, as a collaborative effort between the glass craftspeople at the studio and the artist, who hand painted many of the panels.

The IOSME Today

The IOSME is proud to have a state medical examiner system. Through combined efforts of the centralized state office and the local county offices throughout the state, Iowa has a strong, modern medicolegal death investigation system.

The county medical examiners determine whether an autopsy is necessary, and they determine cause of death and manner of death in cases that are not sent for autopsy.
The IOSME provides many services, including guidelines, assistance, direction, and training to county medical examiner personnel and law enforcement officials. The IOSME also provides autopsy service to the counties, testimony for court, and education for the medical school and many other groups throughout the state.

County medical examiner responsibilities are outlined in §§ 331.801-805 of the Code of Iowa while the duties of the State and Deputy State Medical Examiner can be found under §§ 691.5-6C. With the goal of having a high level of standard of practice through the state, the IOSME expounded on these established rules for death investigation via the 641 Iowa Administrative Code Chapter, 126 State Medical Examiner and Chapter 127. These codes and rules can be viewed and printed from the links found on the Medical Examiner main page (www.iosme.iowa.gov).

The physicians in the county are paid very little, if at all, for their services to the county. Some of them even volunteer, along with running a practice. Many county medical examiners are family physicians or ER physicians, and it is difficult for them to get away from their practice to go to a death scene. To help alleviate this problem, the IOSME has promoted the use of Medicolegal Death Investigators. The IOSME provides training for the investigators and encourages them to attend the St. Louis Medicolegal Death Investigator course. Some of the funds that the IOSME receives from the Paul Coverdell Grant are used to send county medical examiner investigators to the St. Louis death investigators course.



The IOSME was successfully accredited by NAME in 2008. Iowa is one of only eight states where the state medical examiner's office and the state crime laboratory are both accredited by their respective bodies.

Kentucky

History of the Kentucky Medical Examiner Program

Tracey S. Corey, MD and David W. Jones

October 2014

Kentucky was established as a Commonwealth in 1792. The County Coroner, in each of Kentucky's 120 counties, is a constitutional office, as written into Kentucky's constitution. Each of Kentucky's 120 counties elects a coroner every four years. Each Kentucky coroner appoints deputy coroners, to help them provide death investigative services; the number of appointed deputies is dictated by the population size in the county. In January of 1968, the Kentucky General Assembly passed legislation, establishing a Kentucky Medical Examiner Program, with the expressed intention to provide professional and technical assistance to the coroners in Kentucky's 120 counties.

In October of 1968, at the request of Governor Louis Nunn, the Commissioner of the Kentucky Health Department, Dr. Russell Teague, appointed the following individuals to serve on the first Kentucky Medical Examiner Program Advisory Commission:
Dr. Fred Stein- Kentucky Medical Association (and an elected coroner)
Dr. Leonard Wallace – Pathologist, University of Kentucky Medical Center
Charles Owen, Kentucky Bar Association
Chester Hager – Kentucky Coroner's Association
Commissioner Russell Teague – Kentucky Department of Health
Commissioner W.O. Newman – Kentucky Department of Public Safety
Although there was an advisory commission, there wasn't actually a program yet in place, and there were no state employees within the Kentucky Medical Examiner program.

In May of 1971, the Kentucky Medical Examiner Program Advisory Commission received a grant from the Kentucky Crime Commission for $83,333.00. These funds were to be used to pay administration costs to establish the Kentucky Medical Examiner Program, and for "toxicology implementation," to establish postmortem toxicology services for coroner services. Both the office of the administrator and the toxicology laboratory were housed in the Kentucky Department of Health building in Frankfort, as part of the Department of Health. This original grant money was utilized to purchase laboratory equipment, for a pre-existing Health Department toxicology laboratory, to allow that laboratory to perform postmortem toxicology services for coroners. There were few requests for toxicologic analysis in postmortem investigations in those early years.

In February of 1972, the Kentucky Medical Examiner Advisory Commission contracted with Dr. Jerry Francisco, Tennessee Chief Medical Examiner, to assist the Commission. Dr. Francisco was to provide technical advice, and assistance in recruiting an administrator to manage the

Kentucky Medical Examiner Program. In March of 1972, Dr. Francisco recommended that the state be divided into 10 regions, and a hospital pathologist be appointed in each region to serve as a regional medical examiner. The regional medical examiners would perform autopsies at the request of the county coroners within their region. Each hospital pathologist serving as a Regional Medical Examiner would be paid by the state on a "fee-per-case" basis. In 1972, the fees paid were $150 for each "coroner's autopsy," and $75 for any "partial autopsy." The first "Kentucky Regional Medical Examiners" are listed in Table 1. Unlike programs in other states, from the very inception, the doctors serving as medical examiners would be paid directly by the state government, but would be doing work, as authorized and requested, by county offices.

The First Full Time Employee of the Kentucky Medical Examiner Program

In January of 1973, David W. Jones was hired by the Commonwealth of Kentucky to be the "Administrator" for the Kentucky Medical Examiner Program, and thus became the first full time employee. As Administrator, Mr. Jones was responsible for the coordination of all aspects of the Medical Examiner Program, including maintenance of all autopsy records and any other reports generated by the Regional Medical Examiners. The Administrator was also expected to arrange and participate in seminars, conferences and meetings for the coroners, regional medical examiners, and law enforcement officials in Kentucky regarding death investigation.

Given the magnitude of the duties and responsibilities of the position, in the same month of his hiring, January 1973, Administrator David Jones hired Susan Hayden to become the first administrative secretary for the Kentucky Medical Examiner Program. Thus, as January 1973 drew to a close, the staff of the Kentucky Medical Examiner Program consisted of two individuals – an administrator and an administrative secretary. These two employees shared a single office space allotted to the Kentucky Medical Examiner Program, which consisted of a small room just outside the office of the Director of Laboratory Services for the Kentucky Department of Health. This small single office housed both employees, and had just enough room for two desks facing one another, a phone, two typewriters, and three file cabinets.

In July of 1973, Administrator David Jones met with Dr. William Petty, Jefferson County Coroner and Dr. William Christopherson, Chairman of the University of Louisville (U of L) School of Medicine Department of Pathology, to inquire if Dr. Christopherson would consider having the Department of Pathology serve as a Regional Medical Examiner Center, to perform autopsies for the Jefferson County Coroner. Mr. Jones explained to Dr. Christopherson that the purpose of the new Medical Examiner Center at U of L would be to perform forensic autopsies at the request of the Jefferson County Coroner, and that through the Kentucky Medical Examiner Program, the Department of Pathology would be paid $150 for each autopsy performed. Dr. Christopherson quickly agreed to participate, as the department was currently performing autopsies for the Jefferson County Coroner directly, for a fee of only $50 per autopsy.

The first official Medical Examiner Program autopsy at the University of Louisville School of Medicine, Department of Pathology, was performed in July of 1973. At that time, the Department of Pathology was located in what was known as Louisville General Hospital, in

downtown Louisville. Louisville General Hospital continued to house the autopsy facility for the Medical Examiner Program until its closure in the mid 1980's.

In 1973, the first official year of operation of the Kentucky Medical Examiner Program, the operating budget for the year was $99,962.00. After salaries and fringe benefits for the two employees and other office expenses, the remainder of the annual budget was used to pay the fees to regional medical examiners (hospital pathologists) for autopsies performed at the request and authorization of Kentucky coroners. In 1973, the Kentucky Medical Examiner Program conducted 227 autopsies, all conducted by hospital pathologists serving as Regional Medical Examiners. Of these 227 autopsies, 143 were homicides, 35 were natural, 30 were accidents, and 19 were suicides.

In October of 1976, the annual Kentucky Coroner's Conference invited, as the principal speaker, Dr. George Gantner, the St. Louis County Chief Medical Examiner. While at the conference, Dr. Gantner and Administrator David Jones discussed a mass fatality incident known as the Scotia Coal Mine incident that Mr. Jones had investigated in May, 1976 (see section entitled "History of the Kentucky Medical Examiner's Office Response to Mass Fatality Events"). Mr. Jones expressed that he "thought there should be somewhere to go to get more in depth training for death investigators." Dr. Gantner replied that he was developing a course to provide that very training. Following up, in February of 1977, Mr. Jones received a call from Dr. Gantner in St. Louis, inviting Mr. Jones to a new course, "The Basic Medical Legal Death Investigators' Course." One entire day of Dr. Gantner's newly minted training was devoted to mass fatality incident response. According to Mr. Jones, at the time, he "had no idea just how important this training would soon become." Just months later, Mr. Jones found himself responding to a fire at the Beverly Hills Supper Club in Fort Thomas, Kentucky in which 167 people perished (see section entitled "History of the Kentucky Medical Examiner Office Response to Mass Fatality Events").

In March of 1977, Mr. Jones secured funding to recruit Louisville native Dr. George Nichols to become the first Chief Medical Examiner for the Commonwealth of Kentucky. The son of a physician, Dr. Nichols had grown up in Louisville, and had completed medical school and a residency in anatomic and clinical pathology at University of Louisville School of Medicine. At the time of his recruitment, Dr. Nichols was serving as a forensic pathology fellow in Cincinnati, Ohio. It was agreed that Dr. Nichols would become Chief Medical Examiner for the Commonwealth of Kentucky upon completion of his forensic fellowship year with Dr. Frank Cleveland in Cincinnati.

On July 1, 1977 Dr. George Nichols went straight from fellowship to become the first Chief Medical Examiner for the Commonwealth of Kentucky. The Office of the Chief Medical Examiner was located on the second floor of the University of Louisville's Medical-Dental Research Building on South Floyd Street in Louisville. The building was one block away from the Louisville General Hospital, where medical examiner autopsies were conducted. In July of 1977,

with the appointment of Dr. Nichols to the position of Chief Medical Examiner, the entire Kentucky Medical Examiner Program consisted of 4 employees:

Dr. George Nichols, Chief Medical Examiner
Janice Voyles, Secretary at the Office of the Chief Medical Examiner
David Jones, Administrator Kentucky Medical Examiner Program
Patricia Brown, Secretary of the Office of the Administrator of the Medical Examiner Program

Annual Meeting of NAME in Kentucky in October 1977

In October, 1977, the President of the National Association of Medical Examiners and Tennessee Chief Medical Examiner Dr. Jerry Francisco arranged a joint conference of the National Association of Medical Examiners and the Kentucky Coroner's Association. This joint meeting between the national organization of medical examiners and the state association of coroners was held at the Galt House Hotel along the Ohio River, in Louisville. The conference was entitled "Medical Legal Investigations of Death in the Rural Community." The conference schedule included prominent pathologists from throughout the United States, speaking on issues that were considered "hot topics" at the time. These included:
Dr. Thomas Noguchi (Los Angeles, CA): "Medical Legal Investigation of Deaths of National Concern"
Dr. Joe Davis (Miami FL): "Dilemmas Created by the Autopsy Protocol and Professional Opinion"
Dr. Leslie Lukash (Nassau County NY): "NAME Inspection and Accreditation Program"
Dr. Cyril Wecht (Pittsburgh PA): "Communicating With the Media"
Dr. William Sterner (Rhode Island): "Dilemmas in the Certification of Death"

It is interesting to note that at the time of this writing, in 2014, every one of the above subjects remains a "hot topic" in our national discussion in forensic pathology. The more things change, the more they do indeed stay the same.

The speaker for the evening banquet at the meeting was Dr. Fred Stein, Coroner of Campbell County Kentucky, who spoke about the Kentucky experience with a mass fatality fire, entitled "The Beverly Hills Nightclub Revisited." For a more complete list of speakers and topics from this historic conference, please see Table 2.

The last day of the conference included a panel discussion entitled "Investigating Unique Deaths." Approximately 30 minutes into the panel discussion, there was a very loud crash just outside the conference room. Following the crash, an individual ran into the room shouting "Is there a doctor in the room?" According to Mr. Jones, "there were at least 40 doctors in the room." As conference participants rushed out of the room, they encountered a deceased individual on the floor, beneath a shattered ceiling. Investigation revealed that a man checked into the hotel about an hour before the crash, shortly before the convening of the panel discussion. He asked for a room on the 22nd floor with a view of the Ohio River. The man, a suspect in the recent violent deaths of his parents, jumped from his open window on the 22nd

floor, and crashed through the roof of the room next to the conference room. According to Mr. Jones, “He missed coming through the conference room roof by about 12 feet.” Observing the decedent and the scene, one of the conference attendees was heard to remark: “Now, that is a great example of a unique death!”

It can be said that Kentucky provided true southern hospitality, providing forensic pathologists from around the nation with an active scene to observe on the last day of their national meeting. Following that meeting, the National Association of Medical Examiners never had another joint meeting with another coroners association. Thirty-one years later, in 2008, the Kentucky Medical Examiner Program hosted the Annual Meeting of the National Association of Medical Examiners at the historic Seelbach Hotel, with Kentucky Chief Medical Examiner Dr. Tracey Corey serving as Program Chair and Meeting Host. Although it received good reviews for the scientific program and meeting venue, the 2008 meeting did not provide such a memorable event, as there was no active death scene at the host hotel during the meeting.

Growth and Development of the Kentucky Medical Examiner Program

In addition to their other duties, Dr. Nichols and Mr. Jones spent a significant amount of time and energy in 1978 devoted to writing suggested language for the Coroner Medical Examiner Statutes in the Commonwealth of Kentucky. This broad sweeping, and comprehensive language detailing the authority and duties of Kentucky coroners and medical examiners passed the Kentucky Legislature in March 1978. The statutes that were subsequently enacted into law are often referred to as the “Coroner’s Act of 1978.”

By July of 1978, Dr. Nichols was growing weary of being the single salaried physician performing autopsies for the Kentucky Medical Examiner Program. Dr. Nichols recruited two local pathologists, Dr. L.C. McCloud and Dr. Frances Masser, to work at the Office of the Chief Medical Examiner as part-time employees.

In August 1978, Forensic Anthropologist Dr. David Wolf came to work for the Kentucky Medical Examiner Program as the first Forensic Anthropologist, on a “per-case” basis through a Personal Service Contract.

By March of 1979, Dr. Nichols and Mr. Jones had arranged funding for an Associate Chief Medical Examiner, to be created in Lexington, Kentucky in association with the Department of Pathology at University of Kentucky’s School of Medicine. Dr. Nichols notified colleagues around the country of this newly created position. North Carolina Chief Medical Examiner Dr. Page Hudson called Dr. Nichols to recommend a physician in his office, Dr. William Hamilton, for the position. Shortly after interviewing, Dr. William Hamilton accepted the offer extended to him by Dr. Nichols, and thus became the first Associate Chief Medical Examiner for the Commonwealth of Kentucky. Dr. William Hamilton began work as the first Associate Chief Medical Examiner for the Commonwealth of Kentucky in October of 1979.

In January 1980, Dr. Frank Cleveland, Coroner for Hamilton County (Cincinnati, OH), sent a letter to Administrator David Jones indicating that his office could no longer afford to perform forensic autopsies for the Northern Kentucky area, given the amount of money the Medical Examiner Program was paying. Therefore, beginning in 1980, forensic autopsy services for the Northern Kentucky coroners were performed by hospital pathologists, Dr. George Tanner and then Dr. Charles Stephens at St. Luke's Hospital in Fort Thomas, Kentucky. Dr. Charles Stephens continued to perform forensic autopsies for the Kentucky Medical Examiner Program throughout the remainder of his career, eventually leaving his hospital pathology practice to serve as a full-time Medical Examiner for Northern Kentucky. Dr. Charles Stephens obtained his board certification in forensic pathology in 1991. He continued to perform forensic autopsies for the Northern Kentucky Medical Examiner's Office until he retired in 2014.

In July of 1981, Dr. Barbara Weakley-Jones began working full-time for the Kentucky Medical Examiner Program, and eventually undertook the one year forensic pathology fellowship with Dr. Nichols in the Louisville office, after he secured ACGME accreditation for a fellowship position. Dr. Weakley-Jones served as a Kentucky Medical Examiner in the Louisville Office continuously from this time until her retirement in 2010. After retirement from the Medical Examiner Program, Dr. Weakley-Jones was appointed, and then successfully ran for office as Jefferson County Coroner. She continues to serve in this capacity at the time of this writing (2014).

Relying on language drafted by Dr. Nichols and Mr. Jones, the Kentucky General Assembly passed legislation referred to as "The Postmortem Act" in March, 1982. The major changes associated with this legislation included"

Mandatory notification of a law enforcement agency in all suspected homicides, suicides, and accidental deaths.
Mandatory completion of a 37 hour Basic Training Course by all Deputy Coroners, along with 18 hours of in-service training annually thereafter.
Mandatory payment by the county fiscal court for all expenses incurred by a coroner or deputy coroner to transport a decedent to the regional medical examiner facility.

In December 1980, Dr. William Hamilton resigned his position as Associate Chief Medical Examiner, and relocated to another state. In November 1982, Kentucky Justice Cabinet Secretary Billy Wellman officially announced that Dr. John Hunsaker would become the new Associate Chief Medical Examiner for the Commonwealth of Kentucky. Dr. John Hunsaker began his work in the Commonwealth of Kentucky, as Associate Chief Medical Examiner in February 1983, and spent two months setting up the office. He performed his first postmortem examination as Associate Chief Medical Examiner in April, 1983.

As of April, 1983, the Kentucky Medical Examiner Program consisted of:
Dr. George Nichols, Chief Medical Examiner
Dr. John Hunsaker, Associate Chief Medical Examiner

David Jones, Administrator
Dr. Barbara Weakley-Jones, Medical Examiner
Patricia Brown, Secretary
Dr. David Wolf, Forensic Anthropologist
Dr. L.C. McCloud, Medical Examiner, part-time
Dr. Frances Masser, Medical Examiner, part-time

Additionally, there were six "District Medical Examiners" in 1983. These District Medical Examiners were actually hospital pathologists still performing forensic autopsies on a fee-per-case basis in hospitals around the state.

By 1988, few hospital pathologists were willing to perform forensic autopsies on a fee-per-case basis around Kentucky. Most cases from around the state were being transported to Dr. Nichols' Office in Louisville, or Dr. Hunsaker's Office in Lexington. During 1988 and early 1989, Dr. Nichols and Mr. Jones negotiated with Trover Clinic, a regional medical center in Madisonville Kentucky, to establish forensic pathology services in Western Kentucky, and to house and employ a full-time forensic pathologist as the Western Kentucky Medical Examiner within the Trover Clinic facility. In August of 1989, Dr. Mark LeVaughn became the first Western Kentucky Medical Examiner, working out of Trover Clinic in Madisonville. In 1991, Mr. Jones worked with St. Luke's Hospital East Administrator John Hoyle in Fort Thomas Kentucky, to negotiate a contract for St. Luke Hospital East to provide dedicated Medical Examiner Services for Northern Kentucky. Working under a biennial contract, St. Luke Hospital East provided full forensic pathology services for the citizens of Northern Kentucky including a full-time forensic pathologist and associated technical and administrative support staff, autopsy facilities, histology, and radiology.

In the late 1980's, the Office of the Chief Medical Examiner, which initially consisted of a single pathologist, had grown to 3 full-time pathologists -- Dr. Nichols, Dr. Weakley-Jones, and Dr. Greg Balko. In the late 1980's, Dr. Balko decided to leave full-time medical examiner work, and pursue a fellowship in neuropathology. He has remained affiliated with the Kentucky Medical Examiner Program throughout the years, and currently serves, through contract, as the Neuropathology Consultant for the program. At Dr. Balko's departure, Dr. Nichols hired Dr. LC McCloud to be the third full-time pathologist in the Louisville office. Dr. McCloud was retiring from a full-time hospital pathology practice in Clark County Indiana. For many years, Dr. McCloud had provided weekend coverage for Dr. Nichols at the OCME, and was ABP- board certified in forensic pathology. Dr. Frances Masser continued to assist with weekend coverage at the Office of the Chief Medical Examiner until 1991, when Dr. Tracey Corey joined the office as the fourth full-time pathologist.

By 1991, Kentucky employed 1 part-time and 4 full-time forensic pathologists in Louisville, 1 full-time Forensic Pathologist in Lexington, 1 full-time forensic pathologist in Madisonville, Kentucky, 1 full-time forensic pathologist in Northern Kentucky, and a full-time administrator and a full-time anthropologist in Frankfort Kentucky. In the words of Administrator David Jones:

"On January 1st, 1973, David W. Jones became the first and sole employee of the Kentucky Medical Examiner Program, when the Commonwealth of Kentucky hired him as the Administrator of the Medical Examiner Program. The purposes of the program were to perform forensic autopsies, and provide technical assistance to the Kentucky coroners and deputy coroners in death investigations. In September 1991, 18 years from the time Mr. Jones was first employed, the Medical Examiner Program had 8 forensic pathologists and one forensic anthropologist to assist the coroners and deputy coroners throughout the state. The lesson learned: "Nothing moves fast when you are involved in a state bureaucracy".

As of September 1991, the Kentucky Medical Examiner Program now had 4 dedicated Regional Medical Examiner Offices, and one administrative office, located in:
Louisville (Office of the Chief Medical Examiner),
Lexington (Office of the Associate Chief Medical Examiner),
Madisonville (Western Kentucky Medical Examiner's Office, located in Trover Clinic Medical Center), and
Fort Thomas, Kentucky (Northern Kentucky Medical Examiner's Office, located in St. Lukes Hospital).
Frankfort (Office of the Administrator and Forensic Anthropologist)

As the caseload continued to grow for Dr. Hunsaker in Lexington, Kentucky, it became necessary to hire a second pathologist. Dr. Carolyn Coyne was recruited and joined Dr. Hunsaker as a full-time University of Kentucky employee in the 1991-1992 academic year. In May of 1992, the Office of the Associate Chief Medical Examiner moved from the facility within University Kentucky Department of Pathology to a new dedicated facility in downtown Lexington. This new dedicated facility also housed the Fayette County Coroner's Office. The Office of the Associate Chief Medical Examiner continued to operate out of that facility until the new Central Laboratory Facility opened in Frankfort, Kentucky, in 1994. In addition to housing the Office of the Associate Medical Examiner, the Central Laboratory Facility houses other offices important to the death investigation system, including the Kentucky State Police Crime Laboratory.

As the caseload from eastern Kentucky continued to grow, Dr. Gregory J. Davis joined Drs. Coyne and Hunsaker, relocating from Winston Salem, North Carolina, in 1996. Dr. Hunsaker served as Associate Chief Medical Examiner from 1983 until 1998. In 1998, because of potential conflicts due to a family member also being an employee of the Medical Examiner Program in another regional ME office, Dr. Hunsaker stepped down as Associate Chief Medical Examiner for the Commonwealth, but retained his title of Division Director of the Division of Forensic Pathology, Department of Pathology, University of Kentucky, and continued as a Kentucky Medical Examiner. In 1998, Dr. Gregory J. Davis became Associate Chief Medical Examiner, and served in this role until he became Program Director of the University of Kentucky's Department of Pathology Residency Program in 2005. Dr. Davis has continued to work in the Office of the Associate Chief Medical Examiner on a part-time basis. Upon Dr. Davis' departure

from full-time medical examiner work, Dr. Hunsaker graciously re-accepted the title of Associate Chief Medical Examiner. He continues in the roles of Associate Chief Medical Examiner and Division Director of Forensic Pathology at the time of this writing (2014).

Through the years, as the caseloads have grown, the number of forensic pathologists has increased. Complete lists of the forensic pathologists and anthropologists who have served in various Kentucky Medical Examiner Offices are listed in Tables 3 through 8.

Summary of Structural Facilities of the Kentucky Medical Examiner Program

Forensic pathology services throughout Kentucky began as a fragmented, but statewide system in which many hospital pathologists, scattered throughout the state, provided autopsy services for Kentucky coroners on a fee-per-case basis. Under the leadership of Administrator David Jones and Chief Medical Examiner Dr. George Nichols, over the years the system gradually transitioned to a true regional medical examiner system, with full-time forensic pathologists and staff. With this transition, the 'fee-per-case" contracts were abolished. At this writing, 3 of the 4 Medical Examiner facilities in Kentucky are housed in facilities that are dedicated to the Medical Examiner (Office of the Chief Medical Examiner, Office of the Associate Chief Medical Examiner, and Western Kentucky Medical Examiner's Office). The Northern Kentucky Medical Examiner Office continues to be housed in St. Elizabeth's Healthcare Hospital in Ft. Thomas, Kentucky. At this writing, 2 of the facilities, The Office of the Associate Chief Medical Examiner in Frankfort, Kentucky and the Western Kentucky Regional Medical Examiner Office in Madisonville, Kentucky, are relatively new facilities that were built specifically for the Medical Examiner. It is recognized by the Medical Examiner's Office and the Kentucky Justice and Public Safety Cabinet that 2 offices, The Office of the Chief Medical Examiner and the Northern Kentucky Regional Medical Examiner Office are in dire need of new office space. Due to the impending closing of the current office location, The Office of the Chief Medical Examiner will be relocated within the next 2 years. Funding requests have been made over the years by both the Chief Medical Examiner and the Kentucky Justice Cabinet Secretary, for new construction for the Office of the Chief Medical Examiner in Louisville, and the Northern Kentucky Medical Examiner's Office. Despite inclusion of funds for a site selection for OCME construction in Governor Steve Beshear's budget proposal in 2013, the funding was removed from the budget by the Kentucky Legislature. As of this writing (2014), the Kentucky Legislature has not approved funding for "new-construction" facilities for either The Office of the Chief Medical Examiner or the Northern Kentucky Regional Medical Examiner's Office.

Changing of the Guard

As the first employee of the Kentucky Medical Examiner Program, Administrator David Jones laid the foundation for a statewide medical examiner system. Under the leadership of Mr. Jones and Chief Medical Examiner Dr. George Nichols, the program grew into a well-organized statewide system. Starting as Chief only of himself, at the time of his retirement, Dr. Nichols oversaw 4 regional offices. Known for his frank expression of opinions, and maxims, including "rarely in error, never in doubt", Dr. Nichols stated repeatedly through the years that he would

serve his tenure as Chief Medical Examiner as "20 and out", indicating 20 years of service as Kentucky's first Chief Medical Examiner. True to his word, Dr. Nichols became Kentucky's first Chief Medical Examiner on July 1, 1977, and retired as Kentucky Chief Medical Examiner in August of 1997.

With news of Dr. Nichols' impending retirement, Kentucky Justice and Public Safety Cabinet Secretary Dan Cherry established a search committee to choose a new Kentucky Chief Medical Examiner. The Search Committee included representatives from the Kentucky Coroner's Association, the Chairs of the Departments of Pathology of University of Louisville and University of Kentucky, as well as retiring Chief Dr. George Nichols.

Following a national search, Dr. Tracey Corey was appointed by Kentucky Governor Paul Patton to serve as Kentucky's second Chief Medical Examiner. After an internship year in Internal Medicine, Dr. Corey began her service with the Medical Examiner's Office first as a resident in University of Louisville's Department of Pathology in 1988. One of her fellow residents in the program was Dr. Gregory J. Davis, the future Kentucky Associate Chief Medical Examiner. Dr. Corey and Dr. Davis both completed their forensic pathology fellowships with Dr. Nichols at the Office of the Chief Medical Examiner in Louisville, Kentucky. After finishing her training, Dr. Corey took a position offered to her by Dr. Nichols as a Medical Examiner in the Louisville Office in 1991. Dr. Corey was appointed Chief Medical Examiner for the Commonwealth of Kentucky on September 1, 1997, and continues in this role as of this writing.

The Kentucky Medical Examiner Program initially began to take shape in the 1970's, due to the forward thinking of those in local and state government. The process was greatly influenced by the advice and efforts of Dr. Jerry Francisco, the Chief Medical Examiner in Tennessee. Being from a state similar in size, population, and geography, Dr. Francisco realized that the geographic distribution of the citizens of Kentucky, and the constitutional office of county coroner should be taken into consideration in the development of the Kentucky Medical Examiner Program. We, here in the Kentucky Medical Examiner Program, remain indebted to Dr. Francisco for his time and energy. In an interesting corollary, in 2014, Kentucky Chief Medical Examiner Dr. Tracey Corey served as one of three Chief Medical Examiners chosen by the National Association of Medical Examiners to conduct a formal review of the death investigation system in Tennessee, and to provide formal recommendations for the way forward in that state, as requested by the Tennessee Commissioner of Health, and the Tennessee Chief Medical Examiner Karen Cline-Parhamovich.

NAME Accreditation

Realizing changing times, and changing expectations by the courts and the public, Chief Medical Examiner Dr. Tracey Corey made NAME Accreditation a goal for the OCME in the early 2000's. Although practicing good forensic pathology standards for the day, the previous administration did not see written documentation of policy and procedure as a priority. Thus, there were no written documents regarding standard operating procedures, or any type of Policy and Procedure Manual. All such records had to be created, de novo, before the first inspection.

Dr. Corey was assisted by various members of the OCME staff, with a huge effort exerted by Dr. Donna Stewart, who spent countless hours working on the Policy and Procedure Manual, in addition to her duties as a Kentucky Medical Examiner. The OCME underwent its first inspection, by Dr. John Howard from Washington, in 2002, and passed with no phase 1 or phase 2 deficiencies. The OCME was re-inspected, as part of the normal five-year inspection cycle, in 2007 (again by Inspector Dr. John Howard), and in 2012 (by the Chair of the NAME Inspection and Accreditation Committee and Maryland Chief Medical Examiner Dr. David Fowler, with a ride-along inspector, Volusia County FL Chief Medical Examiner Dr. Marie Herrmann). The Office of the Chief Medical Examiner has retained full accreditation throughout, since the first inspection in 2002. Re-inspection for NAME-Accreditation for the Kentucky Office of the Chief Medical Examiner will be due in 2017.

Forensic Pathology Fellowship Training in Kentucky

Early in his tenure as Kentucky Chief Medical Examiner, Dr. Nichols established an accredited Forensic Pathology Fellowship Training Program at the Office of the Chief Medical Examiner. The first trainee, Dr. Barbara Weakley-Jones, began her fellowship with the program in 1984, after having already begun work for the program in 1981. Upon completion of her fellowship, she continued as a staff person, serving as second in command at the Office of the Chief Medical Examiner, until her retirement in 2010. Throughout the years, 14 physicians have successfully completed their forensic pathology training at the Office of the Chief Medical Examiner, in conjunction with the University of Louisville, Division of Forensic Pathology. Upon Dr. Nichols' retirement in 1997, newly appointed Chief Medical Examiner Dr. Tracey Corey became Program Director of the ACGME-Accredited Fellowship that continues to this day. In 2013, Dr. Corey appointed Kentucky Medical Examiner and former Forensic Pathology Fellow Dr. Jeff Springer to the newly created position of Forensic Pathology Training Program Co-Director. Many of the individuals who have trained at the Fellowship Program in Louisville have gone on to serve the Kentucky Medical Examiner's Office in various regional offices throughout the state. For a list of forensic pathologists who have successfully completed their Forensic Pathology Fellowship at the Kentucky Office of the Chief Medical Examiner/University of Louisville Division of Forensic Pathology, please see Table 9.

History of Mandatory Training for Kentucky Death Investigators

The first known organized training session for death investigators in Kentucky occurred in April of 1972, the very year Kentucky was first divided into regions for the purposes of provision of "coroner autopsies" by hospital pathologists around the state. Dr. Malcolm Barnes, the regional Medical Examiner in Louisville, arranged a seminar for the Kentucky coroners and regional medical examiners at the Brown Hotel in Louisville, Kentucky. Presented by Tennessee Chief Medical Examiner Jerry Francisco, this seminar was entitled "Why Are Medical-Legal Autopsies Necessary?"

In November of 1973, the newly-minted Bureau for Criminal Justice Training at Eastern Kentucky University conducted its first training session for Kentucky coroners and deputy

coroners. The instructors for the course were Kentucky Medical Examiner Program Administrator David Jones, and Tennessee Chief Medical Examiner, Dr. Jerry Francisco.

Although not mandated initially, the first Kentucky Coroners Basic Training Course was held in August of 1979, conducted at the Bureau of Training Facilities at Eastern Kentucky University. Thirty-six Coroners and Deputy Coroners participated in that week-long course. At the conclusion, all participants were presented with a document certifying that they had completed "Coroner Basic Training." Don Stith, Coroner of Boone County, received Certificate #1, and thus became the first Kentucky coroner to be certified by the Kentucky Department of Justice Bureau of Training the Department of Human Resources, Division of Medical Programs. In September of 1979, the second coroner's basic course was presented to 30 Coroners and Deputy Coroners.

In March 1983, in accordance with new legislation enacted by the Kentucky General Assembly, the first statutorily-mandated Coroners Basic Training Course was conducted at the Bureau of Training Facilities at Eastern Kentucky University. Forty-two coroners and deputy coroners participated in this first mandatory course.

Currently, all Kentucky deputy coroners must undergo mandatory, accredited training through the Department of Criminal Justice Training. This agency accredits and/or provides mandated training for all sworn law enforcement officers in Kentucky. As constitutional officials, training cannot be mandated for elected coroners. However, the vast majority of coroners through the years have participated in training, along with their deputies.

When deputy coroners first begin working for the coroner's office in their county, they must undergo a 40 hour "basic course" curriculum established by the Department of Criminal Justice Training. After this initial basic certification, each deputy coroner must undertake a 2 day "in-service training" on an annual basis. This in-service training must be in a class either accredited by, or approved by The Department of Criminal Justice Training (DOCJT). These training sessions, taught by certified instructors, are provided at no charge. Multiple types of courses and subjects are offered in various locations throughout the state, and at various times of the year. These courses are taught by DOCJT instructors and the forensic pathologists and administrators that serve in Kentucky Medical Examiner's Office.

At the time of this writing, since August 1979, 1383 Kentucky coroners and deputy coroners have undergone training, with a structured curriculum, and approved and certified instructors, through the Kentucky Department of Criminal Justice Training.

History of the Kentucky Medical Examiner's Office Response to Mass Fatality Events

In April of 1974, a tornado struck Brandenburg Kentucky, resulting in 31 fatalities. This event marked the initial participation of the Kentucky Medical Examiner Program in a mass fatality

incident. Administrator David Jones, and District Medical Examiner for Louisville, Dr. Malcolm Barnes, assisted Meade County Coroner, Kenneth Hager, with body recovery and operation of a temporary morgue.

In March of 1976, the Kentucky Medical Examiner's Office responded to its second mass fatality incident. Two separate explosions in Scotia Coal Mine Number One in Letcher County, Kentucky killed a total of 26 people – 15 coal miners were killed in the initial explosion, and then 11 responders to that event were killed in a second explosion. The bodies were finally recovered 281 days after the explosion, when the mine was deemed safe for entry. Administrator David Jones was assisted in the scene investigation and recovery of the 11 responders by Dr. George Nichols II, a native of Louisville who was completing his forensic pathology fellowship with Dr. Frank Cleveland in Cincinnati. In addition to Dr. Nichols and David Jones, other death investigators participating in this mass fatality incident response included Dr. John Feegel, a pathologist from Atlanta, Georgia representing the Blue Diamond Coal Company, and Dr. Robert Thompson, a pathologist from Washington, D.C., representing the Federal Mining Enforcement and Safety Administration. According to Administrator David Jones "The main conclusion by the forensic team was that only trained and qualified miners should investigate anything that ever happens in a coal mine."

In May of 1977, a fire erupted on a busy night at the Beverly Hills Supper Club in Southgate, Kentucky, resulting in 167 fatalities. Dr. Fred Stein, the Campbell County Coroner, called Kentucky Medical Examiner Program Administrator Jones to assist in the response. At the scene, Administrator David Jones came to the quick realization that Kentucky was not prepared to respond to such a tragedy. There was no clear plan of response, nor was there an organization to take responsibility for the recovery and identification of the deceased victims. Indeed, there were not even enough body bags available for the number of fatalities. From across the Ohio River in Cincinnati, forensic pathology fellow Dr. George Nichols assisted the officials in Kentucky with the mass fatality response to this tragedy, and Dr. Frank Cleveland allowed the use of the Hamilton County Morgue in Cincinnati. At that tragedy, Administrator Jones realized that one of his main missions in his professional life would be preparation of the death investigation system in Kentucky in mass fatality response.

On June 2, 1983, Air Canada Flight 797 left Dallas-Ft. Worth Airport, bound for Toronto. While flying over Kentucky, heavy smoke, originating from a fire behind the rear lavatory, forced an emergency landing at the Greater Cincinnati airport, in Boone County, Kentucky. After a difficult landing, due to loss of the electrical system, the 43 people on the plane attempted to exit emergently. When the over-wing emergency exits were opened to allow for evacuation, the influx of fresh air fueled the fire and caused a flashover. Twenty-three of the passengers died. Dr. Nichols' wife heard of the tragedy on the news, but did not inform Kentucky's Chief Medical Examiner at the time, as she did not realize that the Greater Cincinnati airport was actually in Kentucky. Dr. Nichols learned of the mass fatality later, and responded, along with Associate Chief Dr. John Hunsaker, from Lexington. The investigation was largely conducted by representatives of the federal government. Dr. Frank Cleveland, the forensic pathologist who

had trained Dr. Nichols, allowed the use of the Hamilton County Morgue in Cincinnati for the examinations conducted by Drs. Nichols and Hunsaker.

Late in the night on May14, 1988, a church bus was returning to Radcliff, Kentucky from a day at an amusement park north of Cincinnati. Most of the passengers on the bus were children. The former school bus was traveling southbound on interstate 71 in Carroll County, Kentucky, when it was struck head-on by a pickup truck traveling in the wrong direction on the interstate, driven by drunk driver Larry Wayne Mahoney. Of the 67 persons on the bus, 27 died in the resultant fire, when the passengers could not escape through the rear door and the front door was engulfed in flames. Of the 27 victims who lost their lives, 24 were children. This incident remains the deadliest drunk driving incident and the second deadliest bus disaster in United States history. Chief Medical Examiner Dr. George Nichols was assisted by Dr. Barbara Weakley-Jones, Administrator David Jones, and technical support staff in the recovery, autopsy examination, and identification of the victims of this mass fatality incident. Forensic odontologist and University of Louisville Dental School professor, Dr. Mark Bernstein conducted the dental identifications. Following this incident, Administrator Jones continued his organizational efforts in preparing the county coroners, and the Kentucky Medical Examiner's Office for mass fatality response.

Through the leadership of Administrator Jones, an active "Medical Examiner–Coroner Mass Fatality Response Team" developed in the ensuing years. This team, consisting of coroners and medical examiners from around the state, met regularly and trained in scene response, victim recovery, and morgue operations necessary for a mass fatality incident. Additionally, Mr. Jones secured funding for the purchase of mass fatality response trailers and associated equipment, strategically placed throughout the state, to be used at a moment's notice, should a mass fatality event occur in the general area.

On the morning of Sunday, August 27, 2006, Conair Flight 5191, bound for Atlanta Georgia, crashed during an attempted takeoff from Bluegrass Airport in Lexington, Kentucky. Of the 50 souls on board, 49 perished in the crash and ensuing fire. At the request of Fayette County Coroner Gary Ginn, members of the Kentucky Medical Examiner – Coroner Mass Fatality Response Team responded to the crash site in Lexington. Members responding to the scene included, among others, Chief Medical Examiner Tracey S. Corey, MD, forensic anthropologist Emily Craig, PhD, and then-retired Executive Director, David Jones. Due to the extensive planning and training that had occurred in the previous years, the team was well organized and prepared to respond to this mass fatality event. While Drs. Corey and Craig, and Administrator Jones responded to the scene, other members of the team immediately began to prepare the morgue operations. Persons responding to the morgue, in preparation for arrival of victims, included Dr. Barbara Weakley-Jones, (who had assisted Dr. Nichols with the Carrollton bus crash), Dr. John Hunsaker, and forensic odontologist Dr. Mark Bernstein (who had performed the dental identifications in the Carrollton bush crash.

Recovery of the victims of the crash of Conair Flight 5191 began shortly after 2:00 p.m., August 27, 2006, after the federal authorities had performed their scene examination, and secured necessary evidence including the voice and flight data recorders. All victims were recovered on the day of the crash, and transported to the Office of the Associate Chief Medical Examiner, in Frankfort, Kentucky. Due to the organization by Drs. Weakley-Jones and Hunsaker, the morgue stations were established prior to victim arrival, and postmortem examinations began immediately upon receipt of the victims, on the day of the crash. Through the week, Chief Medical Examiner Dr. Tracey Corey was assisted in examinations and organizational meetings late into the night, with extensive involvement by Dr. William Ralston and Forensic Autopsy Technician Jason Ritter. Over the ensuing days, with assistance from members of the Mass Fatality Response Team, the Kentucky State Police Crime Laboratory, and medical examiners from the Frankfort and Louisville offices, and with the Forensic Odontology Team led by Dr. Mark Bernstein, all crash victims were examined and forensically identified. Many agencies provided assistance and support throughout the response, including (but not limited to) the American Red Cross, the Kentucky Public Health Department, the Kentucky State Police Crime Laboratory and a host of police and fire agencies from throughout the area. The federal organization, D-MORT, was helpful in gathering important information from victims' loved ones. NTSB was extremely helpful in helping to coordinate the flow of information, communication with families, and press releases. Paul Sledzik and Deborah Hersman were two of the representatives from NTSB who ensured the success of the governmental response to this tragedy. The plane had crashed on the morning of Sunday, August 27, 2006. All forty-nine victims of the crash of flight 5191 were examined, identified, and released by the Kentucky Medical Examiner Office for funeral home retrieval by noon, Thursday August 31, 2006.

Although other smaller mass fatality events have occurred before and since the crash of Conair 5191, as of this writing, this tragedy marks the last large-scale fatality event to occur in Kentucky. Now called the Kentucky Coroner-Medical Examiner Incident Response Team, the team first envisioned and organized by Administrator David Jones continues to meet on a regular basis, and participate in incident exercises throughout the state, including regularly scheduled airport drills. Most members of today's team have participated in at least one mass fatality incident, and are well-versed in the need for continuing training, planning, and preparation. Mr. Jones has indeed accomplished the goal of mass fatality response preparedness that he first set in 1977. Thanks in large part to Mr. Jones' ongoing efforts and dedication throughout the decades (even after his official retirement), Kentucky has one of the most active, well-equipped, well-trained, and well-organized mass fatality response teams in the United States.

Conclusion

The Kentucky Medical Examiner Program has a long history of stability, having had only two Chief Medical Examiners and three Associate Chief Medical Examiners since its inception in 1978. Further, the majority of the forensic pathologists serving as Kentucky Medical Examiners throughout the state, tend to stay for many years, and actually retire from their position in Kentucky. This "continuity of care" ensures consistency in policy and procedure, ensures

continuing maintenance of integrity of evidence and records, and instills a sense of stability and security for the employees of the Medical Examiner Program, and the various offices that interact with the Kentucky Medical Examiner Program throughout the Commonwealth.

**Special thanks to Kendall Gault, who prepared tables, and assisted in gathering information.

TABLE 1: FIRST KENTUCKY "REGIONAL MEDICAL EXAMINERS"* MARCH 1972

NAME	CITY
Dr. Elmer Ylitalo	Paducah
Dr. Frank Pitzer	Hopkinsville
Dr. David Orrahood	Owensboro
Dr. Malcolm Barnes	Louisville
Dr. George Tanner	Fort Thomas
Dr. Carl Nudorfer	Ashland
Dr. Leonard Wallace	Lexington

*Hospital pathologists paid to do "coroner's autopsies" on a "per case" basis

TABLE 2: SPEAKERS AND TOPICS AT THE JOINT MEETING OF NAME AND THE KENTUCKY CORONERS' ASSOCIATION, LOUISVILLE KY, 1977

SPEAKER AND PRESENTATION

DAY 1:

Dr. Ali Hameli, Chief ME Delaware: "A Model Medical Legal Death Investigation System"
Dr. Leslie Lukash, Chief ME Nassau County NY: "NAME Inspection and Accreditation"
Dr. William Sterner, Chief ME Rhode Island: "Dilemmas in the Certification of Death"
Dr. Thomas Noguchi, Chief ME Los Angeles, CA:"Medical Legal Investigation of Deaths of National Concern"
Dr. Cyril Wecht, Coroner, Allegheny County PA, speaking on "Communicating With the Media"
Dr. John Pfaff, Chief ME Montana: "Problems of Identifying Human Remains in Remote Areas"
Dr. Joe Davis, Chief ME Miami, FL: "Dilemmas Created by the Autopsy Protocol and Professional Opinion"
Dr. Ronald Kornblum, ME Ventura, CA: "Investigating Deaths in Mental Hospitals"

DAY 2:

Dr. Charles Petty, Chief ME Dallas TX: "Residues on the Hands of Alleged Suicide Victims"
Dr. Werner Spitz, Chief ME Detroit MI: "Investigating Deaths in Penal Institutions"
Dr. Jerry Francisco, Chief ME TN: "History of the Kentucky Coroner Medical Examiner System"
Dr. Richard Greathouse, Coroner Jefferson County KY: "Investigating Child Abuse Deaths"
Dr. George Gantner, Chief ME St. Louis MO: "Investigating Farm Related Deaths"
Dr. William Cross, Chief ME Hartford CT: "Medical Examinations and Homicide Investigations in Small Police Departments"
Dr. George Nichols, Chief ME KY: "Investigations of Deep Coal Mine Fatalities."

Table 3: Kentucky Medical Examiner Executive Staff		
Name	Title	Dates of Service
George Nichols, MD	Chief Medical Examiner	1977-1997
Tracey Corey, MD	Chief Medical Examiner	1997-Present
William Hamilton, MD	Associate Chief Medical Examiner	1979-1980
John Hunsaker, MD JD	Associate Chief Medical Examiner	1983-1998, 2005-Present
Gregory J. Davis, MD	Associate Chief Medical Examiner	1998-2005
David Jones	Executive Director	1972-2002
Joe Grantham	Executive Director	2003-2004
Dan Able	Executive Director	2004-2008
Mike Wilder	Executive Director	2008-2010
Mandy Combest	Staff Assistant	2004-Present

Table 6: Pathologists at the Western Kentucky Medical Examiner Office	
Name	Dates of Service
Mark LeVaughn, MD	1989-2002
Deirdre Schluckebier, MD	2003-2011
Greg Wanger, MD	2013-2014

Table 4: Pathologists at the Kentucky Office of the Chief Medical Examiner	
Name	Dates of Service
George Nichols, MD	1977-1997
Barbara Weakley-Jones, MD	1981-2010
L.C. McCloud, MD	1978-1999
Frances Masser, MD (Part Time)	1978-1991
Greg Balko, MD	1987-1990
Tracey Corey, MD	1991-Present
Amy Burrows-Beckham, MD	1995-Present
Donna Stewart, MD	1998-Present
William Ralston, MD	2000-2008
Betty Spivack, MD	2001-2006
Polly Purcell, DO	2008-2010
Mike Johnson, MD	2010-2012
Rameen Starling-Roney, MD	2010-2012
Darius Arabadjief, MD	2010-Present
Jeff Springer, MD	2013-Present
Victoria Graham, MD	2013-Present

Table 5: Pathologists at Northern Kentucky Medical Examiner Office	
Name	Dates of Service
Charles Stephens, MD	1991-2014
Leopold Buerger, MD (Part Time)	~1991-~2006
Greg Wanger, MD	2007-2013
Ashton Ennis, MD	2013-Present

Table 7: Pathologists at the Kentucky Office of the Associate Chief Medical Examiner	
Name	Dates of Service
William Hamilton, MD	1979-1980
John Hunsaker, MD	1983-Present
Carolyn Coyne, MD	1991-1996
Gregory J. Davis (Full Time), MD	1996-2005
Cristin Rolf, MD	1997-2014
Gregory J. Davis (Part Time), MD	2005-2014
Jennifer Schott, MD	2005-2009
Mary Goolsby, MD	2009-2010
Victoria Graham, MD	2011-2013
Meredith Frame, MD	2013-Present
William Ralston, MD	2014-Present

Table 8: Forensic Anthropologists at the Kentucky Medical Examiner Program	
Name	Dates of Service
David Wolf, PhD	1982-1991
Emily Craig, PhD	1994-2010

Table 9: Kentucky Office of the Chief Medical Examiner Fellows Successfully Completing Program	
Name	Dates of Service
Barbara Weakley-Jones, MD	1984-1985
Greg Balko, MD	1986-1987
Greg Davis, MD	1989-1990
Tracey Corey, MD	1990-1991
Marie Herrmann, MD	1992-1993
Amy Burrows, MD	1994-1995
William Ralston, MD	1999-2000
Leigh Thorne, MD	2000-2001
Angela Wetherton, MD	2001-2002
Deirdre Schluckebier, MD	2002-2003
Polly Purcell, DO	2007-2008
Victoria Graham, MD	2009-2011
Jeff Springer, MD	2012-2013
Rand Falls, DO	2014-2015

Maryland

Death Investigation in Maryland

Bruce Goldfarb

October 2015

The history of death investigation in Maryland dates nearly to its founding in 1634. Under the authority of King Charles I, provincial Governor Leonard Calvert appointed Thomas Baldridge, a tobacco planter in St. Mary's County, as sheriff and coroner in 1637. The coroner was authorized to "[d]oe all and everything…the office of sheriff or coroner of any county in England doe."[1]

The coroner was instructed how to determine the cause of death:

"Upon notice or suspicion of any person that hath or shall come to his or her death entirely within the limits of that hundred as you conveniently may to view the dead body and to charge the said persons with an oath truly to inquire and true verdict to grant how the person viewed came upon his or her death according to the evidence."[2]

Two days after his appointment as coroner, Baldridge conducted his first inquest.[3] On Jan. 31, 1637, a jury of twelve freemen tobacco planters was called to view the body of John Bryant, who met an untimely death while felling a tree. According to a witness who testified under oath to the jury, Bryant stepped back five or six paces as the tree toppled. The falling timber glanced off another nearby tree and rebounded onto Bryant. "[T]he said John Bryant spake not one word after," the jury noted.[4]

Examination of Bryant's body showed "two scratches under his chinne on the left side." The jury concluded that Bryant died because "his bloud bulke broke."

The tree responsible for Bryant's death was forfeited to the Lord Proprietor of the Province of Maryland --the earliest example of a deodand in the New World. It was the coroner's responsibility to ensure a proper disposition of the deodand. Acting as a sort of executor at large, the coroner also liquidated a decedent's material possessions to settle his debts.
One of the first death investigations to include the participation of a medical person occurred in 1642. A jury of twelve St. Mary's County men was empaneled to consider the death of an infant

[1] Introduction to Forensic Sciences, Second Edition. William G. Eckert. New York: Elsevier 1992
[2] Criminal Investigation. Ronald F. Becker & Aric W. Dutelle. Burlington , MA: Jones & Bartlett 2013
[3] Proceedings of the County Court of Charles County, 1658-1666. J. Hall Pleasants, editor. Archives of Maryland 1936, xl-xli
[4] An Inquest taken before the Coroner, at mattapient in the county of St maries, on Wednesday the 31. of January 1637. USGenWeb Archive (http://files.usgwarchives.net/md/stmarys/wills/briant-j.txt)

named Anne Thompson. One member of the inquest was Robert Ellyson, who is described in records as a "Barber-Chirurgeon." After viewing the body of the infant and hearing from witnesses, the panel concluded "that they do not find anything, but that the said Anne came to a naturall death."[5]

The earliest known forensic autopsy in America was performed in St. Mary's County on Feb. 25, 1642. It was likely performed by George Binx, a "Licentiate in Physicke" serving as foreman on the coroner's inquest investigating the homicide of a Native American youth, who was killed by a bullet fired by John Dandy, a blacksmith.[6]

"[W]e find that this Indian ladd (named Edward) came to his death by a bullet shott by John dandy, which bullet entered the epigastrium neare the navel on the right side, obliquely descending, & piercing the guts, glancing on the last vertebra of the back, and was lodged in the side of Ano," the inquest reported.[7]

The coroner system existed in Maryland for more than 300 years. For most of this time, coroners were untrained laypeople who lacked any qualification other than being an adult male. Initially, the office of coroner was combined with that of the sheriff, constable, or justice of the peace. Due to the potential for abuse, in 1666 the provincial Assembly passed an act prohibiting the same person from holding both offices, and directed the Governor to appoint coroners for each of Maryland's counties.[8] Unlike Massachusetts, where coroners were chosen by popular vote, Maryland's tradition of appointing death investigators continues to this day.

In 1671, the Assembly set a fee for coroners – about 250 pounds of tobacco per case -- which was on a scale slightly higher than the amount paid to their counterparts in England.[9] Although they were state officials, coroners were paid by local governments.[10]
The 1671 act limited the duties of coroner to "the holding of inquests over the bodies of those dead by misadventure, murder, suicide, or other forms of violence, as well as the serving of writs or subpoenas upon a sheriff in any suit to which he is a party, or for the arrest of a sheriff."[11] The coroner was authorized to make arrests in cases of homicide.[12]

The term of service for coroners varied by jurisdiction until the Maryland Constitution of 1777, which gave the Governor authority to appoint coroners to two-year terms.[13]

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[5] Illustrations of Medicine in Maryland in "Ye Olden Time." Maryland Medical Journal Sept. 1 1883, 275-276.
[6] Early Medicine in Maryland, 1636-1671. JAMA June 21, 1902. Vol 38 No 25: 1639
[7] Judicial and Testamentary Business of the Provincial Court, 1637-1650: Maryland State Archives, Vol 4: 254
[8] Proceedings of the County Court of Charles County, op cit.
[9] ibid
[10] Suspicious Deaths in Mid-19th Century Baltimore. Baltimore City Archives . Family Line Publications, 1986, p iii
[11] Proceedings of the County Court of Charles County, op cit
[12] Suspicious Deaths in Mid-19th Century Baltimore. op cit
[13] ibid

Grievous and Oppressive

Noting that "the prevailing practices of coroners are improper, grievous and oppressive," a law enacted in 1821 established a fee schedule for coroners and jurors serving on inquests. No coroner was to be paid more than $4.17 for his services, plus an additional $2.50 if he provided a coffin and another $2.50 if he dug the grave and buried the body. Although coroners throughout the State faced a steep penalty up to $100 for overcharging for their services, additional sums of money were allowed "for any business done" by coroners in Baltimore County. The law compensated each juror serving on a coroner's inquest 50 cents, and 12.5 cents per juror for the constable or coroner who summons them.[14]

The unceremonious treatment of the deceased, particularly the unknown dead, was affected by a burgeoning demand for cadavers for medical education. University of Maryland was one of the first medical schools in America to add a requirement for human dissection to its curriculum, in 1833.[15] The need for cadavers for anatomical study increased substantially as Baltimore became home to a growing number of medical schools, with at least seven institutions in business during the 19th Century.[16]

Grave-robbing was frequently employed to acquire bodies for medical schools in Baltimore and elsewhere, often retrieved from the Eastern Potter's Field at the corner of Orleans and Broadway -- presently the location of the Weinberg-Kimmel Cancer Center at Johns Hopkins Medical Center. Baltimore's reputation as an abundant source of cadavers for anatomical study during the 1800s earned it the nickname "the Paris of America."[17]
The earliest statute related to the participation of a physician in an inquest is an 1847 Baltimore City ordinance enacted by the Maryland General Assembly.[18] The ordinance allowed the coroner to require the attendance of a physician from the same jurisdiction to examine the body and provide testimony if a decedent was suspected to have met a violent death. A doctor who declined to cooperate with an inquest faced a fine from the coroner or justice of the peace. Otherwise he was compensated $5-10 for his services.

Many local governments believed that coroners were lining their pockets by calling for inquests in cases when it wasn't necessary.[19] A law similar to the Baltimore ordinance, enacted statewide in 1860, contained the same provision for physician participation in suspected violent deaths.[20] The law also featured a key limitation on coroners, prohibiting inquests "where it is

[14] The General Public Statutory Law and Public Local Law of the State of Maryland. Maryland State Archives, 2000. Vol. 141, Ch. 243, p 778-779.
[15] Human Dissection: Its Drama and Struggle. M. Lassek (Boston; Charles C. Thomas, 1958), p. 226.
[16] Medicine in Maryland, 1752-1920. http://mdhistoryonline.net/mdmedicine. Accessed June 7, 2015.
[17] Historical Sketch of the University of Maryland. Eugene Fauntleroy Cordell (Baltimore, Isaac Friedenwald, 1891) p. 127.
[18] Ordinances of the Mayor and City Council of Baltimore, Chapter CLXVIII, (Baltimore; George Bowen & Co., 1858), p 563.
[19] Suspicious Deaths in Mid-19th Century Baltimore, op cit, p iii
[20] Maryland Code: Public General Laws and Public Local Laws, 1860, Article 25, pp 147-147.

known that the deceased came to his death by accident, mischance or any other manner" except if the person died in jail or as the result of a felony.

Other duties assigned to coroners by the 1860 law included assuring the safety and security of people in his custody and, when required, burying the dead. "Whenever it shall be necessary for a coroner to bury any deceased person, he shall provide a coffin and decently bury him," the law stated.

In 1868, a State law was enacted authorizing the Governor to appoint "a competent member of the medical profession" as sole coroner for the City of Baltimore, who served a two-year term at an annual salary of $2,000.[21] The coroner was instructed to hold inquests over any person found dead in the city when the cause and manner of death were not already known as accidental or natural causes. He was responsible for the interment of unclaimed and unidentified bodies, and was required to provide monthly reports of his activities to the police.

The population of Baltimore soared in the 1800s. By the mid-century, Baltimore was larger than Philadelphia, second in size to New York City. As the demand for cadavers for anatomical study increased steadily during the 1800s, the call for a dignified method for the disposition of unidentified and unclaimed bodies became increasingly urgent.

A Dead House

In 1861, Baltimore coroner Hiram Greentree requested that the City Council consider building "a dead house, in which to deposit dead bodies."[22] According to Greentree, "the bodies of persons accidentally killed &c., are often interred in the Potter's Field, and taken therefrom to the dissecting rooms, before their friends are aware of their death, thus causing great anguish to families." The matter was referred to the council's health committee, where no further action was taken.

The following year, Charles H. Bradford, M.D., Commissioner of Health and City Physician, brought up the matter of a dead house in his annual report to the Mayor and City Council.[23]

The erection of a dead house in some central and suitable location within the city, has been so often urged upon your Honorable bodies, that we should not venture to touch upon the subject, did not circumstances of almost daily occurrence so clearly demonstrate the necessity of such an institution.

Under existing circumstances, the bodies of unknown persons found dead, are ordinarily carried to some of the police stations; but as there is no suitable place of deposit at those places, they are generally removed to the public burial ground with as little delay as possible;

[21] Baltimore City Code, Article XI, (Baltimore; E.G. Armiger, 1869), p 111-112.
[22] Annual Session of the City Council. The Baltimore Sun, Feb 2, 1861. p 4.
[23] Ordinances of the Mayor and City Council of Baltimore (Baltimore; King Bros. & Armiger, 1862), pp 440-441

and it not infrequently happens that the jury is had, the coffin obtained, and the body interred, even before the deceased is missed from his home; and when the body is subsequently sought for by his family or friends, it cannot always be found; such unpleasant circumstances must continue to occur so long as the city is without the convenience of a dead-house, or some means by which dead bodies may be kept for a time sufficiently long for their recognition.

In 1869, Baltimore enacted an ordinance ordering that space be allotted in the new Central Police Station, slated for construction at Fayette and Fallsway, for a "Morgue or Dead House for the reception and keeping for identification of the bodies of unknown persons dying within the city, and such other bodies as may be directed to be placed therein by the Coroner of Baltimore City" unless the bodies were infectious or too decomposed for identification.[24] Bodies were to remain at the dead house for 24 hours. The ordinance directed that a room be provided for the preservation of clothing and personal effects, which were kept for 12 months.

The 1869 ordinance also authorized the City Commissioner to build a vault in the Eastern Potter's Field where unidentified bodies were taken after 24 hours at the police station. Bodies remained at the vault awaiting identification for at least 15 days from September to May, and ten days during the warmer months, before final interment.

An update to the City Code in 1878 increased the number of coroners in Baltimore to four, paid an annual salary of $600 each.[25] The coroners were assigned to police districts throughout the city. Although the salary for coroners was reduced, the position evolved into a profitable occupation by those shrewd enough to figure out how to exploit it. According to anecdote, physicians would write longer, more detailed reports for wealthy citizens. Coroners would also delay filing death certificates with Vital Records, forcing attorneys and others with a need for the document to settle a decedent's affairs to pay $10 to $25 for a death certificate that should cost 50 cents.[26]

The Anatomical Board

In response to the scandalous way bodies were acquired for anatomical study in Baltimore's medical schools, in 1882 State lawmakers established an Anatomical Board in Baltimore City.[27] The board, composed of anatomy faculty from each of the medical schools in the State of Maryland, was authorized to "take such bodies within forty-eight hours of death...for the advancement of Medical Science."

The Anatomy Board formed in 1882 was not able to provide a sufficient supply of cadavers for medical teaching, and the practice of grave-robbing and other abuses persisted.[28] The only

[24] The Ordinances of the Mayor and the City of Baltimore, No. 55 (Baltimore; E.G. Armiger, 1869) pp 58-60.
[25] The Baltimore City Code, Article XII (Baltimore, John Cox, 1879), p 170-171)
[26] "Racketeering laid to state coroners." Baltimore Sun, Feb 16, 1939, p 20.
[27] Code of Public Local Laws, City of Baltimore. Article 4, Section 154, Chap. 166, p 168.
[28] Human Dissection: Its Drama and Struggle, op cit

known instance of "burking" to occur in the United States happened in Baltimore in 1886, when a woman named Emily Brown, whose life had deteriorated to drugs, alcohol and prostitution, was strangled to death. Her killer, John T. Ross, worked in the dissecting room at University of Maryland, where he sold her body for $15. Brown's death was partly the impetus for an expanded State Anatomy Board established in 1890. The last illegally acquired body reportedly occurred in 1899.[29]

Postmortem examinations, when they were done at all, were performed at police stations, funeral parlors, hospitals, private homes and other places of convenience. Efforts to establish a morgue were stymied by a widespread NIMBY (not in my backyard) bias among Baltimoreans. Some argued that the morgue should be located near the center of the city, as morgues were in New York, and Paris. Others contended that it made more sense to place the morgue near the waterfront, since so many decedents were victims of drowning.

One proposal suggested locating a morgue on the former city spring property on Calvert Street between Mulberry and Lexington, near the College of Physicians and Surgeons (subsequently subsumed by the University of Maryland School of Medicine).[30] Residents of the upscale neighborhood objected to the presence of the morgue and the potential to cause traffic congestion on a major central thoroughfare. Today this location, known as Preston Gardens, is a slender park across the street from Mercy Medical Center.



Former city spring on Calvert Street, now Preston Gardens, proposed morgue site. 1920s

Noting that there were five dissecting rooms in Baltimore where bodies were kept for weeks or longer without complaint, a committee of College of Physicians and Surgeons faculty sought unsuccessfully to assuage concerns of the public:[31]

A great deal has been said about the ineligibility of the Calvert-street spring lot for a morgue, and frightful pictures have been drawn of bloated and stinking corpses spreading consternation,

[29] ibid
[30] The Proposed Morgue and Its Location. Baltimore Sun, Jun 27, 1885, p. 5
[31] Lynch JS, Friedenwald A, Bevan CF, Ople T: The Morgue Question. Baltimore Sun, Jun 5, 1885, p 1

disgust, and, perhaps contagion in their track, being carried through the city. One writer has even suggested that the fetid emanations from the morgue itself would render Calvert street unendurable as a place of business or residence, and even impassible to sensitive people…

As unknown persons will be killed by railroad and other accidents, or will commit suicide by means of poison, the pistol or the rope, as well as by drowning, they will never be confined to any particular part of the city, and no matter where the morgue is located some portion of the city must be traversed in conveying them to it…

Wherever a morgue may be located some opposition will inevitably be around among those living in that particular neighborhood.[32]

In May of 1887, the City Council passed an ordinance to establish a morgue in Baltimore, but made no appropriation for provide for its construction.[33]

A Hopkins Proposal

With no funding made available for a morgue, Francis T. King, president of the Johns Hopkins Hospital being developed on N. Broadway, offered to furnish and equip facilities for the unknown dead and provide "post-mortem examinations in medico-legal cases." King offered to build the facility and have the Hopkins medical staff perform forensic autopsies, all at no cost to the city. His motivation for the gesture was "the desire of making the hospital as useful as possible to the city; second, the belief that the work which should be done in a morgue, and the methods which ought to be employed in medico-legal autopsies, are subjects for which it is very desirable that systematic and skilled instruction should be given for the benefit of justice and of the public."[34]

Baltimore officials declined King's offer. City health commissioner James A. Steuart, M.D., argued that a morgue should be under the supervision and control of the police and the health department, and that such an arrangement would be fundamentally unfair to the city's medical schools. "[I]t would be wrong to give any one medical school the monopoly of the advantages to be derived from the use of the corpses of the unknown dead," he said. "It would be in effect saying that the Hopkins Medical University shall teach anatomy."[35]

The need for a modern morgue became increasingly desperate. "In the name of the afflicted friends of the unknown dead, in the name of our efficient and zealous police force, and in the name of every reflecting citizen of Baltimore, I urge that this long felt want shall no longer be

[32] ibid
[33] Journal of Proceedings of the First Branch City Council of Baltimore (Baltimore, Stephen Tongue, 1887), pp 591-594.
[34] The Hopkins Morgue: Proposal of the Hospital Trustees to the City Government. Baltimore Sun, May 28, 1887, p 5.
[35] The Morgue Question: Views of Mayor Hodges, Mr. Francis T. King and Commissioner Steuart. Baltimore Sun, Mar 18, p5.

neglected and laid aside as a matter for future consideration," city health commissioner Steuart, said in 1888. "A city of five hundred thousand people cannot afford to be without a Morgue any more than she can be without electric lights."[36]

Baltimore made major strides in the care for its dead during the last decade of the 19th Century. On March 9, 1890, Mayor Robert Davidson approved an ordinance passed by the City Council to appoint two physicians to serve as medical examiners for the city.[37] Four months later, city leaders appropriated $4,000 to select "a suitable site on the water front, or easy access from the harbor, and cause to be erected thereon a building to be used as a morgue or dead-house."[38]

Medical Examiners

Organized within the city's Board of Health, the 1890 ordinance authorized the appointment of a Medical Examiner and an Assistant Medical Examiner.[39] The physicians were appointed by the Board of Health to two-year terms, at an annual salary of $1,000 and $500 respectively. The law directed the medical examiners to make post-mortem examinations whenever called upon by coroners or the State's Attorney. The city's health commissioner was also authorized to order an autopsy.[40]

The medical examiners primarily performed autopsies on cases of homicide, and occasionally on cases of suspected poisoning.[41] Upon completion of their investigation, the medical examiners were directed to furnish the evidence and a formal written report to the Board of Health and the State's Attorney.[42] Baltimore's first Medical Examiner was Nathan G. Keirle, M.D., who served in that capacity for 29 years.[43]

The site selected for the morgue was at the foot of President Street, on the northwest corner of Lancaster. Located in the lumber district of the waterfront, the morgue was on the eastern side of Baltimore's inner harbor adjacent to the mouth of the Jones Falls. The Jones Falls is an 18-mile long flood-prone stream used for commercial navigation as well as a conduit for the city's open sewers. One of the least desirable pieces of real estate in the city, the Jones Falls effluvium and various waterfront aromas were no doubt intended to provide olfactory camouflage for the morgue's operation.

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[36] Annual Report of the Health Department of the City of Baltimore, 1888 (Baltimore, John Cox, 1889, p 13)
[37] Ordinances and Resolutions of the Mayor and City Council of Baltimore, 1889-1890 (Baltimore, John Cox, 1890) p 24-25.
[38] Ibid, p 220-221
[39] Ordinances and Resolutions of the Mayor and City Council of Baltimore, 1889-1890 op cit
[40] "Public Health Administration in Baltimore." Carroll Fox, U.S. Public Health Service (Washington, DC, Government Printing Office, 1914)
[41] Maldeis, Howard J. "Medical examiner's system in the State of Maryland." Southern Medical Journal 41;9: 1943, p 840-844
[42] Ordinances and Resolutions of the Mayor and City Council of Baltimore, 1889-1890 op cit
[43] Maldeis, Howard J. "The History of the Medical Examiner System." Bulletin of the School of Medicine 2;1, July 1942, p 33-45.

Prior to designing the morgue, city health officials visited similar facilities in Philadelphia, New York and Boston to glean ideas and suggestions for Baltimore's facility. When completed in 1890, the two-story sand brick building was 40 feet wide and 18 feet deep. The building had an autopsy room, a storage room for surgical instruments, an office, a room for holding inquests, and a room for the storage of the clothing and personal effects of decedents. An additional appropriation of $500 was necessary to properly furnish and equip the facility.[44]

"It may be said without exaggeration that no city in the country is now provided with a morgue better adapted for the uses of such an institution than the one just completed in Baltimore," the city's health commissioner reported upon completion of the facility in 1890.[45]



Baltimore's first morgue at Lancaster and President, mid-1890s

All that was needed was somebody to run the place. The health commissioner noted the need to appoint a keeper or superintendent, and recommended "a practical undertaker, familiar with the methods of preserving bodies and of so preparing them for preservation that identification will be easy and the sensibilities of the relatives and friends of the dead person be not shocked by improprieties and unseemly conditions of the body or its surroundings."[46]

Initially, the morgue had an ice-chilled refrigerator that could hold eight bodies, which could be doubled up when necessary. This woefully inadequate capacity proved to become a chronic problem over time. In late December, 1895, newly elected Mayor Alcacus Hooper suggested several improvements during a tour of the morgue.[47]

[44] Municipal Matters: The Morgue Handed Over. Baltimore Sun, Jan 16, 1891, p. 3
[45] The Mayor's Message and Reports of the City Officers made to the City Council of Baltimore. (Baltimore, MD: John Cox, 1891) p. 21.
[46] ibid
[47] A Larger Morgue: Mayor Hooper Says that the Present Building is Not Adequate. Baltimore Sun, Dec. 30, 1895.

"Eighteen bodies were removed to the morgue Friday night – two more than the ordinary capacity," according to an account of the mayor's visit. "Of course, the bodies over and above the capacity of the morgue had to be placed wherever room could be found." Hooper recommended that a wooden shed next to the morgue be torn down and a room with a concrete floor built to hold bodies temporarily.

Hooper also said that "there ought to be a telephone at the morgue and also at the residence of the superintendent of the morgue." He directed the health commissioner to install a telephone immediately.

Additional improvements were made to the morgue in 1898, but by the turn of the 20th Century the facility was recognized as inadequate and outdated. "The building now used as a morgue is entirely inadequate and serves very poorly for the purposes intended," coroner J. Ramsey Nevitt reported to officials. He cited as an example a recent incident in which the stench emanating from the morgue caused a nearby police station "to vacate, temporarily at least, their quarters, even after every precaution had been taken, including the liberal use of disinfectants."[48]

The morgue lacked sufficient storage space to keep records and maintain the property of decedents, according to Nevitt. Surrounded by the sights and sounds of a bustling waterfront and often shrouded in smoke from passing boats and trains, it was also unpleasant for members of the public who had to visit the morgue to identify a decedent. "The mode of access to the building and its immediate surroundings cause quite a shock to sensitive people, especially to women," Nevitt said.

The morgue was improved again in 1909 with the addition of an incinerator and a steam/formaldehyde sterilizer that passed through to a clean room. A wharf was constructed to receive bodies directly from watercraft. Another innovation introduced at the time was the acquisition of an ammonia refrigeration plant that kept bodies at a constant 38 degrees F without the need for ice.[49] The new refrigerator doubled the capacity to 16 bodies, which was still insufficient to meet demand.

Fumigation and Burial

Within the Baltimore City Health Department, the morgue was organized in the Division of Fumigation and Burial, which was also responsible for the control of tuberculosis, diphtheria, scarlet fever and other communicable diseases. Thousands of blankets, pillows and miscellaneous goods were sterilized or incinerated at the morgue each year.[50]

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[48] Need of a New Morgue: Coroner Tells Commissioners That it is Urgent. Baltimore Sun, Oct 12, 1900, p. 12.

[49] Morgue Has Improvements: Health Commissioner Bosley Inspects Changes at Station. Baltimore Sun, Dec 9, 1909, p 14.

[50] Reports of the City Officers and Departments Made to the City Council of Baltimore for the Year 1914. (Baltimore, MD, Meyer & Thalheimer, 1915), p 428-431.

During the year of 1914, the morgue received 394 bodies, primarily unidentified persons. Keirle, the city's medical examiner, performed autopsies in 67 cases (17 percent), the vast majority of which were at the request of a coroner.[51] That same year, 880 bodies had been received by the Anatomical Board and distributed to ten medical teaching facilities in the city.

In 1914, Baltimore had coroners in each of the police districts, and one serving at large throughout the city. Coroners were appointed to two-year terms and paid a $1,000 annual salary. They were responsible for holding inquests for deaths that occurred within their district. Cases requiring an autopsy were sent to the morgue for Keirle's examination.[52]

A 1914 study of the U.S. Public Health Service was critical of Baltimore's coroner system:

The coroners lack organization, inasmuch as each works independently of the other and confines his particular work to his own district; he does not care even in an emergency to accept a case which may be just over the border line. To get the most efficient service from such an important office as the coroner's office there should be one coroner appointed for the city, who would be responsible and who should be given as many assistants as would be necessary to perform the work. He should have his office in police headquarters, and there should be a coroner on duty at all times.[53]

Despite the improvements made over the years, in 1917 the city sold the property on which the morgue was located to the Baltimore and Ohio Railroad, which planned to build a bridge near the foot of President Street. The B&O paid $32,000 for the property and $6,000 for the cost of a new morgue, which was temporarily located in a leased vacant lumber warehouse on the southwest corner of Fallsway and Fleet streets.[54] The temporary relocation, which was originally to be for three months while a new morgue was built, lasted for more than seven years.[55]

As it had years earlier, decisions about the new morgue were bogged down by issues of location. There was uniform consensus that a morgue was absolutely essential, but nobody wanted it near where they worked or lived. One plan that was briefly considered proposed building a morgue straddling the Jones Falls on the south side of Pratt Street, with a platform that could be lowered to receive a body directly from the water out of view from the public. By present-day geography, this is situated between the Inner Harbor and Little Italy. In 1920, the city's building inspector unveiled plans for a morgue spanning the Jones Falls, with a chapel and provisions to keep 60 bodies under refrigeration.[56] The proposal was abandoned when

[51] ibid
[52] Fox, Public Health Administration in Baltimore op cit
[53] ibid
[54] Morgue Lot Sale Up. Baltimore Sun Jan 23, 1917, p 14.
[55] Says New Morgue Needed at Once, Baltimore Sun Feb 7, 1924, p 3.
[56] Unique Building Planned for New City Morgue. Baltimore Sun Apr 8, 1920, p 24

businesses and merchants in the vicinity objected, claiming that their employees threatened to quit if forced to work near the morgue. "[N]ot only negroes, but white men and women would refuse to work near a place where bodies were kept in cold storage," according to a contemporaneous account.[57]

The Worst Blot on the City

Meanwhile, conditions of the dismal, run-down former lumber shop were widely decried. The morgue was described as a small room with dirty green painted wallboard and an old concrete floor with a drain in the middle. An office was off to one side, and beyond that an autopsy room with a grimy white cabinet and an enameled washstand. The morgue had an icebox with eight shelves to hold bodies. There were no chairs on the entire first floor of the building.[58]

One member of the public wrote to the paper to describe the experience of having to go to the morgue to identify the husband of a friend:

Aside from the nasty, dirty and partly dangerous section, I must say that inside the room is one of the dirtiest holes in town. There is no waiting room for ladies, no chairs to sit on if anyone should become faint and no disinfectant whatever kept in the place…

When we viewed the body we could not help seeing other bodies, for they were all in the same compartment and mostly all exposed. Bodies that were dragged out of the river and the remains of persons who were killed and mangled in accidents, both black and white, male and female, all were in the one part, and those that had been there for a week or more had started to decompose and the worst stench filled the room, aside from the dirty can that held the old, wet and dirty clothing that was removed from the bodies.[59]

In 1922, a group of coroners spoke out about the conditions at the morgue. "The administration will build a stadium that costs thousands of dollars and allow this disgrace, this hole, to exist," said southern district coroner George C. Blades, M.D., "It is the worst blot on this city that I can think of. There are absolutely no facilities for work by physicians. A person dropping dead in the city streets because of heat or sudden illness is brought into this terrible place and put side by side with some decomposed body that had been dragged from the water. I feel positive that if the majority of people knew of the conditions they would rise up in their ire and demand immediate correction of the evils now existing."[60]

"We have no decent facilities for an autopsy, not half of the proper medical instruments required, no photographic room, no room for records or files, no refrigeration plant, no plant for hot water, no nightkeeper and only eight shelves on which to place the dead that come

[57] Superstitious Fear A Morgue: Pratt Street Site Is Opposed. Baltimore Sun Oct. 27, 1920, p 20.
[58] Coroners Condemn Morgue Conditions. Baltimore Sun Jul 15, 1922, p 20
[59] Says The Morgue Is In Horrible Condition. Baltimore Sun Mar 29, 1919, p 6.
[60] Coroners Condemn Morgue Conditions, op cit

here," said at-large coroner Otto M. Reinhardt, M.D. "The place is absolutely filthy and unsanitary."

Although land for a new morgue had been acquired by the city and $65,000 had been budgeted for construction, authorization to proceed had been delayed by a lack of approved plans for the "elaborate arrangements" necessary to construct a modern facility, according to morgue superintendent August H. Rittmiller.[61]

"I hate to take people into this building," Rittmiller told a reporter.[62] "Slabs are falling down and wood is rotting. I have a scar on my leg which I will carry through life as a result of conditions here. The lower part of the stairs rotted away under me."

Although he diligently hosed the premises with disinfectant, "the stench cannot be overcome in these quarters," Rittmiller said.[63]

In 1922, the city purchased a piece of property for a new building across the street from the temporary morgue, on the northwest corner of Fallsway and Fleet Street.[64] The lot was located behind the Eastern Avenue Pumping Station, built in 1912. One of the last major American cities to install enclosed sanitary sewers, the sewage pumping station was the crown jewel of the Baltimore's newly unveiled sewer system.

City officials announced plans to build a reinforced concrete one-story building with a capacity to hold 60 bodies, as well as a chapel and a waiting room.[65] This vision was whittled back over time. The city's health commissioner approved plans for a facility that could hold 50 bodies in refrigeration, and featured an inspection room for the purposes of body identification, an autopsy room, an incinerator for infectious and unclaimed property, and a laboratory for performing chemical analyses.[66] Leaders balked when the low bid for the project came in at $172,000, far more than the $65,000 that was appropriated for the morgue. Scaled-back plans that lacked a chapel and a refrigerator capacity for 36 bodies elicited a bid of $100,000.[67] Ultimately, the chapel and other amenities were pared away, and officials approved plans for a facility with a capacity for 64 bodies, as well as a room for the identification of decedents, an autopsy room, a room for coroner inquests, an incinerator, and a rudimentary laboratory. The final budget for the new morgue was $65,000, with another $18,000 spent to acquire the property.

[61] Says New Morgue Is Needed At Once. Baltimore Sun Feb 7, 1924, p 3.
[62] ibid
[63] ibid
[64] New Morgue Site Acquired by City. Baltimore Sun Apr 4, 1922. p 9.
[65] ibid
[66] Commissioner Jones Approves Morgue Plans. Baltimore Sun Aug 2, 1922, p 5
[67] Modified Morgue Plans Are Submitted To Mayor. Baltimore Sun May 20, 1923 p 3

Even before construction was under way, Health Commissioner C. Hampson Jones, M.D. complained that the morgue, although modern in design, was not as large as it should be. “We should build the morgue with a view to future needs,” he said.[68]



Baltimore Morgue/Medical Examiner Office at 700 Fleet Street, 1927

A further manifestation of what reporters called the “jinx” that had plagued attempts to build a new morgue over the years occurred at the laying of the cornerstone of the building on June 19, 1924. With Mayor Howard W. Jackson, various elected officials and civic leaders in attendance along with members of the press, it became apparent that nobody had made arrangements for the customary records and newspapers that were to be sealed beneath the cornerstone. Instead, the mayor, his secretary, the commissioner of health, the inspector of buildings, and members of the De Con & David construction company dropped their business cards into a box that was placed under the cornerstone.[69]

When the morgue at 700 Fleet Street was completed and opened in 1925, $15,000 over budget, the facility inaugurated 24-hour service.

Guesses and Hearsay

By the 1930s, the coroner-based death investigation system in Baltimore – and throughout the State of Maryland – had evolved into one that was unreliable, dissatisfactory, and vulnerable to corruption and abuse. “It’s a known fact that the old system of ‘coroner’s’ diagnosis is replete with guesses, snapshot diagnoses based often on hearsay and without personal investigation,” said Howard James Maldeis, M.D., who served as Chief Medical Examiner from 1939 until 1949. Discrepancies and inaccuracies were so common on death certificates, he said, that “in a large proportion of cases they were worthless for giving immediate causes of death with accuracy.”[70]

[68] To Complete New Morgue by Oct. 1925. Baltimore Sun Feb 1, 1924, p 9.
[69] Laying of Cornerstone Adds To History of Morgue Jinx. Baltimore Sun June 20, 1924, p 3.
[70] Maldeis, Howard J. "Medical examiner's system in the State of Maryland." Op cit

The coroner system was held in low regard by the public. The Baltimore Sun editorial page said that the "antiquated coroner system…has long provided lucrative jobs for politically minded physicians,"[71] and that "[t]he system is a relic of the past and fails utterly to meet the present-day demand for immediate, competent inquiry into all deaths resulting from other than natural causes."[72]

Among the harshest critics of the system was the Medical and Chirurgical Faculty of Maryland (MedChi), the state medical society, which characterized the practice of coroners as racketeering.[73]

Starting in the mid-1930s, MedChi members began meeting to discuss the coroner system and ways in which it could be reformed. In April of 1937, surgeon Richard T. Shackelford, M.D., a member of MedChi's Medical-Legal Committee, presented a paper about the problems posed by doctors testifying as witnesses in the coroner system.[74]

Shackelford noted that a growth in insurance was among the factors contributing to an increase in court cases involving medical testimony. According to Shackelford, medical witnesses appeared in about half of all cases that come to court. Doctors, he said, were poorly equipped to be thrust into the adversarial arena of the courtroom and are often unaware of their rights on the witness stand. Physicians felt they were being exploited, losing income while testifying in court, and browbeaten into providing expert opinions for the payment of $1 per day allotted for fact witnesses. "The average physician views this contingency with great distaste, and often goes to ridiculous extremes in his efforts to avoid it," Shackelford said.

A New Approach

The general election of 1938 opened a door to the possibility of reforming death investigation in Maryland. MedChi had a sympathetic ear in Herbert O'Conor, a Democrat who served as Baltimore City State's Attorney for ten years before being elected as Attorney General of Maryland in 1932. More than almost anybody, newly elected Governor O'Conner understood the deficiencies of the coroner system.

The 1938 election also brought a General Assembly determined to undertake a sweeping restructuring of state government, in which numerous commissions and departments were eliminated or reorganized.[75] For example, lawmakers merged the Conservation Commission, the State Forestry Department, the Geologic Survey, and the State Weather Bureau into a new Department of Natural Resources.[76]

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[71] Coroners Step Down. Baltimore Sun May 28, 1939, p 8.
[72] Coroners. Baltimore Sun Dec. 7, 1938, p 12.
[73] Racketeering Laid to State Coroners. Baltimore Sun Feb 16, 1939. P 20.
[74] Shackelford RT. "The Doctor as a Witness." Medical & Chirurgical Faculty of Maryland Proceedings 1937-1939. P 104-110.
[75] O'Donnell, Lewis. "7 Reorganization Bills Introduced." Baltimore Sun, Jan 18, 1939, p 4.
[76] "Bowman Report Urges O'Conor to Abolish Ten Major State Agencies." Baltimore Sun, Jan. 6, 1939, p 22.

Tackling the coroner system fit well into the reform movement, and MedChi struck while the iron was hot. Within a month of the election, MedChi formed a committee, chaired by Shackelford, to study the issue and draft legislation for a radically different approach to death investigation.

During a series of meetings, members of MedChi discussed the shortcomings of the coroner system. Shackelford pointed out that appointments to coroner are strictly political, with no qualifications necessary to hold the office. With a two-year term, coroners had no incentive to increase their efficiency or expertise. The coroners had no supervision or accountability, and were slow and unreliable to submit reports to the Health Department and the State's Attorney.

By 1939 there were ten physicians serving as coroners in Baltimore City. Eight were assigned to police districts, one served at-large throughout the city, and one was assigned specifically to automotive fatalities.[77] Death investigation was uneven elsewhere in Maryland. Physician coroners served in only six of the state's 23 counties, with magistrates acting as coroners in the remainder.[78]

The MedChi committee sought to abolish the coroner system and replace it with a state-wide medical examiner system modeled after some of the best features of the laws governing medical examiner offices in New York City and Newark, N.J., combined with some original and innovative provisions.[79]

Among key features of the draft legislation, which became known as the Coroner Bill:
The abolition of the office of coroner throughout the State of Maryland, and a prohibition on inquests
Separation of the medical and legal duties of the coroner, with the latter assigned to the State's Attorney
Appointment of a Chief Medical Examiner with the authority to conduct forensic investigations without the need for permission of the State's Attorney or law enforcement agencies.[80]

MedChi members were of the consensus that two years of pathology training was an adequate minimum qualification for appointment as Chief Medical Examiner. The Chief Medical Examiner would be based at the Baltimore morgue, which would serve as the primary site of autopsies for Baltimore City and the five counties in closest proximity – Anne Arundel, Carroll, Howard, Harford, and Baltimore County – and provide laboratory services and expertise throughout the

[77] Maldeis HJ: The History of the Medical Examiner System. Bulletin of the School of Medicine, Vol 2 No 1, July 1942, p1 33-45.
[78] Racketeering Laid to State Coroners, op cit
[79] Maldeis, The History of the Medical Examiner System, op cit
[80] ibid

state. The central Baltimore office would also be the permanent repository of forensic investigation records.[81]

In Maryland's 18 outlying counties, Deputy Medical Examiners would be appointed for each jurisdiction based on the recommendation of the county medical society. Deputy Medical Examiners, under the supervision of the Chief, could conduct an autopsy at a local hospital or have the body transported to Baltimore.

A considerable amount of discussion among MedChi committee members centered on governance, how medical examiners would be appointed and supervised. Initially, the medical examiner's office was envisioned under the State Health Department, with appointments by the State Board of Health. Another suggestion was for medical examiners to be appointed by county medical societies or county health commissioners. None of these options were acceptable to MedChi members, who were "quite determined to keep the job out of politics if possible."[82]

An Independent Commission

A proposal that the committee considered most favorably called for the establishment of an independent commission, comprised of the chairman of pathology at University of Maryland and Johns Hopkins medical schools, the director of the State Department of Health, the commissioner of the Baltimore City Health Department and the Attorney General of Maryland. The unpaid commission would be nonpartisan and nonpolitical, have expertise to appoint and supervise qualified medical examiners, and provide a link to university and state laboratories for assistance when needed.

As in New York City, authority to conduct a forensic investigation was vested in the medical examiner, and not done at the behest of the coroner or State's Attorney. "The medical examiner need not obtain permission….Therefore, they are not handicapped and make their own decisions regarding autopsies. There are no interfering influences and the responsibility is on the examiner," Maldeis said.[83]

Under the proposed model, the Chief Medical Examiner did not work for the coroner, the police, or the State's Attorney. His primary responsibility was to look after the interests of the citizens of Maryland, divorced from politics, the criminal justice system, and other considerations.

"One of the most important duties of the chief medical examiner is to protect those concerned after the demise of a loved one, and to see that they are dealt with honestly," Maldeis said.[84]

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[81] Medical and Chirurgical Faculty of Maryland Transactions 1937-1938, p278-282
[82] ibid, p 278
[83] Maldeis, The History of the Medical Examiner System, op cit
[84] ibid

The Coroner Bill was among the first pieces of legislation introduced during the 1939 session of the Maryland General Assembly, sponsored by Emanuel Gorfine, a Senator representing Baltimore City. Initially, the bill languished in the Senate Judicial Proceedings Committee. When presented to the full Assembly, the bill was the subject of contentious debate. Some lawmakers were skeptical of financial aspects of the legislation, while others were opposed to having the state meddle in what had traditionally been a local activity. Reporters suspected the real objection was something more tangible; "politicians do not look with much favor upon the removal of these lucrative appointments from the political sphere," one noted.[85]

Despite an attempt to defeat the Coroner Bill by an amendment that would render it impractical, the legislation was passed on April 3, 1939 – the last day of the General Assembly – and signed into law by Gov. O'Conor on May 3.[86,87] All but one of Maryland's 23 counties were covered by the new law. Cecil County, the lone holdout, joined the system in 1941.



Baltimore Morgue/Medical Examiner Office, center, 1930s

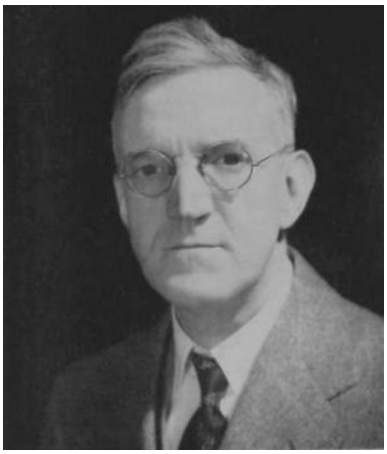
Once the legislation was signed, events moved very quickly. The law was slated to go into effect on June 1, 1939. A new system had to be operational in less than a month. In the meantime, a citizen petition was filed with the Secretary of State requiring the new law held in abeyance until the matter could be decided by voters in the 1940 election. Attorney General William C. Walsh determined that the petition was defective because half of the names must be residents of Baltimore City and half from the counties, and ruled that the law could take effect as planned.[88]

[85] Defeat Foreseen for Coroner Bill. Baltimore Sun, Mar 12, 1939, p. 13
[86] Coroner Bill Nearly Killed by Amendment. Baltimore Sun, Mar 29, 1939, p. 24.
[87] Comment on Maryland. Baltimore Sun, July 31, 1939, p 6.
[88] Coroner Law Stands Good. Hagerstown Daily Mail, June 2, 1939, p. 5.

Almost immediately, the newly minted Post Mortem Examiners Commission set to work developing guidelines – later formalized into regulations – to govern forensic investigations. The Commission established guides for defining sudden death and determined which deaths were medical examiner cases. Certain medical examiner cases that occurred during hospitalization could be released without a forensic autopsy subject to the approval of the medical examiner. The Commission eliminated the requirement that any deaths that occur during the first 24 hours of hospitalization are automatically coroner's cases. They also issued a requirement that hospitals designate a person responsible for providing reports and records to the medical examiner in forensic investigations.[89]

The framework established by the Commission in 1939 remains in effect today with very little change. One minor revision was made by lawmakers subsequent to passage of the bill; the Director of the Maryland State Police was substituted for the Attorney General on the Post Mortem Examiner's Commission.[90] The composition of the Post Mortem Examiner's Commission has remained the same ever since.

The law authorized a $6,500 annual salary for a Chief Medical Examiner, and two Assistant Medical Examiners at an annual salary of $5,000 each. Twenty-three deputy medical examiners were appointed for the counties, paid at a rate of $10 per case they investigated. Maldeis, who had served as post-mortem physician at the Baltimore Morgue since 1919, was appointed as the first Chief Medical Examiner by the Commission.



Howard J. Maldeis, M.D.

A native of Baltimore, Maldeis was a 1903 graduate of the University of Maryland School of Medicine. The following year he was appointed to teaching positions in the UM medical school's departments of bacteriology, histology, and clinical pathology. In addition, until 1936 Maldeis was a professor of histology and embryology and chief of the science laboratories at UM School of Dentistry. At the time of his death, he was also an associate professor of legal medicine.[91]

As a pathologist, Maldeis was committed to developing the profession. He was involved in organizing the pathology section of the Baltimore Medical Society and the Maryland Pathologists Association. He was elected a Founding Fellow of the College of American Pathologists and was certified by the American Board of Pathology.[92]

[89] Maldeis, History of the Medical Examiner System, op cit.
[90] Maldeis, The History of the Medical Examiner System, op cit
[91] MDGenWeb. www.mdgenweb.org/baltimorecity/maldeis.htm accessed 8/28/2015
[92] Obituary: Dr. Howard J. Maldeis. Bulletin of the University of Maryland School of Medicine, Vol 24 No 1, 1949, p 61-63

Maldeis deserves credit for forging a state-wide medical examiner system from a patchwork of jurisdictions, and for transforming the Baltimore Morgue into a centralized facility. He improved and expanded the morgue's laboratory capabilities, adding a part-time toxicologist and a laboratory technician to the staff,[93] and introduced photography as a routine part of forensic investigation.

The medical examiner system proved superior to the coroner system, ultimately winning over even its most vocal critics. Death investigations were more thorough and completed sooner, and records available more promptly.

"The law definitely separates the legal and medical duties and yet creates a close cooperation between the legal agencies and the police departments," Maldeis said. "This system, through separate investigation of a death, is much more satisfactory. If the case is turned over to a grand jury, it is much better prepared for prosecution. The evidence is more direct and trustworthy….A great improvement likewise has been brought about in the accuracy of the causes of death as placed on the death certificates for medical examiner cases. This results from the more careful and efficient investigations of the deaths as compared with the coroner system."[94]

One of Maldeis' final accomplishments as Chief Medical Examiner was overseeing a $100,000 renovation to the Baltimore Morgue, completed in 1948, which added a second floor to the building and substantially increased space to accommodate the growing work load.[95] The expanded building had about 7,400-square-feet of space.



Baltimore Morgue/Medical Examiner Office after 1948 renovation

[93] Post Mortem Unit Requests $67,000. Baltimore Sun July 19, 1939. P 10.
[94] Maldeis, History of the Medical Examiner System, op cit
[95] O'Donnell JR. Morgue Offered As Space For Expanding City Offices. Baltimore Sun Aug 11, 1969, p C6

Maldeis died on January 15, 1949, after a brief illness.[96] A search to find a suitable replacement commenced immediately.



Frances Glessner Lee

At the time, there were very few pathologists trained in medicolegal or forensic pathology in the U.S. The Commission's search led to Francis Glessner Lee, the International Harvester heiress who used her fortune to establish the country's first program in legal medicine at Harvard University. Lee was considered well-informed about developments in legal medicine around the country. The Commission sought her advice about candidates, and met with Lee and her friend Erle Stanley Gardner, author of the bestselling Perry Mason novels, over dinner at the Elkridge Country Club near Baltimore.[97]



Russell Fisher, M.D.

Lee spoke highly of a young Harvard-trained forensic pathologist who she met at one of her homicide seminars, Russell Fisher, M.D. Fisher had recently completed a three-year research fellowship, and was looking for a place to apply his expertise. Gardner assured the Commission members that Fisher had the strength of character to resist political pressure.[98]

The Commission appointed Fisher Chief Medical Examiner in 1949, a position he held for the next 35 years. Fisher transformed the Baltimore Morgue into a leading center of research, education, and training in forensic pathology. Barely a year into his tenure, Fisher began conducting seminars on homicide investigation for officers at law enforcement agencies throughout the state, which included practice with Lee's celebrated crime scene dioramas, the Nutshell Studies of Unexplained Death.[99,100]

In the 1950s, Fisher established a postgraduate forensic pathology and toxicology program that flourished over the years. The roster of medical examiners who trained in Fisher's office includes Charles S. Petty, M.D. of Dallas; Joseph H. Davis, M.D. of Miami-Dade County; Ronald N. Kornblum, M.D., of Los Angeles; Charles S. Hirsch, M.D. of New York City; Vincent Di Maio, M.D., of San Antonio; and Werner U. Spitz, M.D. of Detroit among many others.[101] During an interview with a newspaper reporter late in his career, Fisher estimated that about 20 percent

[96] Obituary: Dr. Howard J. Maldeis. Bulletin of the University of Maryland School of Medicine, vol 34, no 1, 1949, p 61-63.
[97] Taylor B: "The Case of the Outspoken Medical Examiner." Maryland State Medical Journal. March, 1977, p 59-69.
[98] ibid
[99] Seminar On Homicide Invites Sodaro Talk. Baltimore Sun, Sept. 18, 1950, p 8.
[100] Police Will Be Given Seminar In Investigation Of Homicide. Baltimore Sun, Oct. 14, 1951, p 26.
[101] Spitz WU: A Posthumous Award and Tribute to the Late Russell S. Fisher. OCME News 1988? P 3-4

of the 350 board-certified pathologists in the world at the time passed through Maryland's facility.[102]

Fisher's research interests included sudden cardiac death, mechanisms of drowning, vehicular crash trauma, sudden infant death syndrome, ballistics, the aging of injuries, and studies of cancer in chromate workers.[103] By 1952, he was generating $50,000-100,000 in research grants.[104]

Pioneering trauma surgeon R Adams Cowley, M.D. credited Fisher with contributing to research of irreversible shock leading to death, which produced insights and innovations that developed into the field of trauma care. Maryland's Shock Trauma Center was the first to establish an immediate autopsy protocol, the majority of which were performed by Fisher.[105]

Fisher facilitated the work of trailblazing injury epidemiologist Susan Baker, who as a research associate at the medical examiner's office during the 1970s conducted studies that demonstrated the importance of transporting seriously injured patients to specialized trauma centers. Baker's presence at Fisher's office provided a vital link between forensic pathology and injury epidemiology. Her groundbreaking research includes the relationship between alcohol and homicide, choking hazards in young children, the use of drugs and alcohol in adolescent suicide, and the role of cigarettes in the house-fire deaths of nonsmokers. Baker's research helped convince legislators across the country to pass mandatory infant and child restraint laws. In 1987, Baker founded the Center for Injury Research and Policy at the Johns Hopkins School of Public Health.[106]

In 1969, Fisher was among a group of four forensic pathologists asked by U.S. Attorney General Ramsey Clark to re-examine the findings of the Warren Commission investigation of the assassination of President Kennedy. The group was given a very limited charge; to review Kennedy's wounds without considering any other medical conditions or the injuries sustained by Gov. John Connally. Additionally, the pathologists were unable to examine Kennedy's brain, which vanished somewhere between the White House and the National Archives.[107]

"There is, therefore, a great mystery as to what happened to the brain," Fisher recalled. "And the brain remains missing to this day."[108]

Nonetheless, the pathologists concluded that the medical evidence supported the Warren Commission's conclusions that Kennedy was shot from behind through the shoulder, missing

[102] Henderson R: Maryland's Main Man at the Morgue. Baltimore Sun, Sept 12, 1982. pE1.
[103] Man at the Morgue (Letter to the Editor). R Adams Cowley, Sept 25, 1982, p A11.
[104] Joel E: What Goes On At The Morgue. Baltimore Sun, Apr 10, 1952, p 14.
[105] Cowley, Man at the Morgue, op cit
[106] Susan P. Baker, M.P.H. Maryland Women's Hall of Fame, Maryland Commission for Women. msa.maryland.gov/msa/educ/exhibits/womenshall/html/baker.html Accessed Sept. 9, 2015.
[107] Henderson R: Maryland's Main Man at the Morgue. Op cit
[108] Taylor B: "The Case of the Outspoken Medical Examiner" op cit

the spine, and exiting from the front of the neck. A second shot from behind entered high on the back of the head, tearing out large pieces of the right side of the skull.

An Aging Facility

As the 1960s rolled around, it became increasingly apparent that the aging Fleet Street morgue was obsolete and inadequate for the needs of a modern medical examiner's office. The decrepit building, next to a sewage pumping station along Baltimore's derelict waterfront, hardly matched the prestige contained within.

Fisher's colleague and collaborator Werner U. Spitz recalled taking a cab to the morgue to begin his fellowship. "I was taken to a very dilapidated part of town within the harbor area of Baltimore," he said. "When the cab stopped I looked out the window and debated whether to get out or return to the hotel, until the driver pointed out the sign above the door of the building which read 'State of Maryland Medical Examiner's Office.'"[109]

Inside, the office was crowded and busy. A newspaper reporter documented a visit in 1962;

The medical examiners and their staff work under jammed and jostling conditions as the number of cases continues to outrun the available office and laboratory space.

The Morgue is a place where secretaries have desks in converted closets, where filed and shelves of supplies line hallways, where specimens are stored in the boiler room, where other specimens are on top of the refrigerating machinery, where a camera is in one place and film in another, where a toxicologist must sit on the corner of his secretary's desk to dictate notes because there is no room for another chair, and where a pathologist may have to go to the basement to find the records he needs.

The Morgue is also a place where bodies have to be brought out into a main hall to be photographed, and while the photography proceeds, the technicians making tests on tissues can't get by to the basement storage area where specimens and files are kept.[110]

Frances Glessner Lee, the patron of Harvard's legal medicine program, died on Jan. 27, 1962. With Lee's death, interest and support in the Harvard program waned. Fisher reached out to associates at Harvard and made arrangements to assume Lee's seminar in homicide investigation in Baltimore. The Nutshell Studies of Unexplained Death were relocated in 1966, and the first Frances Glessner Lee Seminar in Homicide Investigation was conducted in Baltimore in 1968. The highly regarded seminar is now in its 70th year.

In 1962, discussion about building a new medical examiner's office began to gain traction. Fisher and the Post Mortem Examiners Commission envisioned a $900,000 three-story state-of-

[109] Spitz WU: A Posthumous Award and Tribute to the Late Russell S. Fisher. Op cit
[110] Jones EL. The Lively and Crowded Morgue." Baltimore Sun, Mar 29, 1962, p14.

the-art medical examiner's office. One floor of the building would be dedicated to research, for which Fisher had $250,000 in funding lined up.[111]

Once again, Baltimore's two medical schools competed to have the proposed facility located near their respective campuses.

University of Maryland had a site across the street from the old Western District police station on Pine Street, between Baltimore and Fayette, which offered proximity to the schools of medicine and law. Johns Hopkins set aside a lot at Madison and McDonough streets, near the present-day location of Kennedy Krieger Institute, which could operate in close association with the Johns Hopkins School of Hygiene and Public Health. The Baltimore City Planning Commission selected the Hopkins site, which was also the preference of Mayor J. Harold Grady.[112] Initially, Fisher expressed a preference for the Hopkins site as well, believing it would enhance funding for medical-legal research.[113,114] The Hopkins location was also closer to a medical library, the convenience of which was essential for the pathologists, Fisher said.[115] Ultimately, Fisher agreed to abide by whatever decision was made by civic leaders.

The University of Maryland site was preferred by Gov. J. Millard Tawes, U.M. President Wilson H. Elkins, and Baltimore City Councilman William Donald Schaefer, who served as Mayor from 1971-1987 and as Governor from 1987-1995.[116] Tawes threatened to withhold State funding for the facility if it were located at Hopkins.[117]



Medical Examiners Building at 111 Penn Street, 1970s

[111] Flowers CV: Tawes, Dr. Elkins Support U.M. Site For New Morgue. Baltimore Sun, Apr 16, 1963, p 40.
[112] Somerville FPL: Hopkins Picked For New Morgue. Baltimore Sun, Nov. 28, 1962, p 44.
[113] Unit Debates Morgue Site. Baltimore Sun, Jul 13, 1962, p 24
[114] Somerville FPL: Morgue Site At U.M. 'Lost.' Baltimore Sun, Nov 22, 1962, p 22.
[115] New Morgue Is Live Issue. Baltimore Sun, Apr 9, 1963, p. 12
[116] Flowers CV: Tawes, Dr. Elkins Support U.M. Site For New Morgue, op cit.
[117] Nordlinger SE. Tawes Warns On Site For New Morgue. Baltimore Sun, Dec 18, 1963, p 46.

In the end, the State acquired property near the U.M. campus on the northeast corner of Pratt and Penn streets, the location of an Anheuser-Busch beer distribution warehouse.[118] Funding for the new building was earmarked from the State's racetrack revenues, supported by a $100,000 donation from the Maryland Medical-Legal Foundation.[119,120]



Una Hanbury's bronze sculpture

One small detail proved to be a minor stumbling block to construction of the new building. An ordinance introduced by Schaefer in 1964 to improve the aesthetics of the urban landscape required that one percent of the estimated construction cost of municipal projects must be spent on "fine arts embellishment such as mosaics, sculpture of ornamental fountains."[121] With an estimated final price tag of $1.2 million, Fisher felt that the $12,000 could be better used in the laboratory than on art. A bill was introduced in the City Council at the request of an organization funding infant death research in Fisher's office, seeking an exemption to the ordinance for the new building. The effort was defeated in the Council, mainly by dint of Schaefer's objections.

Faced with the inevitability of acquiring public art, Fisher approached the task diligently. He recommended District of Columbia artist Una Hanbury, who specialized in bronze sculpture.[122] Once Hanbury was approved by the city's Civic Design Commission, she designed a 6-foot tall piece that depicts a group of people – a guardian figure representing law, a doctor holding the map of knowledge, a symbolic figure of justice, and the public.[123] Hanbury's sculpture has since been incorporated into the Office of the Chief Medical Examiner seal.

When the building at 111 S. Penn Street was dedicated on Sept. 10, 1969, it was four times the size of the Fleet Street office, with space for laboratories and classrooms, a modern photography lab, and other improvements. The building was given a designation befitting its stature. No longer the Baltimore Morgue, informally or otherwise, the new facility was to be called the Medical Examiners Building.[124]

The press praised the development. "The emergence of Dr. Russell S. Fisher and his post-mortem examiners from the shadows of harborside decay to fresh, physically adequate

[118] Flowers CV. Morgue Site Agreement Announced. Baltimore Sun, Mar 19, 1964, p 54.
[119] Levine RH. Mystery Bill Would Alter Morgue Aid. Baltimore Sun, Mar 22, 1967, p C24
[120] Foundation Gives $100,000 To Aid New Morgue's Work. Baltimore Sun, Nov 6, 1966. P 10.
[121] Morgue Art Hearing Due. Baltimore Sun, May 10, 1966, p. C9
[122] Somerville FPL. D.C. Sulptor Is Selected To Do Morgue Decoration. Baltimore Sun, May 12, 1966, p C12.
[123] Spitz, Fisher: Medicologal Investigation of Death (edition in King's office)
[124] New Morgue Dedicated Under Another Name. Baltimore Sun, Sept. 11, 1969, p A15.

quarters…marks the end of a long struggle for a building and equipment commensurate with the importance of their work," an editorial noted.

The Penn Street building, with renovations, served its purpose until 2010.

Fisher made lasting contributions to the State of Maryland and his profession. The textbook he co-edited with Spitz, *Medicolegal Investigation of Death*, is regarded as the bible of forensic pathology. Much of what is considered standards of practice in forensic pathology has its origins in Maryland. From modest beginnings, Fisher created a world-renown center of research and training that conducted thorough, science-based investigations at a cost to the public that was less than the State spent on stocking fish in recreational waters.[125]

Fisher worked until illness forced his retirement in 1984. Three weeks later, he died at age 67.

The Smialek Years

The person appointed by the Post Mortem Examiners Commission to continue Fisher's legacy was John E. Smialek, M.D. A native of Toronto, Smialek received his medical degree at University of Toronto in 1967. For three years, he served as a general practitioner and area coroner in Thunder Bay, Ontario. He returned to Toronto for specialty training in pathology and a fellowship in forensic pathology at Spitz's medical examiner office in Detroit. Smialek remained in Detroit as an Associate, and then Deputy Chief Medical Examiner, before moving to Albuquerque as the Chief Medical Examiner for New Mexico.
Smialek had not been on the job long when he was thrust to the center of a national media story. On June 19, 1986, top NBA prospect Len Bias died in his University of Maryland dorm room after a night of partying. The forensic investigation revealed cocaine intoxication as the cause of death. Typically taciturn and publicity-shy, Smialek faced a media scrum with patience and professionalism.



John E. Smialek, M.D.

In 1987, Smialek introduced a program to train contractual on-call forensic investigators to provide coverage in the counties for Deputy Medical Examiners who were unable to get to a scene in a timely fashion. Trained similarly to forensic investigators who worked in Baltimore City, ranks of the county forensic investigators were drawn primarily from law enforcement, fire service, and EMS personnel. The county forensic investigators ensured that the OCME was able to respond to scenes within one hour throughout the state.

Approaching its third decade of use, the Medical Examiners Building was sorely in need of renovation and improvements. Beginning in 1987, Smialek oversaw a multi-year project to modernize the OCME.

[125] Fisher Tells 'How Doctor Plays Detective' Baltimore Sun, Oct. 1, 1955, p. 4.

The first phase included the acquisition of a $250,000 gas chromatography mass spectrophotometer for the toxicology lab, and a $70,000 renovation of a biosafety autopsy room for handling decomposed and infectious decedents. The OCME also implemented a computerized case management system and acquired personal computers for staff.[126]

Phase II of the modernization project was delayed by several years, and didn't get under way until 1994. Budgeted at $2.1 million, Phase II included the construction of a penthouse for new heating, ventilation and air conditioning equipment, a new sprinkler and fire alarm system, an emergency electrical generator, modernization of the building's two elevators, and several other improvements to comply with building codes and address inadequate working conditions. The project included renovations to the histology and toxicology labs, and a new tissue storage room.[127]

Pathologists who trained during Smialek's tenure include Julia C. Goodin, M.D., Chief Medical Examiner of Iowa; Ljubisa J. "Luby" Dragovic, M.D., Chief Medical Examiner in Detroit; James Kaplan, M.D., Deputy Chief Medical Examiner in West Virginia; and Charles Kokes, M.D., Chief Medical Examiner in Arkansas.
Smialek served as Chief Medical Examiner until he died suddenly while at work on May 9, 2001.

The Fowler Years



David R. Fowler, M.B., Ch.B.

In 2002, the Post Mortem Examiner's Commission appointed as successor David R. Fowler, M.B., ChB, MMed Path (forens), who had been Deputy Chief Medical Examiner since 1998 and served as acting Chief Medical Examiner since Smialek's death. A native of Rhodesia (now Zimbabwe), Fowler attended medical school at University of Cape Town, where he also completed a five-year residency in forensic pathology. He came to Baltimore in 1991 for a residency in anatomic pathology at University of Maryland Medical Center. Upon completion of a two-year fellowship in forensic pathology at the OCME, Fowler was appointed Assistant Medical Examiner.

Having risen through the ranks, Fowler was ideally suited to continue the OCME's commitment to training and education, research, and excellence in forensic pathology. Much of Fowler's tenure as Chief Medical Examiner has been shaped by events occurring in the Fall of 2001 – the attacks of 9/11 and the U.S. mail anthrax attack in October of that year that resulted in five deaths and sickened 17 people.[128] The autopsy of one of the anthrax victims, a postal worker,

[126] Modernization of the Office of the Chief Medical Examiner. OCME News, June 1987, p 1.
[127] HVAC Renovation Begins. OCME News, June, 1994, p 1
[128] Amerithrax or Anthrax Investigation. Federal Bureau of Investigation www.fbi.gov/about-us/history/famous-cases-anthrax-amerithrax Accessed Sept. 17, 2015

was conducted in the Penn Street office. The events starkly demonstrated the inadequacy of the 32-year-old Medical Examiners Building to meet the needs of a post-9/11 era.

Uniquely situated in the mid-Atlantic in proximity to the National Capital area, the OCME had to be better prepared for potential mass-fatality incidents and bioterror attacks in addition to dealing with burgeoning problems with drugs, urban violence, and the variety of ills faced by modern society. The OCME was performing about 4,000 autopsies a year, twice the amount the building was designed to accommodate.

Planning for a new Forensic Medical Center began in 2002. One proposal envisioned a $41 million one-story, 72,000-square-foot building on eight acres of State-owned land south of the city center on Potee Street. However, this site would require decontamination, venting of high levels of methane, and removal of hazardous waste.[129]

Ultimately, the State acquired property in the University of Maryland BioPark, a 10-acre community of life science companies and translational research centers west of the UMAB/medical center campus. Working with a team of architects and designers, Fowler and other State officials developed plans for a 120,000-square-foot six-story building that occupying an entire block. When completed, the facility would be one of the largest freestanding forensic medical centers in the U.S., rivaling the military's largest mortuary at Dover Air Force Base.

Ground was broken on the site on Oct. 22, 2008, and the Forensic Medical Center of Maryland officially opened on Sept. 21, 2010, under budget with a final cost of $43.6 million.



Forensic Medical Center of Maryland, 900 W. Baltimore Street

The group designed an idealized forensic medical center, employing innovative features and technology for a truly state-of-the-art facility. In a departure from earlier efforts, the new building was designed with future growth in mind, so that major renovations would not be necessary for 25 years. Substantial portions of most floors of the building are unfinished shell

[129] Richardson T: Medical examiners feel growing pains. Baltimore Sun, Sept. 26, 2005, p 1B.

space that can be economically finished into offices, classrooms, labs, or future needs that can't be envisioned yet.

Among the noteworthy elements of the building:

Energy-saving features including a curtain wall system with argon gas low E glass that is up to three times more energy efficient than standard single glazed glass; sensors to turn off lights in unoccupied spaces; water conservation measures on all plumbing fixtures; variable speed controllers on all fans and pumps; night set back operations on all HVAC systems; use of high-efficiency air cooled chillers; a system to cool the computer rooms via outdoor air in the winter time to minimize the load on chillers.
A radio frequency identification (RFID) system for case files so they can be located at any time anywhere in the building.
An enclosed 15,000-square-foot ground-floor receiving and mass fatality triage area that permits smooth, logjam-free access for transport vehicles and deliveries. Columns in the ground floor area are fully equipped with water, electrical, data lines and other utilities necessary to set up a temporary morgue or autopsy stations in event of a mass fatality incident. The space is scaled to allow access for tractor trailers, a decontamination tent, or anything else that may be required.
In-house histology, toxicology, and neuropathology laboratories. The toxicology lab can provide STAT results within an hour, negative results in three days, and quantified final results within five days. Sufficient space is provided for specimen preparation and storage.
A biosafety level (BSL) III suite for handling decomposed or infectious decedents. The suite has three rooms equipped with two stations each, and includes a gowning room and shower, a pass-through sterilizer, and a dedicated elevator to the ground-floor receiving area. Two additional rooms are ready to be finished for use as BSL-III autopsy rooms in the future.
Two spacious main autopsy rooms with eight stations each. The rooms have abundant natural light, bright, shadow-free artificial lighting, and an extremely efficient laminar ventilation system. At present, the OCME has a total of 22 autopsy stations; 16 in the main autopsy rooms and six in the BSL-III suite. The autopsy suite also has a viewing room and an operating room for harvesting tissues.
A radiology suite with computed tomography and a Lodox low-dose X-ray machine that produces a crisp, full-body digital image in less than 15 seconds.
Scarpetta House, a training facility donated by novelist Patricia Cornwell, who based the futuristic space-age forensic medical center in her books on the OCME. Designed much like a studio apartment, the facility is used to stage a variety of crime scenes. Aside from being used to train the OCME's forensic investigators, Scarpetta House has been employed to train members of the Disaster Mortuary Operations Response Team (D-MORT), Baltimore City Police Department homicide detectives, attendees of the Frances Glessner Lee Homicide Seminar, and other groups.

The OCME Today

The Forensic Medicine Center of Maryland is considered a model in the U.S. and internationally. OCME has hosted visits from U.S. and foreign medicolegal death investigation agencies to observe the building for their own design process, including representatives from San Francisco, Houston, Singapore, Turkey, Japan, United Arab Emirates, and the People's Republic of China.

The OCME maintains a role in resident training for the two medical schools in Baltimore, three in the District of Columbia, and the Armed Forces Institute of Pathology. Students have been hosted from China, Japan, Ireland, South Africa, Malaysia, and numerous other countries.

The OCME has established educational relationships in China, largely through the efforts of Assistant Medical Examiner Ling Li, M.D. In 2012, OCME formed an international study agreement with Ningbo University medical school and hosted two visiting scholars from Fudan University. Two years later, the OCME launched the U.S.-China Forensic Science Research Center, which includes a new forensic science master's program in conjunction with the University of Maryland Graduate School and the China University of Political Science and Law. Li and Fowler also produced the first English language forensic pathology textbook in China.

Today, the OCME investigates more than 9,000 deaths and conducts about 4,400 autopsies annually. The OCME's 12 Assistant Medical Examiners are supplemented by three fellows and a dozen full-time forensic investigators. The OCME has a strong institutional lineage of excellence, following policies and best practices enacted by Smialek, Fisher and Maldeis. Maryland's forensic investigation system is tightly integrated, with one centralized facility for autopsies, laboratories, records, training, and supervision. The OCME is one of the few forensic medical centers with quality assurance practices-- multiple layers of peer review with morning rounds and afternoon conferences -- to ensure that findings are as close to the truth as humanly possible.

The work at the OCME is done with remarkable efficiency, mindful of costs to the public. Among peer forensic investigation systems, the average cost is $3 per taxpayer annually, while the OCME operates at $1.97. The OCME's $10 million annual budget is still less than the State's Fisheries Service.[130]

These are among the reasons why the OCME is regarded as the gold standard to which other forensic investigation systems are compared. After a site visit and assessment for accreditation by the National Association of Medical Examiners, evaluators called the OCME "a stellar example of modern and professional medicolegal death investigation.

[130] Fisheries Service FY 2014 Budget Report. Maryland Department of Natural Resources. dnr2.maryland.gov/fisheries/Documents/SFAC_budget_report-2014.pdf Accessed Sept. 23, 2015.

Missouri – Greene County (Springfield)

History of the Greene County, MO Medical Examiner's Office

Ron Yoder, BA, BSN, RN

May 2011

Dr. James Spindler took over as the Greene County Medical Examiner in January of 1996. Dr. Erwin Busiek was the Examiner for approximately 23 years prior to Dr. Spindler. Dr. Spindler did the autopsies for Greene County starting in about 1990 when Dr. Busiek was still the Medical Examiner.

In January 1996 the new office opened in the court house and Ron Yoder BA, BSN, RN ran the office for Dr. Spindler. This was the first time Greene County had an office dedicated to being solely the Medical Examiner office. Prior to this it was run out of Dr. Busiek's medical office. The office was under the directorship of Mr. Yoder as Dr. Spindler appointed him as the Deputy Medical Examiner. In 1999 an assistant was hired as full time help to assist in the office operation.

The office did various types of training as Dr. Spindler and Mr. Yoder went to Jefferson City to teach a course on Death scene Investigation twice a year. Dr. Spindler and Mr. Yoder also did many lectures at Missouri State University, Drury and Evangel. The autopsies were mostly done at Cox Medical Center Morgue and those inappropriate for Cox were done at Springfield Mortuary Service. Dr. Spindler was the Chief Medical Examiner for Greene County until July of 2003.

The statistics for the office were left with the office when we left.

Missouri – Jackson County (Kansas City)

History of the Jackson County Medical Examiner's Office Kansas City, Missouri and Missouri Death Investigation



Mary H. Dudley, MD.

August, 2012

Jackson County Medical Examiner's Office

Office Information

Jackson County Medical Examiner's Office
660 E. 24th Street
Kansas City, Missouri
(816) 881-6600
(816) 404-1345 fax

Website- http://www.jacksongov.org

Mary H. Dudley, MD.
Chief Medical Examiner
January, 2007 to present

The Jackson County Medical Examiner's Office (JCMEO) current jurisdiction includes Jackson County, and the surrounding contract counties of Platte, Cass and Clay.
Population of jurisdiction covered:

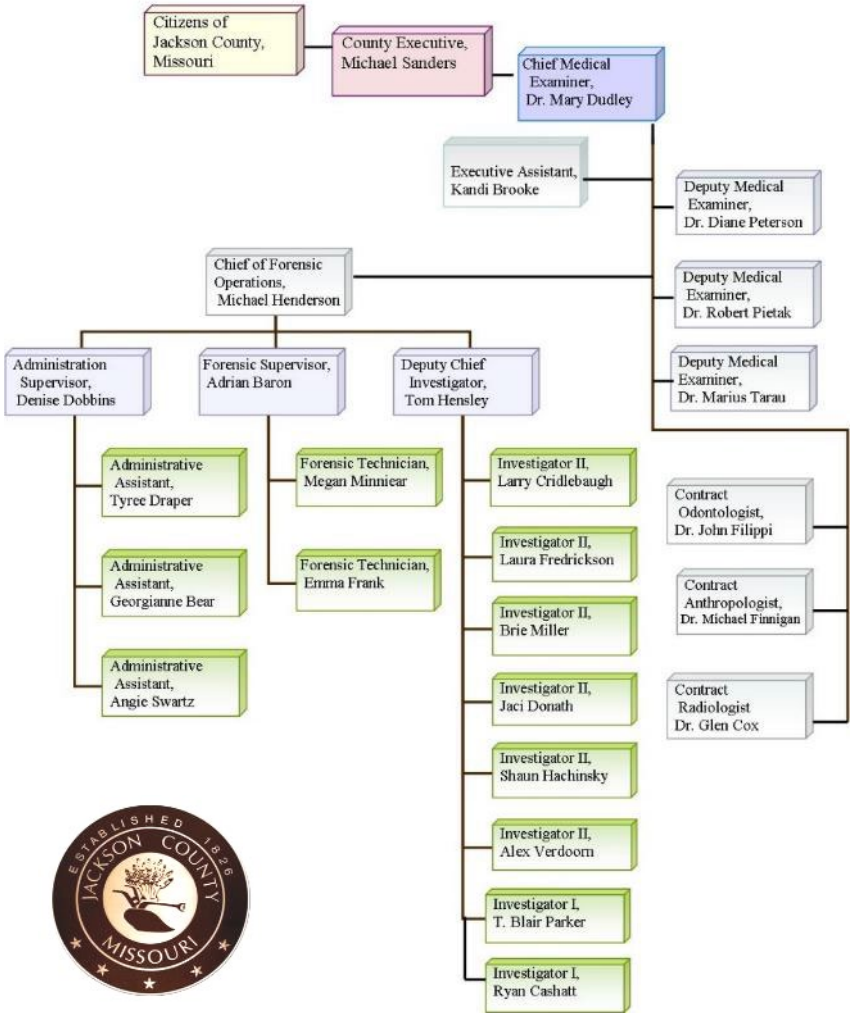
Jackson – As of 2010, the population was 674,158
Cass – As of 2010, the population was 99,478
Clay – As of 2010, the population was 221,939
Platte – As of 2010, the population was 89,322

Total population coverage: 1,084,897

2012 Annual Budget, approximately - $2.7 million

Fully Accredited by National Association of Medical Examiner's (NAME) -1999; Reaccredited 2004 and 2009
The Accreditation Council for Graduate Medical Education (ACGME) – 2002; Reaccredited – 2011

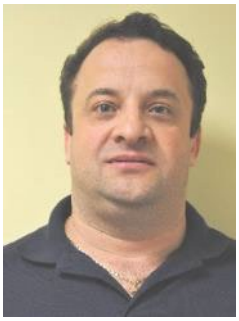
Jackson County Medical Examiner's Organizational Chart



Personnel

Total of 23 full-time employees: 4) Full Time Board Certified Forensic Pathologists, 1) Chief of Forensic Operations and Investigations, 1) Deputy Chief Investigator, 8) Full Time Medical Legal Death Investigators, 1) Forensic Supervisor, 2) Full Time Forensic Technicians, 4) Full Time Administrative Staff, 1) Executive Assistant to the Chief Medical Examiner, 1) Forensic Pathology Fellow (vacancy)
4 Full Time Board Certified Forensic Pathologists
Dr. Mary H. Dudley, Chief Medical Examiner
Dr. Diane Peterson, Deputy Medical Examiner
Dr. B. Robert Pietak, Deputy Medical Examiner
Dr. Marius Tarau, Deputy Medical Examiner



Mary H. Dudley, MD Diane Peterson, MD Robert Pietak, MD Marius Tarau, MD

10 Full Time Medical Legal Death Investigators
24/7 telephone coverage for reported deaths.
Prepares intake form on reported deaths.
Conducts scene investigations,
documenting circumstances of death through photographs, diagrams,
narrative, and witness interviews.
Acts as family liaison.
Reports findings to the Forensic Pathologist to assist in determining the cause and manner of death.
Documents injury and natural
disease.
Attends all death scenes.
Involved in mass fatality preparedness.

3 Full Time Forensic Technicians
Assisting with Forensic Autopsy
X-Rays
Collection of evidence

Collection of toxicology, histology and microbiology specimens
Documentation of clothing and property
Release of body to funeral home
4 Full Time Administrative Staff
1 Executive Assistant to the Chief Medical Examiner
The five administration personnel in this division of the Jackson County Medical Examiner's Office are responsible for the forensic administrative functions of the office. Our personal staff prepares payroll, maintain account payables and receivables, releasing information to families, agencies, hospitals. The transcriptionist types all autopsy reports for the Medical Examiner and staff by transcription and dictation. Personnel also send autopsy reports to law enforcement agencies, families and attorneys, and perform filing and receptions duties. Personnel perform data entry into the computer of information from the investigator's intake form, the doctor's information, death certificate, autopsy and drug and alcohol findings on each case. The receptionist provides information to callers or visitors regarding office policies and procedures, death certificate and burial handling. Additional duties include making notification of Child Fatality Review Board and to Kansas City Health Department on heat related deaths. Prerequisites for forensic administration include forensic and medical terminology, clerical typing skills and ability to handle distraught families with compassion and empathy.

Duty and Authority of the Medical Examiner:

The medical examiner has direct jurisdiction for Jackson, Cass, Clay and Platte Counties and is empowered by Missouri State Statutes #RSMo 58.720 to investigate deaths as a result of:

1. Violence by homicide, suicide, or accident;
2. Thermal, chemical, electrical or radiation injury;
3. Criminal abortions, including those self-induced;
4. Disease thought to be of hazardous and contagious nature or which might constitute a threat to public health;
5. Any person dies suddenly when in apparent good health;
6. When unattended by a physician, chiropractor, or an Accredited Christian Science Practitioner, during a period of thirty-six hours immediately preceding death;
7. While in custody of the law, or while an inmate in a public institution;
8. In any unusual or suspicious manner;
9. All child deaths, involving individuals below the age of eighteen years

Cases

Case Load

Year	Homicides	Suicides	Traffic	Accidents
2007	133	148	131	453
2008	160	163	145	371
2009	138	156	105	386
2010	149	156	124	363
2011	143	184	99	353

Procedural Statistics

Year	Total Cases	Autopsies	Ext Exams	Scenes
2007	2312	560	489	733
2008	2351	521	518	766
2009	2324	653	392	1147
2010	2217	569	464	1223
2011	2195	502	466	1255

Office Accomplishments

In 2011, the new forensic database program, VertiQ and electronic death certificate system, Missouri Electronic Vital Records (MoEVR) systems were implemented.

The Jackson County Medical Examiner's Office (JCMEO) has teamed with the Mid America Regional Council (MARC) in an effort to raise efficiency in response to mass fatality events and received approximately $148,000 from MARC for the purchase of mobile morgue equipment, as well as a customized 53 foot refrigerated trailer necessary for temporary storage of decedents. With the joint effort of the Mid America Regional Council, at little cost to the Medical Examiner's Office, our office is capable of responding to a mass fatality event with less assistance from federal agencies.

Four members of the DMORT 7 team received Certificate of Recognition for their assistance in the recovery efforts in Joplin, Missouri to assist in identification of the tornado victims.

Our office assisted in creating a regional 11 county team, Kansas City Regional Mortuary Operational Response Group (KCRMORG), to train and prepare for mass fatality events.

The JCMEO is very supportive of organ and tissue donation and aims for zero denial rate. The Jackson County Medical Examiner's Office (JCMEO) was recognized by the Midwest Transplant Network (MTN) for their efforts in tissue donation. Chief Medical Examiner Dr. Mary

Dudley and members of her staff received the "Outstanding Achievements in Tissue Donation" award at the Medal of Honor Hospitals and Donation Champions in both 2010 and 2011.

Publications/Research/Presentations

Dudley, MD, Carson, HJ, Lingamfelter, DC, Hensley T, Frank, EL, Tarau, M; Leptospirosis Presenting as Presumptive Pandemic Influenza a (H1N1) Infection; National Association of Medical Examiners, Baltimore, MD. Nov. 2012

Frazee C, Uttam G, Peterson D, Pietak R, Dudley MH; "Bath Salts: Observations and Results from Eight Cases poster presentation; The Society of Forensic Toxicologists" annual meeting. July 2012, Boston, MA

Dudley MH & Chapman B, et al. "Death of a Six-Year-Old Boy with Mental Retardation: Accident versus Child Abuse" Journal of Forensic Science, July 2012

Peterson D, Frazee C. Garg U., Dudley MH, "Case Report of a Death Involving Methylenedioxypyrovalerone (MDPV) from Bath Salt Use" poster: February, 2012 American Academy of Forensic Science Conference Atlanta, GA.

Jares, Morgan, Reiner, Dudley, Herrera, Hensley, Lane, Minniear; "What Medical Examiners, Coroners, and Forensic Pathologists Think About Tissue Donation: A Survey"; AATB 35th Annual Meeting Scottsdale, AZ. Sept. 8-12, 2011

Dudley MH, Hensley T, Morgan C., Lane S., Minniear M. "A Review of Coroner and Medical Examiner Opinions Regarding Tissue Donation Issues in the United States" poster presentation; National Association of Medical Examiners Conference Seattle, WA. August, 2011

Dudley MH, Hensley T, Cai J, Hoff G, Edwards JM, Haldiman L; "Infant Death and Sleep Environment" poster presentation. National Association of Medical Examiners Conference Seattle, WA August, 2011;

Dudley MH, Fleming S, et al. "Fatality Involving Complications of Bupivacaine Toxicity and Hypersensitivity Reaction: A Case Report" Journal of Forensic Sciences; April, 2011

Dudley MH, Carson H, et al. "Severe Leptospirosis Similar to Pandemic (H1N1) 2009, Florida and Missouri, USA." CDC Publication June, 2011 17:6

Dudley MH, Fleming S., et al. "Marcaine" poster presentation; February 2011; American Academy of Forensic Science Conference Chicago, IL.

Dudley MH, Knoblauch J, et al. "Psilocin Related Accidental Death: A Case Study". ToxTalk Publication June/July 2011

Dudley, MD & Fleming S., et al. "Anaphylaxis: Fatal Hypersensitivity Reaction to Carboplatin"; National Association of Medical Examiners, Cleveland, OH Oct 2010

Frazee, Dudley, MD, Fleming, Garg, Lingamfelter and Sabharwal; "Huffing: Two Deaths Involving 1,1-Difluoroethane" Poster presentation, SOFT Annual Meeting Richmond, VA. Oct 2010

Dudley M.H, Pons-Sepsis, A. "Expanding the Scope of Practice: The Forensic Nurse's Administrative Role in a Medical Examiner's Office"; International Association of Forensic Nurses Pittsburgh, PA Oct 2010

Dudley MH, Parker A; "Fatal Fall of a Nine-Month- Old Infant" American Society of Forensic Pathology Check Sample No. FP 10-8 (FP-359) May 2010

Carson HJ, Knight LD, Dudley MH, Garg U, et al. "A fatality involving an unusual route of fentanyl delivery: Chewing and aspirating the transdermal patch" Legal Medicine 12 (2010) 157-158

Carson HJ, Dudley MH, et al. "Severe Leptospirosis with Presentations Similar to Pandemic (H1N1) 2009 Florida and Missouri "USA Emergency Infectious Diseases-10-0980 Jun 2010

Dudley MH, Fleming SW, Porter WR, Frazee III CC, Garg U, Gidwani RM, and Sabarwal KD. Anaphylaxis: Fatal Hypersensitivity Reaction to Carboplatin: A Case Study. *Forensic Pathology Check Sample, FP 10-7*. Chicago, IL: ASCP; 2010

Dudley, Fleming, Frazee, Garg, Knight, and Young; "Deadly Ingestion Involving Zolpidem, Clonazepam And Ethanol: A Case Report" poster presentation; 2009 Annual Society of Forensic Toxicology meeting, Oct 18-23, 2009, Oklahoma City, Oklahoma

Dudley M. H., Hensley S. T.; "Management of Multi-Vehicle Accident with Multiple Fatalities Single Vehicle MVA-Determining Cause & Manner of Death" National Association of Medical Examiner's Annual Meeting, San Francisco, California, Sep 11-16, 2009

Knight, Dudley, Fredrickson, and Stueve; "Young Drivers Over-Represented In Traffic Fatalities In Missouri: Retrospective Review Of Young Driver Deaths In A Large Metropolitan Jurisdiction, 2006-2008, With An Eye Toward Prevention"; Poster presentation, Annual Meeting of the National Association of Medical Examiners, San Francisco, California, September 11-16, 2009

Dudley, M.H.; "Role of the Coroner/Medical Examiner, Mass Fatality, Crime Scene to Trial- a Quadruple Homicide Case Study (Carr Case)", National Academy of Sciences Report, SUIDI; Wisconsin Coroner Medical Examiner Association Conference; June 8, 2009; Au Claire, Wisconsin

Fleming S, Frazee III CC, Garg U, Dudley M, Knight L, et al "Deadly Ingestion Involving Zolpidem, Clonazepam and Ethanol: A Case Report" *ToxTalk*. 33(4): 15-17, 2009

Dudley, Goldschmidt, and Hensley; "Commotio Cordis: A Forensic Science Perspective"; AAFS Annual Meeting, Denver, Colorado, Feb 16-21, 2009

Dudley MH, "Application of Lean Quality Management Theory to Forensic Autopsy Service" poster presentation; National Association of Medical Examiners annual meeting September, 2008 Louisville, KY

Fleming S, Frazee CC, Garg U, Johnson, Dudley MH, et al; "Toxicological Findings of Dicyclomine and Morphine in a Deceased Cancer Patient" Tox Talk, Spring 2008, Vol 32, Issue 1

Dudley, M.H., Fredrickson, L; An Example of the Importance of Scene Investigation by a Medico-legal Death Investigator in Providing Clues to the Cause and Manner of Death, National Association of Medical Examiners Annual Conference, October 2007; Savannah, Georgia

Dudley, M.H., Hensley, S.T.; Cold Case Serial Murders, National Association of Medical Examiners Annual Conference, October 2007; Savannah, Georgia

Dudley and Sciotto "Mitial Valve Prolapse and Promyelocytic Leukemia Associated with Fatal Stroke" Check Sample ACSP, Aug 2007

Forensic Pathology Fellowship

Since 2002, Jackson County Medical Examiner's Office has offered a 1 year ACGME accredited forensic pathology fellowship. The program's first fellow was Dr. Miguel Laboy in 2005. In 2007, Dr. Laboy was hired at JCMEO as a Deputy Medical Examiner. Dr. Laboy currently serves at Medical Examiner for Forensic Medical Management Services in Davidson County, Tennessee. In 2009, Dr. Harry Carson attended the fellowship program; he currently serves as Anatomic & Clinical Pathologist at Mercy Hospital in Iowa City, Iowa. The program received ACGME re-accreditation in 2011.



Miguel Laboy, MD. 2005 - 2007



Harry Carson, MD. 2009 - 2010

Pathology Residents Rotation

We offer one-month forensic pathology rotation to in the training of University of Missouri-Kansas City (UMKC) and The University of Kansas Medical Center (KUMC) residents in Pathology, Children's Mercy Hospital Fellows in Pediatric Pathology and Child Abuse Pediatric Fellows during one month rotations.

The Chief Medical Examiner serves as Associate Clinical Professor, and the 3 Deputy Medical Examiners serve as Clinical Assistant Professors at both KUMC and UMKC.

Academic involvement through research, education, and training include sharing knowledge and skills with the next generation of Forensic Pathologists and Death Investigators.

JCMEO hosts a monthly forensic lecture series to Pathology Residents.
Continuing education lecture on "Sudden Unexpected Infant Death Investigation and Sleep Environment" to Children's Mercy Hospital staff.
Lectures on "Body Farm/Death Investigation" and "Autopsy/Toxicology" for Practicum Students of UMKC Dental School

Public Training and Public Service

The Chief Medical Examiner, 3 Deputy Medical Examiners and Medical Legal Death Investigators provide education and training to the communities and agencies we support. To better address certain priorities, the JCMEO has in-house committees to focus on both short-term and on-going needs. Select members of these committees often participate in public education or interagency informational seminars.

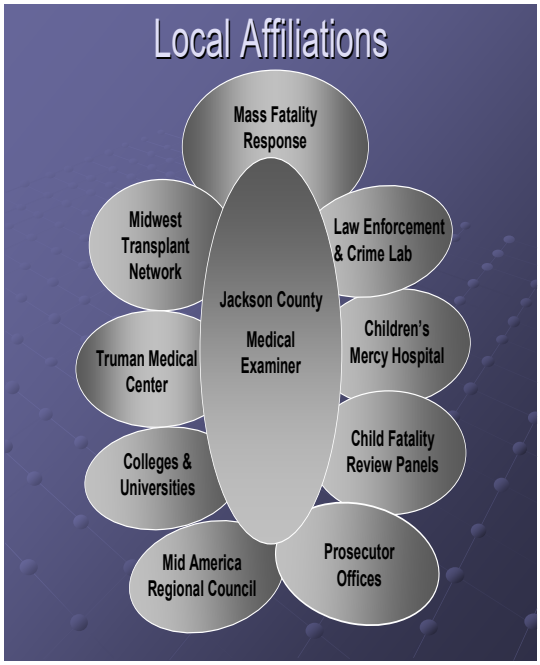
Hospital Liaison Committee, created to educate local hospitals on forensic issues and proper reporting of deaths.
Hospital presentation on "Reportable Deaths to the Medical Examiner's Office" at a local hospital educating ER nurses and ICU nurses.
Local hospital presentation on "Forensic Nursing and the Trauma Patient" to local sexual assault nurses.

Community Liaison Committee, formed to create marketing materials to use at schools, colleges, etc. regarding careers in forensics. Select members of these committees often participate in public education or informational seminars.
Motor Vehicle Re-enactment with the Independence Fire Department to high school students.
Presentation on "Death Investigator's Role During Scenes" at the Junior Police Academy
Mock accident assembly for students at Park Hill South High School.
"Death Investigation and Crime Scene Investigation" presentation at Fort Osage High School career day.
Participation in a question and answer session at the Adhoc Group Against Crime for family of homicide victims.

Presentation to radiology technology students on Forensic Pathology.

Interagency Coordination

It has always been a high priority of The Medical Examiner's Office to create and maintain great working relationships with all outside agencies, including law enforcement, attorneys, organ and tissue agencies, and health departments. JCMEO has improved community relationship with associated agencies in public health and safety, mass fatality preparation and prevention with our community partners.
Presentation to members of a regional group of agencies; Fire/EMS, Police, Missouri Department of Transportation, tow truck industry, Missouri Department of Natural Resources, discussing Traffic Accident Management and Scene Safety for first responders.
Crime scene testing for fingerprinting with the Kansas City Police Department.
"Wound Recognition of Gunshots", "Blunt Force Trauma" and "Penetrating Trauma" lectures at the KCMO Police Academy, Metro Homicide Squad Training
Lecture on "Emergency Preparedness, Capabilities of the MEO" and "Experiences in Joplin" to State Emergency Management Agency (SEMA) representatives.
"Basic Death Investigation" and "Mass Fatality" presentation for members of the Jackson County Sheriff's Department.
Presentation "Overview on the Medical Examiner's Office" at the Grain Valley Police Citizens Academy.
Attendance at the State Emergency Management Agency New, Madrid Exercise in Jefferson City.
Participation in "Gunshot Residue and Blood Spatter Training" at the Jackson County Shooting Range.



Disaster Management and Readiness Program

Kansas City Regional Mortuary Operational Response Group (KCRMORG)

For the past 5 years the Jackson County Medical Examiner's Office has been working in conjunction with the Mid-America Regional Counsel in the area of mass fatality preparedness and response. In 2011 the Jackson County Medical Examiner's Office received over $200,000.00 in mass fatality equipment from the Mid-America Regional Counsel. The equipment consisted of a customized 53ft refrigerated trailer and several components of morgue equipment that will allow us to set up mortuary operations outside the Medical Examiner's Office during a mass fatality event. This equipment included generators, power cords, autoclave, lights, body bags, freezer, tarps, hot water heaters, plastic utility tables, PVC pipe for morgue wall construction, autopsy tables, and other operating equipment. The Jackson County Medical Examiners added to the equipment by purchasing PPE, administrative supplies, pathology, anthropology, x-ray, dental x-ray and several other operating supplies. With the equipment purchased by the Mid-America Regional Counsel and the Medical Examiner's Office, there is approximately $500,000.00 worth of mortuary equipment which will enable emergency mortuary response team. Members are from the Kansas City Regional area from both Missouri and Kansas. This team is called the Kansas City Regional Mortuary Operational Response Group and rosters approximately 100 professionals from several aspects of forensic investigation. This team is responsible for the response and management of a mass fatality event and can be deployed by the Medical Examiner or Coroner of the affected area. The Jackson County Medical Examiner's Office is responsible this equipment, team training and is the lead agency for the KCR-MORG. Members of the Kansas City Crime Lab, Johnson County Crime Lab, Dental School, First Call Morgue, Speaks Funeral Home, Boone County Medical Examiner's Office, Miami County Coroner's Office, Wyandotte County Emergency Management, Jackson County Sheriff's Department and the Jackson County Medical Examiner's Office make up this response team. This team will be able to respond within a short notice and will be under the jurisdiction of the local Medical Examiner or Coroner. Having the resources within the Region, and being able to respond and complete a mass fatality event with little assistance from the Federal Agencies, demonstrate the hard work and dedication that the local and regional government authorities have put forth for the preparedness and management of a mass fatality event.

Death Certification

Originally, the Jackson County Medical Examiner's Office death certificate was typed on an IBM electric typewriter and only initiated for deaths in Jackson County. Once the medical examiner's portion of the death certificate was completed by the clerk, and signed by the doctor, the original is mailed to the funeral home. Over the years the death certificate forms have changed.

Presently, the office issues death certificates for Jackson, Clay, Platte, and Cass County. These death certificates are required by state law to be done electronically (on-line) by the Funeral Homes, Certifying Physicians and Medical Examiner/Coroners, who have been trained by the state. At this time, only 50% of the death certificates are done electronically, but this should

increase once more funeral homes receive their training by the state. The electronic death certificate has improved the efficiency of the process of death certification allowing families to receive the completed death certificate sooner, reduces the number of errors and ensures proper cause and manner of death completed by the Medical Examiner/Coroner.

A History of Recording Deaths and the Coroner/Medical Examiner System

In 1812, 5 original territories formed to make up the State of Missouri: Cape Girardeau, St Louis, New Madrid, St Genevieve, and St Charles. As pioneers moved westward in the 19th century, the Missouri General Assembly declarations authorizing county formations occurred throughout the state. On December 15, 1826 the General Assembly of the State of Missouri declared Jackson County Missouri as a county. Prior to the adoption of the current County Charter in 1970, the governing body in Jackson County, Missouri, was called the Jackson County Court, a form of County government that dates back to Jackson County's formation on December 15, 1826. The County Court consisted of a legislative panel of three individuals popularly elected. Each one's title was "County Judge," which is like a county commissioner common in other areas of the country. Coroners were elected in each county. This system remained in place until 1970 for Jackson County until the Home County Charter was voted in. Information regarding Jackson County death records in Missouri was obtained from the Jackson County Historical Society, Missouri Digital Heritage and at local libraries. In Jackson County Missouri, the oldest government city or county record of death in Jackson County is found in the Jackson County probate record #1 dated September 12, 1828. On that date, Jackson County Clerk Samuel Owens, entered into permanent record, the probate record of decedent Baronette Vasques. The record was initiated by his widow Emily F. Vasques. There is no location of death, no stated date of death, time of death or cause and manner of death in the county probate record. There were no legal documents required for proof of death. This is the earliest form of county/city government documentation that a death had occurred in the county.

Government records of death in Jackson County include registry books listing deaths within rural Jackson County and the city limits of Kansas City, MO and Independence, MO. The registry books were maintained by each city and the county maintained a separate a "Death Registry from 1883-1891.

In Kansas City, the 2 registry books were simply called the "Record of Deaths, Kansas City Missouri", "Book A" (August 3, 1874 – July 31, 1889) and "Book B" (August 18, 1889 – December 31, 1898). The lists in Book A of the Kansas City register totals 14,470 names while the total names in Book B is 17,338. The first decedent listed in "Book A" was "Levi Howard who died on August 3, 1874 at the corner of 14th & Main Street.

Brief History of Vital Records in Missouri

In 1883, the Missouri General Assembly enacted legislation providing for the Board of Health to have supervision of the statewide registration of births and deaths. This supervision amounted to prescribing "such forms and recommending such legislation as shall be deemed necessary for

a thorough and complete registration of vital and mortuary statistics through the state." The State Board of Health was charged with preparing printed forms of certificates of births and deaths; these were to be provided to the clerks of the various counties and it was the duty of the county clerks to furnish the printed forms to the persons required to file birth and death reports. The law required the recording of births and deaths at the county level.

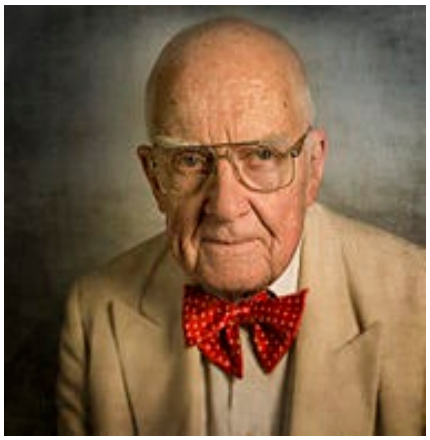
This law did not make the reporting of all births and deaths mandatory. Due to non-compliance from 1883 through 1893, the General Assembly repealed the statutes relating to the registration of births and deaths in Missouri in 1893. Most counties do have these registers, but there is enormous variation as to how complete and/or comprehensive they are.

It was not until 1910 that the General Assembly again provided for the registration of births and deaths on a statewide basis. Approved May 6, 1909, the act was to "provide for the immediate registration of all births and deaths throughout the state of Missouri by means of certificates of births and deaths and burial or removal permits; requiring prompt returns to the central bureau of vital statistics at the capital of the state, as required to be established by the state board of health, and to insure the thorough organization and efficiency of the registration of vital statistics throughout the state, and providing certain penalties." Pursuant to this 1909 law, all births and deaths that occur in Missouri are reported to the Missouri Department of Health and Senior Services. The Bureau of Vital Records maintains these birth and death records.

No vital records were kept on the state level before 16 August 1909. The Bureau of Vital Statistics at the Missouri Department of Health and Senior Services, Bureau of Vital Records in Jefferson City, MO maintains certificates of Missouri deaths less than fifty years old.

In 1970 the voters of Jackson County adopted a Constitutional Home Rule Charter for the County, establishing a County Executive position and the County Legislature. The heart of the Charter is a strong-elected Executive, accountable to all the voters, who has the power to appoint the administrative officers of his government, the power to veto legislation, and both the responsibility and the means at hand with which to operate an effective, efficient County government. The County Executive is allowed to appoint administrative officers (department heads) of each department. The medical examiner is appointed in such a manner.

History of Coroners & Medical Examiners Serving Jackson County



Dr. Charles B. Wheeler Jr.
Coroner
1965-1966

Dr. Charles Wheeler was the first Jackson County Coroner with forensic pathology training and served for 2 years from 1965-1966. Dr. Wheeler attended medical school at KU Medical Center from 1946-1950. He completed his internship at Charity Hospital in New Orleans, LA in 1951. He did his pathology residency at St. Luke's Hospital in Kansas City, Missouri from 1953 to 1955. He received his forensic pathology fellowship training at the University of Maryland in Baltimore and studied under Dr. Russell Fisher from 1955-1956. Wheeler is an American Diplomat of the Board of Pathology, certified in Anatomic, Clinical, and Forensic Pathology. Dr. Wheeler was the laboratory Directory for KC General Hospital from 1957 to 1963.

Dr. Wheeler's administrative office was located in the basement of the Jackson County courthouse while autopsies were performed in the pathology department of General Hospital located a few blocks away. Dr. Wheeler was also the Associate Pathologist and Director of Laboratories at Kansas City General Hospital at the same time he served as coroner of Jackson County. According to Dr. Wheeler, prior to coroner autopsies being performed at the General Hospital, the autopsies were performed at local funeral homes in the metropolitan area. Staffing at the medical examiner's office consisted of (2) clerical staff and himself. An autopsy assistant was not on his staff, but was borrowed from the pathology department at General Hospital. During Dr. Wheeler's term, the city experienced an enormous amount of mafia related homicides including bombings at the River Quay – River Market area of Kansas City. In 1967, Dr. Wheeler was elected as Judge of Western district of Jackson County Court until January 1971. He also served as Mayor for 2 terms and State Senator from 1971 to 1979. He was the recipient of the American Medical Association's Rush Award (1971), The University of Missouri-Kansas City Lifetime Achievement Award (1984), and the Kansas University Medical Distinguished Alumnus Award (1997). Dr. Wheeler was very influential in changing the county statues in 1970 allowing appointed medical examiners to serve in Jackson County. He currently resides in Kansas City, Missouri.



Dr. Andrew McCanse
Coroner
1967 – 1968

Dr. McCanse was the Jackson County Coroner from 1967 until 1968. He graduated from North Kansas City High School in 1945. He completed his medical degree at Washington University in St. Louis and obtained 3 degrees from the University of Missouri where he was a member of Sigma Chi. Dr. McCanse died July 21, 2012.

Coroner
1969 – 1972

Dr. Bryan served as Jackson County Coroner from 1969 until 1972.



Bonita J. Peterson
Chief Medical Examiner
1973-1989

Dr. Bonita Peterson was the first medical examiner appointed by the county executive in 1973 and the second forensic pathologist to work for Jackson County. Dr. Peterson attended medical school at Columbia University in New York City from 1950-1954 and did her one-year internship at the University of Kansas Medical Center in Kansas City, Kansas. She attended the Armed Forces Institute of Pathology (AFIP) in Washington, DC for 4 years of pathology residency. She received one year forensic pathology training at the Medical Examiner's office in Baltimore, Maryland.

In 1973, the Jackson County Medical Examiner's Office was located in the basement of the General Hospital at 2315 Locust in Kansas City, Missouri until they moved across the street in 1976 to Truman Medical Center-West at 2301 Holmes, Kansas City Missouri. Staffing at the medical examiner's office consisted of one pathologist, one autopsy assistant, one clerical and one assigned KCMO Police Detective.

Dr. Peterson took calls 24 hours a day, 365 days a year beginning her day at 6 a.m. She worked as the Chief Medical Examiner and the only forensic pathologist covering the metropolitan Kansas City area for 16 years. There was no "data base" and the filing system was maintained on index cards. Much of the case file consisted of hand written notes. According to a newspaper article published in 1981, "the intense pace and responsibility that Dr. Peterson must keep, is more than most medical examiners must deal with. In 1979, an evaluating team from the National Association of Medical Examiners came to examine the conditions under which this medical examiner must work. What they found was that she was overworked, understaffed, and without the laboratory facilities provided to most examiners in her position. Some large cities like Chicago and New York have 20 medical examiners. Dr. George Gantner, a

member of the evaluating team, suggested that Dr. Peterson obtain one assistant, at the very best."

During her service at Jackson County, there was a 5 year period where one disaster a year occurred in Jackson County Missouri. In 1977, a flood claimed the lives of several residents in the Kansas City, 1978 - the Coates House Hotel Fire in Kansas City occurred claiming 20 lives, 1979 - Kansas City Mortuary Service abandoned 32 bodies dating back to 1977, 1980 - heat related deaths accounted for 157 deaths in Kansas City, 1981 – The Hyatt Skywalk collapse claimed the lives of 114 people.

The JCMEO is very grateful for her many years of dedicated professional forensic service to the Kansas City area. She was indeed a pioneer woman who, with limited resources, cleared the path for those who followed in the forensic pathology field. Dr. Peterson continues to do consulting in forensic pathology and resides in Kansas City, Missouri.

John C. Overman, M.D.
Chief Medical Examiner
1990-1993

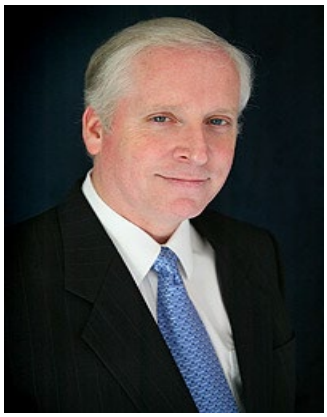
John Overman, M.D. served as the Jackson County Medical Examiner's Office beginning on 7-01-1986 until 10-29-1993. Dr. Overman was a graduate of the UMKC School of Medicine 6 year program. He attended college and medical school from 1976 – 1982 and received his medical degree from UMKC. His residency training in Pathology was from the University of Kansas Medical Center, Kansas City, Kansas. He was certified in anatomic and clinical and forensic pathology by the American Board of Pathology. He served as Staff Pathologist at Truman Medical Center from 1987-1993. He was appointed Clinical Assistant Professor at the UMKC School of Medicine in 1987. In 1991 he became Clinical Associate Professor at the UMKC Medical School. The following year Dr. Overman was appointed Clinical Associate Professor at the University Of Kansas School Of Medicine. He authored articles published in the ``Annals of Clinical and Laboratory Science'', and the ``Journal of Forensic Science''.

Dr. Overman was appointed Chief Medical Examiner in 1990. Prior to April of 1991, the medical examiner's office had a staff of 5 personnel, 1 - Chief Medical Examiner, 1 – Deputy Medical Examiner, 2 – Clerical Staff and 1 – Autopsy Assistant. The death scenes were investigated by law enforcement. After his appointment as Chief Medical Examiner, Dr Overman accomplishments included expanding the office staff to acquiring a team of 6 death investigators for a total of 11 forensic staff. The medical examiner death investigators conducted scene investigations, photograph death scenes, take custody of the body, examine the body, interview witnesses, bystanders, family members and others, write investigative reports, perform body exams, gather medical records, coordinate release of the bodies to funeral homes and other jobs as needed. In 1990, computerization of case files began under Dr. Overman's leadership. In 1992, the medical examiner's office was first accredited by National Association of Medical Examiners (NAME). During his years of employment in JCMEO, Dr.

Overman handled many high profile cases, including several serial murder cases in the Kansas City area. Dr. Overman relocated to Hutchinson, Kansas where he worked as a coroner for Reno County and performed forensic autopsies. Dr Overman died accidentally in 1997.

Brij Mitruka
Chief Medical Examiner
1993-1994

Dr. Mitruka served one year as the Jackson County Medical Examiner from 1993 until 1994. He was a clinical staff pathologist at Truman Medical Center – West in Kansas City Missouri.



Dr. Thomas Young
Chief Medical Examiner
1995 - 2006

Thomas Young was appointed Jackson County Chief Medical Examiner on 7/10/1995. Prior to coming to Jackson County, Dr. Young worked as a Associate Medical Examiner, Fulton County Atlanta, Georgia from July 1989 - June 1995 at the Fulton County Medical Examiner's Office in Atlanta, GA. Dr. Young attended Medical School at Loma Linda University School of Medicine, Loma Linda, California from September 1977 - November 1980. His Internship and Residency in Anatomic and Clinical Pathology was from Loma Linda University Medical Center and Jerry L. Pettis Memorial Veterans Administration Hospital in Loma Linda, California from January 1981 - December 1984. Dr. Young's Fellowship in Forensic Pathology was from the Office of the Medical Examiner, Fulton County (Program affiliated with Emory University, School of Medicine) in Atlanta, Georgia from July 1988 - June 1989.

Dr. Young expanded the medical examiner services to other surrounding counties providing revenue for Jackson County and creating a regional MEO resource. From 1995-2004 three surrounding KC metropolitan counties contracted with Jackson County to provide complete death investigation and medical examiner services. Other counties referred cases for autopsy services only. In 1997, construction contracts for office space at 660 E. 24th St, KCMO were awarded. In August of 1997, Dr. Young and Investigator, Tom Hensley, were deployed to Guam

to assist in the Korean Airline Crash as members of the mass fatalities team, Disaster Mortuary Operations Response Team (DMORT). In 1998, the office relocated to a 4500 square foot office at 660 E. 24th St, Kansas City, MO. In 1999, the office purchased a vehicle for investigators to respond to scenes. Also that year an Alternate Light Source was purchased for evidence detection. In 2000, JCMEO contracted with the Missouri Department of Corrections to perform autopsies on inmates for half the states prison facilities. On July 4, 2004, Legislators approved funding to expand the office space to approximately 9000 sq ft. In 2005, the renovation project was completed.

Dr. Young became a member of NAME in 1991 and gave 3 presentations at the annual NAME meetings. The JCMEO was reaccredited twice by NAME in 1999 and 2004, while Dr. Young served as Chief Medical Examiner. Dr. Young also started the ACGME accredited Forensic Pathology Fellowship Program in 2002.

Dr. Young's forensic staff grew from 11 to 15 full-time employees including 6 Death Investigators, one Chief Investigator, 3 clerical staff, one Chief Medical Examiner, one Deputy Medical Examiner, one Forensic Fellow, and two Forensic Assistants during his 10 ½ years as Chief Medical Examiner. Dr. Young resigned in 2006 and resides in the Kansas City area.

Medical Examiner/Coroner Facilities History



General Hospital
2315 Locust Kansas City, MO
1965 – 1976

Dr Wheeler – Coroner, had his administrative office at the Jackson County Courthouse but conducted autopsies for coroner cases at the General Hospital #1, 2315 Locust in Kansas City Mo from 1965 until 1976.



Truman Medical Center West (TMC-W)
2301 Holmes Kansas City, MO
1976 – 1998

While Dr Bonita Peterson was chief medical examiner in 1976, the medical examiner's office moved from General Hospital #1 to the Truman Medical Center - West Hospital and remained there until 1998.



Jackson County Medical Examiner's Office
660 E. 24th Street Kansas City, MO.
1998 – Present

In 1998 while Dr Thomas Young was chief medical examiner, the medical examiner's office moved from across the street at TMC-W to the Truman Hospital Diagnostic and Treatment Center and Children's Mercy Hospital complex on Hospital Hill. Hospital Hill is a neighborhood in Kansas City, Missouri. The neighborhood is located between 22nd Street to 25th Street and Gillham Road to Troost Avenue. This name reflects not only the geography on which the buildings rest, but also a history of public hospitals on the same site dating back to 1870. Hospital Hill grew in concordance with the construction of local hospitals, and was further populated as the University of Missouri–Kansas City School of Medicine was established. Truman Medical Center-Hospital Hill and Children's Mercy Hospital, Kansas City Missouri Health Department, along with the University of Missouri – Kansas City schools of medicine, pharmacy, nursing, and dentistry, are located on the Hospital Hill campus.

County Medical Examiner's Office Described As A 'Model' For Others



MAY 20, 2009 (Kansas City, Missouri) Jackson County News Release

Jackson County has a Medical Examiner's Office that could serve as a "model" for others in the nation. The National Association of Medical Examiners (NAME) reached that conclusion after finding no deficiencies while inspecting the County Medical Examiner's office earlier this year.

Dr. Jeffrey M. Jentzen, Chairman of NAME's Inspection and Accreditation Committee, personally conducted the Jackson County Inspection January 29. The former Chief Medical Examiner from Milwaukee, Wisconsin, returned to Kansas City on Monday to present Jackson County's Chief Medical Examiner, Dr. Mary Dudley, the official NAME accreditation certificate during the regular weekly meeting of the County Legislature.

The Jackson County Medical Examiner's Office is now one of approximately 60 from across the nation to earn NAME accreditation. The NAME inspection involves an office's administration, facilities, safety, records keeping, autopsy reports and performance improvements.

"This accreditation assures we're meeting the highest standards set by our peers," said Dr. Dudley. "The medical examiner community is most likely moving towards mandatory accreditation, so this puts us ahead of the curve – especially being cited as a model for other medical examiner offices in the country."

Dr. Dudley thanked her forensic and administrative staffs for their two-year effort to prepare for the NAME inspection. County Executive Mike Sanders praised Dr. Dudley and her staff for their professionalism in achieving this national recognition. "Our Medical Examiner's Office, under Dr. Dudley's leadership over these last two years, is not only meeting the highest standards but is exceeding them," Sanders said. "With NAME calling it a 'model office,' I would also have to say that our Medical Examiner's Office is now helping to set the standards."

When calling the Jackson County Medical Examiner's Office a "model," the NAME inspection report especially praised the office's interaction with its community partners, including law enforcement agencies, health departments, donor networks and hospitals.

New York – New York City OCME

History of the NYC Office of Chief Medical Examiner

Accessed from the office web site
http://www.nyc.gov/html/ocme/html/about/about.shtml

April 2016

The Office of Chief Medical Examiner of the City of New York ("OCME") was established in 1918 pursuant to a 1915 Act of the New York State Legislature. In addition to being the first governmental agency of its type in the United States, OCME established the first toxicology laboratory in 1918 and the first serology laboratory in 1938, both at Bellevue Hospital in Manhattan.

In 1933, New York University established the first Department of Forensic Medicine in the country. Since that date, Medical Examiners at OCME have held faculty positions in NYU's Forensic Medicine department.

OCME's administrative offices were in the Municipal Building from 1918 to 1934, and at 125 Worth Street from 1934 to 1960; autopsies were performed at Bellevue Hospital and other borough municipal hospitals during those years. In 1960, OCME's six-story headquarters at 520 First Avenue (northeast corner of First Avenue and 30th Street) opened on land provided by New York University, adjacent to NYU Medical Center.
In 1968 the Institute of Forensic Medicine of New York University and the City of New York was created; in 1977 the Institute was named after the late Milton Helpern, Chief Medical Examiner from 1954 to 1973. The Institute is comprised of OCME, the New York University School of Medicine, and the New York University College of Dentistry. OCME's headquarters at 520 First Avenue houses executive offices, the mortuary, autopsy rooms, X-Ray/photography facilities, as well as toxicology and histology laboratories.

In February 2007, OCME opened the OCME DNA Building located at 421 East 26 Street (east of First Avenue), which houses state of the art Forensic Biology laboratories, as well as OCME's Administrative unit and Evidence facilities including a forensic garage to examine vehicles for forensic evidence.

http://www.nyc.gov/html/ocme/html/about/about.shtml Accessed April 2016

Ohio – Cuyahoga County (Cleveland)

History of the Cuyahoga County Coroner/Medical Examiner's Office
Cleveland Ohio and Suburbs



Elizabeth K. Balraj MD

November 2017

Looking back into the history of death investigation in Cuyahoga County one can observe the gradual transition of this very important task from the coroner system to the present day medical examiner system. This has been a very slow but amicable process. Many bright, talented, highly dedicated and caring Individuals contributed to achieve this. Cuyahoga County is grateful to these individuals from the past and the present for their valuable contribution.

We will now explore the development of death investigation in the state of Ohio which includes Cuyahoga County.

It is believed that William Penn, founder and Governor of Pennsylvania appointed the first Coroner in the American Colonies in 1682. This appointment was made when a dead body was found in the banks of a river in Pennsylvania. Coroner was instructed to investigate the facts concerning the death proceeding in the same manner as was customary in England except that the property of the dead person was to be held in trust for their heirs.

The Coroner in Ohio

A 1788 North West Territory ordinance provided for the appointment of a coroner for each county to serve a term of two years. Such appointments were made by the Governor. The duties of the coroner included holding inquest over the bodies of all persons found within the county who were believed to have died by criminal violence or causality.

The constitution of the state of Ohio enacted in 1802 provided that the coroner should be elected in each county to serve for a term of two years. A statute enacted in 1805 stated the duties and authority of a coroner and provided for remuneration on a fee basis. In 1831, state

legislation directed the coroner to return his findings in an inquest to the clerk of Common Pleas. For example, reports of such cases dated from Oct. 20th, 1833 are on file in the Cuyahoga county coroner's office. The first administrative county offices elected in the county of Cuyahoga were the county commissioners, the Sherriff and the coroner. They were inaugurated on May 1st, 1810.

Constitutional changes enacted in 1851 and 1912 did not affect the office of the coroner. Not until 1921was the coroner empowered to perform autopsies and then only upon authorization by the county prosecutor. In the same act the coroner was granted discretionary powers toward holding formal inquest, and was directed to investigate death supposed to have been caused by unlawful are suspicious means. In the same year a bill was enacted requiring that in counties with a population of 100,000 or more, no person should be eligible for election to the office of the coroner except a physician of good standing in his profession. Dr. A P Hammond MD was in office since January, 1921. By all accounts he was considered a coroner who did his best especially in view of the antiquated condition in which the work was being performed in Cuyahoga County. In 1937, the same qualifications for eligibility were established for coroners in all 88 counties in Ohio. In 1936, the term of office was increased to four years. In 1945 the statute governing the office of coroner were revised to the extent that the Ohio law in this respect is now considered a model for providing modern medico legal investigation in a democracy. Some of these revisions include: specific definition of duties and authority, remuneration by salary rather than fees for all coroner, authorizing a plan whereby coroner in counties without established pathological services may obtain same from counties with such facilities at a fee commensurate with actual cost of time and material used.

The Coroner and Medicolegal investigation

The coroner is charged by law with the responsibility of determining the cause, mode and manner of death. The determination of the anatomic cause of death is a medical aspect while a legal interest is all inclusive and requires that all factors of causation, the mode and manner as well as the anatomic cause of death be established. The two aspects are so inter-related that they cannot be separated: therefore, equal consideration must be given to the medical and legal phase of investigation. This requires a specialized discipline correlating knowledge of law and medicine in a medico legal investigation.

Some of the following information is obtained from Dr Alan Moritz's recording. He was very familiar with the Cuyahoga County coroner's office. In 1926 Raymond Moley wrote in the Missouri Crime Survey, "The coroner's office is a product of medieval conditions and has changed very slightly in functions during the centuries in which it has existed in England and America". According to Dr. Moritz the same could have been said of the Cuyahoga county coroner's office in 1927.

In 1927 Dr. Moritz was Pathologist-in charge at the old Lakeside hospital on Lakeside Ave., and E.12th St., (the current University Hospital on Euclid and Adelbert Rd). At that time the

Cuyahoga county coroner's office was roughly five minutes' walk away from him. Because of his proximity plus the fact that Dr. Moritz would come without charging a fee, had the coroner to invite him over, whenever he had a "Cause and manner of death" problem that might get him into trouble if his medical evidence was as shaky as it would inevitably be if he did not get help. Until 1921 any citizen was eligible to run for office of county coroner. After 1921 in all counties having a population of 100, 000 or more only licensed physicians was eligible to hold the office of coroner. The same bill empowered him to perform autopsies, if authorized by the county prosecutor, the results of which he must also report to the clerk of common pleas court.

In 1927, a bill was passed which set the salary of the coroner at $6000 per year in all counties having a population of 400.000 or more. In 1929 a bill was voted which empowered the coroner to appoint a pathologist to serve as deputy coroner and to perform autopsies. In1936, the term of office of the coroner was changed from two to four years.

The date that marked the beginning of the reorganization and modernization of the Cuyahoga county coroner's office, that took it out of the eighteenth century and placed it in the twentieth century was, 1936. That was the year that Dr. Samuel R Gerber, at the urging of some prominent citizens in the county, filed for and was elected to the office of coroner of Cuyahoga County, a position he held for approximately fifty years. He started with a part-time pathologist, a part time tissue technician and a borrowed microscope and microtome in a building that was constructed to serve as a county morgue and nothing else. Analysis of materials for poisons was performed by the city chemist in the Health department laboratories. Much of the laboratory and secretarial work was done gratuitously by the Mt. Sinai hospital.

Every year there after the service has been significantly improved. Despite limitations in space, equipment and personnel, the Cleveland Coroner's office pioneered in the studies of the role of alcohol in traffic accidents, with Gerber serving in the National Safety Council's committee on chemical tests for intoxication. Diagnostic x-ray equipment was installed in 1944 and was used effectively in helping to identify otherwise unidentifiable bodies in the catastrophic East Ohio Gas Accident in 1944. Gerber has been the principal instigator of modernization of Ohio Coroner's statutes allowing the Coroner the right to investigate any death when it is anticipated that further medical knowledge will be required in the interests of public safety.

In 1946, a bond issue of $395,000 was approved for the construction of a new Coroner's Office and Laboratories. It took three years to reach agreement to build it on Adelbert road between the Institute of Pathology and the Law School, and adjacent to the Medical school in a location strongly supported by the Academy of Medicine, the Bar Association and the Press. By that time, the building costs had increased so as to require almost twice the amount of the original bond issue. The eventual cost of the building was approximately $700,000.

Gerber while neither a pathologist nor a toxicologist was well aware that a high level of professional competence in both areas was essential if the coroner's office was to discharge the quality of public service that he required of it. The School of Medicine was more than willing to

give him support in the recruitment of key personnel.

Shortly after the Coroner's office moved into the University Circle location, the Law Medicine Center of Western Reserve University was established under the direction of Professor Oliver Schroeder of the Law School, with the collaboration of Dr. Alan Moritz of the Institute of Pathology and Dr Samuel Gerber. The center organized non-credit courses dealing with medical and legal matters of concern to police and with application of medical knowledge to the administration of justice.

Within a short time, Gerber with the support of the county commissioners, recruited Dr. Lester Adelson, Harvard trained Forensic Pathologist as chief Deputy Pathologist and Deputy Coroner, and Dr. Irving Sunshine, a New York university trained Toxicologist as Chief Toxicologist. Gerber was fortunate in having already recruited M/S Mary Cowan as Technologist-In-Charge of the Trace Evidence Laboratory. All three as well as Dr. Gerber were appointed to the faculty of the University.

Both Adelson and Sunshine have made many contributions through research activities in their respective fields. Both have written important nationally recognized texts and reference books. Dr. Adelson's text book, The Pathology of Homicide is highly respected and used by many forensic pathologists even as of today. Both were promoted to full Professorship in Forensic Pathology and Toxicology respectively.

When Dr. Gerber took office in 1937, there were a total of 11,675 deaths in Cuyahoga County, 2,009 of which of was reported to the coroner's office for investigation. Autopsies were performed in 248 of these, 100 were deaths by homicide. In 1973 there were 17,234 deaths, 4228 of which were reported to the coroner's office for investigation. Autopsies were performed by the staff of the coroner's office in 1581, of these 327 were homicides. The building constructed in 1950 had become totally inadequate to house the staff required for the huge work load and in late 1975, construction began to expand this building, which nearly doubled its size.

Because of the nation-wide recognition of the quality of this office, it was deluged with visitors and with persons seeking training in toxicology and forensic pathology. By then 13 pathologists had taken one or more years of training to become eligible for certification by the American Board of Pathology. 126 physicians, lawyers or Police officials from foreign countries had visited these laboratories for varied periods of time. 27 toxicologists had received training in Irving Sunshine laboratory.

Samuel R. Gerber M.D was born on 22nd, Aug. 1898 and died on May 16th, 1986. He graduated from the Cincinnati Eclectic Medical College in 1922. In 1949 he graduated from the Cleveland Marshall Law School. He served on the faculty of the medical school of Western Reserve University. He was elected coroner of Cuyahoga County in 1937 and resigned on 15th, Dec. 1986. During his tenure he investigated 10s of 1000s of cases among those were the torso

murder case, the east Ohio gas deaths and the Sam Sheppard case.

He was one of the founding members of the Ohio State Coroner's Association, The International Association of Coroners and Medical Examiners and The American Academy of Forensic Sciences. He was an active member of many other local and national organizations.

For the 50 years or more there have been many studies by national organizations on the offices of county coroners, and almost without exception, they have concluded that the incumbent of this office should be selected under some form of the merit system, rather than election on a partisan political ballot. The Cleveland experience shows that it is possible, through a partisan political procedure, to select and retain in office a Medico Legal Official of high quality. There is little doubt but that Gerber's Political acumen, in addition to his professional Competence has been a most valuable asset in gaining the financial support that was required to run his office. Dr. Moritz remarked it will be interesting to see whether Dr. Gerber's successor will achieve office because of special medical legal competence or for partisan political consideration.

Dr. Samuel Gerber's successor was Elizabeth K. Balraj M.D. She was appointed Coroner of Cuyahoga County in May 1987 by the Cuyahoga county Democratic party. She was a Board Certified Forensic Pathologist with no political connection or background. She was born on February 11th, 1939, in Salem, India. She studied at the Women's Christian College Hospital in Vellore, India to become a medical doctor and surgeon. Upon immigrating to the United States of America in 1966, Dr. Balraj worked in Anatomic Pathology at Akron General Hospital, Akron, Ohio and St. Luke's Hospital, Cleveland, Ohio. She did her Fellowship in Forensic Pathology at the Cuyahoga County Coroner's Office in 1972. She is board certified in Anatomic Pathology and Forensic Pathology.

In 1972, Dr. Balraj began her work in the Cuyahoga County Coroner's office as a Deputy Coroner and Pathologist. In 1987 she was appointed Coroner of Cuyahoga County after the retirement of Samuel R Gerber MD. When she assumed the position of Coroner her salary was reduced by approximately 50% because the elected coroner was at that time paid approximately $35,000/= per year while a Deputy coroner in Cuyahoga county was paid approximately $65,000/= per year. She strongly believed that being the coroner was a public service to the community. Dr. Balraj was elected coroner of Cuyahoga County on November 1st, 1988 and was re-elected continuously for the next twenty years. On July 31st, 2007, she resigned from the position of coroner and served the next three years as Deputy Coroner. She retired in 2010. Dr. Balraj is the first woman ever to be elected coroner of Cuyahoga County. She is also the first coroner of Cuyahoga County with board certification in forensic pathology.

During her tenure as coroner, Dr. Balraj continued to maintain the excellent standards for the office that Dr. Gerber had set, and she worked hard to build on it and enhance it. She held faculty appointment in Case Western Reserve University. Along with her staff she instructed students in Case Western Reserve University School of Medicine. She was Director of the Forensic Pathology Fellowship training programme at Cuyahoga county coroner's office which

upon her retirement she handed over to Dr. Joseph Felo who is carrying on this work in an excellent fashion. Her other academic involvement include membership in the Cleveland Society of Pathologists, The Cleveland Academy of Medicine, and The Ohio State Coroner's Association. She is the past Coroner's association President and chairperson of the Board of Directors of The Ohio State Coroner's Association. She was also a member of the Board of Directors of The National Association of Medical Examiners.

After acquiring an excellent and highly respected office from Dr, Samuel R. Gerber, former Coroner of Cuyahoga County, Dr. Balraj maintained that quality of excellence and enhanced it. Dr. Balraj is credited with moving the Coroner's office to the 21st, Century. Among her accomplishments are acquiring a state of the art building for the Coroner's office, providing the latest technology and equipment for the Toxicology and trace evidence Dept., establishing the DNA department, setting up a digital photography dept., computerizing the entire Coroner's office and establishing a grief counseling program for the families of the bereaved. Under her leadership, the Cuyahoga Coroner's office, toxicology and Crime laboratory became ASCLAD certified. She is also responsible for establishing the parentage dept., in the Coroner's Office. She also co-operated and worked very closely with the LifeBanc which is the Organ donation dept., of Cleveland. She was actively involved in multidisciplinary review of Sudden Death in children and Domestic violence involved deaths.
Many highly respected Forensic Pathologists spent the early years of their career at the Cuyahoga County Coroner's Office. Some of those individuals are Dr. Charles Hirsch, Dr. Ross Zumwalt, Dr. Elizabeth Balraj, Dr. Robert C. Challener, Dr. David Dolinak, to name a few. Some of these individuals worked with Dr. Gerber and some with Dr. Balraj. Forensic Pathologists and Toxicologists who trained in this office have worked in Ohio and elsewhere in other states all over the country and a few outside the country. Most of these individuals were board certified and some of them qualified by experience. Example of those individuals (this list is by no means complete) Dr. Stan Harris, Dr. Donald Reay, Dr. Robert Huntington, Dr. Patrick Fardell, Dr. Elizabeth Balraj, Dr. Kristen Rolf, Dr. Heather Raaf, Dr. Mary Gilliland, Dr. Jan Gorniak, Dr. Ken Gersten, Dr. John Daniel, Dr. Krista Timm, Dr. Robert Challener, Dr. Joseph Felo Dr. Erica Armstrong, Dr. Andrea McCollum, Dr. Daniel Galita, Dr. Srinivasa Murthy, Dr. Stanley Seligman, Dr. Carlos Santoscoy, Dr. Khalil Jiraki, Dr. Stela Miron, Dr. Martha Steinberg, Dr. Jehuda Hiss of Israel and in Toxicology, Dr. Craig Sutheimer, Dr. Brad Hepler, Ph.D., Mr. Eric Lavins and several others.

In 1999 Cuyahoga County Coroner's office moved from 2121 Adelbert Rd., at the university circle to a state of the art building located at 11001 Cedar Ave., also in the university circle. This building is strategically located in the University Circle between University Hospital, The Medical School and The Cleveland Clinic Campus. The Law School is also located close by. The new coroner's office is a six-storied building with 20,000 to 22,000 sq. ft. space in each floor. This building stands on approximately three-acre land with ample parking space and it was worth almost 6 million dollars in 1999. As a result of careful and patient negotiation very little of this cost was borne by the County. This building is now owned exclusively by Cuyahoga County. We owe a debt of gratitude to the three Honorable County Commissioners, Mary

O'Boyle, Timothy Hagan and Lee C. Weingart (for approving this project), and to their administrator and to Mr. Berj Shikarean (county Architect for designing this building) and Mr. George Geletka (Coroner's Administrator) for working closely with Dr. Balraj during the building renovation and for supervising and successfully completing the move. A big share of gratitude goes to M/S Farrah Walters President and CEO of University Hospitals of Cleveland Ohio and to Mr. James McMonagle, Vice President of University Hospitals for their participation, leadership and co-operation in seeing this project successfully completed. Thanks also goes to Dr. Jack Carter, Director of Institute of Pathology, University Hospitals of Cleveland, Ohio for his interest in acquiring the new facility for the Coroner.

In the year 2007, Dr. Balraj resigned from the position of Cuyahoga County Coroner. She served another three years as Deputy Coroner and in 2010 retired after expressing her gratitude to all of her staff for their hard work and co-operation and to the citizens of Cuyahoga County for giving her the opportunity to serve them for thirty-eight years.

The following individuals deserve to be mentioned in appreciation of their valuable contribution to the Cuyahoga County Coroner's Office:

Dr. Alan Moritz. He was in charge of the Pathology department of The University Hospital of Cleveland. He was a highly respected pathologist in USA. He gave his support on a voluntary basis to help the coroners before Dr. Gerber was elected to office and he helped Dr. Gerber during his tenure. He was responsible for bringing Dr. Lester Adelson to the Cuyahoga County Coroner's Office.

Mr. Paul Corey and Mr. David Corey Executive Directors of The Ohio State Coroner's Association. They were instrumental in working with Dr. Gerber and Dr. Balraj and other Coroner's in Ohio to bring about vital legislative changes relating to the Office of the Coroner.

Dr Amanda Jenkins, Chief of Toxicology Department. She was responsible for getting the Toxicology Department ASCLAD certified.

M/S Linda Luke In Charge of the Trace Evidence and DNA Department. She was responsible for starting The DNA and The Parentage Departments. She also was responsible for getting her department ASCLAD certified.

Dr. Ronald Cechner. He wrote the entire Computer program for the various departments of the coroner's office. He along with M/S Bhavna Patel trained all the coroner's staff to use these programs.

Mr. James Wentzel completely digitalized the Photography Department.

Dr. Sandra Miller. Started and served in The Grief Counseling Department.

The Medical Examiner System in Cuyahoga County



Thomas Gilson, MD

November 2017

After Dr Balraj stepped down as Cuyahoga County Coroner in 2007, she was replaced by Dr. Frank P. Miller. Dr Miller is a native of the area and was serving as a Deputy Coroner prior to taking up the reins of the agency. In his tenure, Dr Miller expanded the role of the office in death scene investigation and also undertook the development of a regional crime laboratory. The discovery of multiple homicide victims in a home in Cleveland thrust the office into the national spotlight as the crimes of serial killer Anthony Sowell drew extensive media attention. In 2010 Dr Miller hosted the National Association of Medical Examiners' Annual Meeting in Cleveland.

But 2010 also saw a continuation of troubles for Cuyahoga County, which faced a widespread corruption scandal. In response to the scandal, the citizens ultimately chose to reform the county government and a new charter was adopted. One element of the new charter was the elimination of the elected office of Coroner and its replacement with an appointed Medical Examiner, who would be required to be a board-certified forensic pathologist. Up until that point, the Coroner was required to be a physician living in the county but there were no specific requirements as to death investigation/forensic training (both Dr Balraj and Dr Miller were board-certified forensic pathologists). The new County Executive, Edward FitzGerald, commenced a national search to fill the position and selected Dr Thomas Gilson to become the county's first Medical Examiner. Dr Gilson was sworn into office in June 2011.

Dr Gilson had previously served as Chief Medical Examiner in Rhode Island and Deputy Chief Medical Examiner for the City of New York and the State of New Hampshire. He had trained in general pathology in Cincinnati and received his forensic training from Dr Charles Hirsch in the City of New York- the same Charles Hirsch who several years before had distinguished himself as a forensic pathologist in the Cuyahoga County Coroner's Office and subsequently had gone

on to become one of the office's most prominent alumni.

The creation of the Cuyahoga County Regional Forensic Science Laboratory came to fruition in the following three years with the completion of a large buildout at the Cedar Avenue facility to accommodate the addition of Drug Chemistry, Fingerprint and Ballistics units in addition to the previously established Toxicology, DNA/Parentage and Trace Evidence departments. The laboratory achieved accreditation under the ASCLD-ISO standards and re-established certification with the American Board of Forensic Toxicologists. The administration of the crime laboratory by the Medical Examiner placed the office at the forefront of best forensic practices as outlined in the National Academy of Science review of forensic sciences a few years earlier.

It was also during this time the office achieved accreditation from the National Association of Medical Examiners. This accreditation raised the bar on the quality and timeliness of service the office provided to the county. All of these efforts resulted in the office becoming one of the most accredited public sector forensic institutions in the country, which helped to restore faith in the new county government. The Medical Examiner's Office was greatly served in these undertakings by dedicated CCMEO staff, including many new faces and seasoned veteran employees. This collaboration set an optimistic tone for the office as it entered the 21st century.

Another area where the office saw rapid change was the Investigations Unit. The investigators all achieved certification with the American Board of Medicolegal Death Investigators and commenced a vigorous program to improve the quality of investigations locally, regionally and nationally. The creation of a death scene investigation training course was the culmination of several months of work and research. The course started as a local law enforcement training to best coordinate efforts between CCMEO and the various departments with whom the investigators worked. Gradually, interest from other investigators, including regional coroner offices, prompted a re-analysis of methods and objectives. Death scene was evolving into a distinct forensic entity in many jurisdictions across the country at this time. The CCMEO pooled the talents of the individual investigators to participate in this evolution. Protocols for typical scene investigations were more clearly defined and this resulted in a field manual for death scene investigation. More importantly, investigators researched learning styles that would best serve the education of their colleagues and recognized that a "hands-on" model would be ideal- the agency was ready for this development in that years before the facility had dedicated space for crime scene re-enactment. This was rapidly converted into a training space where mock death scenes were created to teach fundamental techniques in a controlled but realistic environment. In 2016 the program was awarded the Augustus Vollmer Award from the International Association of Chiefs of Police in recognition of the high quality of the program developed.

The CCMEO distinguished itself in the response to the national opioid crisis that gripped the country since the late 1990's. During a serendipitous conversation between Toxicology Analyst Claire Naso-Kaspar and Dr Gilson in 2011, Claire observed that the number of heroin deaths appeared to be rising. Looking into this further revealed a disturbing trend in which heroin

deaths were in fact rising while prescription opioid deaths, which up until that point had been driving opioid mortality, appeared to be hitting a plateau. The Medical Examiner's Office alerted the county and plunged into the public health response of what has now come to be recognized as a major, if not the major, public health crisis of the early 21st century. Through the extensive study of the overdose victims, CCMEO emerged as a critical public health partner in the development of prevention programs. Northeast Ohio's response to the opioid epidemic was recognized a model for the nation and the use of decedent information in the service of public health continued the long tradition of the office to promote the health and well-being of our community. CCMEO and its staff received awards from the National Association of Medical Examiners, Society of Forensic Toxicologists, the State of Ohio, the United States Attorney General and many local institutions for the seminal work done in response to the crisis.

The rich history of forensic science in Cuyahoga County would not possible except for many individuals, living and deceased whose efforts moved the Coroner/Medical Examiner Office forward. It is not possible to name all the principals in that undertaking but we gratefully acknowledge their work.

Oregon

History of Medicolegal Death Investigation in Oregon

Jeff McLennan and Karen Gunson

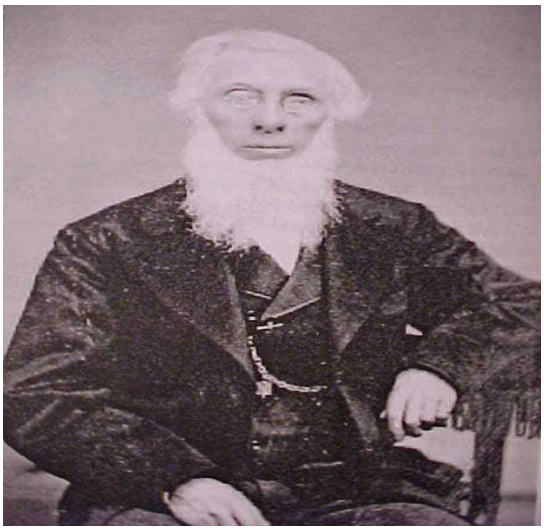
September 2013

The history of the Oregon Territory and the Oregon Trail is rich with stories of pioneer spirit and replete with frontier personalities that hold the imagination of every Oregonian, whether indigenous or transplanted to the great Northwest.

Sadly, historical references to Oregon's first death investigation system are limited to footnotes reflecting the existence of a Coroner system. The work and findings of these pioneers in Oregon's forensic sciences are reduced today to ledger style journals dating from 1894 until Oregon yielded its Coroner system to the modern day medical examiner program in 1959. While a few newspaper clippings and random photos depicting the aspects of 'high-profile-frontier-justice' remain, there is little written that speaks to the system and people who plied the realm of the dead.

Oregon's first recognized Coroner was Dr. Forbes Barkley who was elected in 1850 to serve as Coroner for the Oregon territory. He had served as a physician to the Hudson's Bay Company at Fort Vancouver in 1848-1850 but found his way to the historical end of the Oregon Trail in Oregon City in 1850. There, he was elected Mayor and Coroner and served the community as a physician. The Barkley House in Oregon City stands today as a reminder of this bygone era.

While Dr. Barkley was the first physician Coroner to be mentioned in the history books concerning Oregon, he was likely not the only frontier-minded Coroner. Oregon's death investigation system called for a Coroner in each county. Unlike the 36-counties in Oregon today, Oregon was divided into much larger geographic regions. With fewer people and larger areas to manage, the Coroner's of the first Oregon were likely a few, dedicated pioneers who saw the importance in documenting death as a necessity rather than a bureaucratic function.



Dr. Forbes Barkley served as the first recognized Coroner in the Oregon Territory in 1850. Dr. Barkley had served as a physician for the Hudson's Bay Company at Ft. Vancouver from 1848-1850. He subsequently settled in the Oregon City area where he held the elected position of Coroner as well as Mayor of Oregon City at the historical end of the Oregon Trail.

Actual accounts of death investigations from 1850-1894 are limited in the State Archives. Information is available for specific death cases but unless you are researching a particular individuals death, there is little available for public access.

Ledgers dating from 1894 to the late 1950's from the Multnomah County Coroner give a glimpse into this fascinating time in Oregon's history. In one-line, matter-of-fact terms these ledgers record who died, their age, country of origin, cause, manner and circumstances of death. There were also entries concerning whether they were examined by the Coroner or were the subject of an inquest. There is also a notation about where they were buried and who took responsibility for the burial. The ledgers include entries for the property or money with the deceased at the time of death and who was responsible for the death in cases of homicide or accident.

The first entry found in the ledger from July, 1894 is Charles Kollnier who was killed by a "blast" in some kind of accident. He was buried by friends.

In other noteworthy entries, we find causes of death defined in terms no longer found in modern medicine. These include causes listed as: Cholera, Apoplexy, Old age (80-years), Convulsions, Consumption, and Dropsey. We also find that a younger Oregon had its share of violent death too. Gunshot wounds, knife wounds and poisoning were common causes of death seen during that time. Some of the more unusual entries include: Accidentally injured by a pitchfork, runaway horse and run over by streetcar going too fast.

Historic Oregon had its share of drug problems too. While morphine seems to top the list of early drug related deaths, laudanum and illuminating gas were popular too.

One only has to review these Tombs of history to be transported to another time. You can almost see and smell the scenes as the Coroner and his deputies reduce the story of a life cut short to a single line in the ledger. Each entry is elegantly handwritten in delicate and clear

script, penned in ink with few errors or corrections; a simple journal entry that marks the passing of time and a life.

A model of progressive thinking for others to follow

Oregon, like other states and merry old England before, experienced its share of abuses from the Coroner system of death investigation. While not well documented, it is likely that Oregon's Coroners found themselves with too much power, too little oversight and too many opportunities to exploit the system to their individual benefit. While seizing the property of the accused in a murder or accident case (deodand) did not find its way to the US Coroner system, the fact that the Coroner's of America held control over the findings of the investigation (and therefore the person or company at fault in a death) the political machinery was ripe for "steering". The Multnomah County Coroner ledgers are filled with references to an individual being run over by a train operated by a specific railroad or a ship owned by a particular steam-line. It's easily deduced that these references are present for more than statistical purposes.

In any case, Dr. William Brady writes in the Willamette Law Journal of 1973, that because of abuses in the elected coroner system and the recognized need to improve death investigation throughout Oregon, the Oregon legislature approved House Joint Resolution 7 in May, 1955. This resolution would amend the Oregon Constitution by removing the county coroner as an elected position. Before the general election of 1956, the legislative committee of the 48th Legislative Assembly stated in the voter's pamphlet, "Article 6 of the Oregon Constitution requires that the Coroner be a constitutional office for whom it is impossible to provide any qualifications." The pamphlet continued, "The Oregon Supreme Court has decided that upon the basis of the present sections, the Legislature cannot provide any additional qualifications and it is now possible for one to be elected and qualified…who is not competent…Because of the technical duties which are attached to the office…of coroner…it seems desirable…that the Legislature should have free hand in fixing minimum qualifications for the office."

Brady continues…"After House Joint Resolution 7 was approved in the 1956 general election, the Oregon legislature created a special interim committee composed of nine members to "examine, study and report and make findings and recommendations to the 50th Legislative Assembly and to the Governor concerning the special qualifications which should be prescribed by law to be possessed by county coroners." This committee drafted legislation that created the first medical examiner system west of the Mississippi. By June 1963 the new system was functioning with one full-time state salaried forensic pathologist.

Meet Dr. Russell C. Henry

Born in Altus, Oklahoma, Russell C. Henry received his Medical degree at the University of Oklahoma in 1940. After interning in an emergency hospital in Washington D.C., Dr. Henry entered general practice in Coalgate, Oklahoma for four years. His residency training took him to Boston where he worked in pathology and forensic pathology at Massachusetts General Hospital and the Department of Legal Medicine at Harvard Medical School.

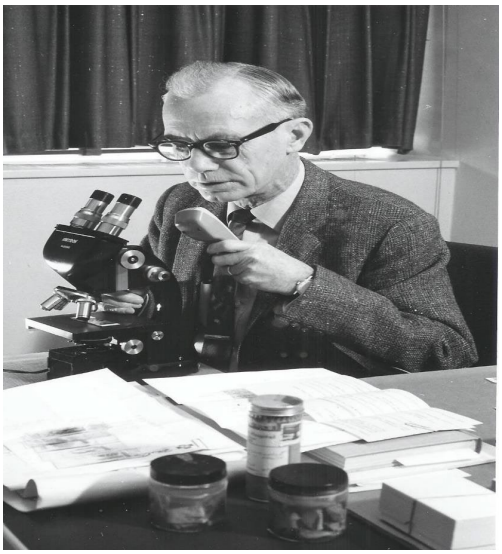
Dr. Henry was in the Air Force Medical Corps, serving at the rank of major in 1951. Dr. Henry practiced general pathology and forensic pathology in North Carolina from 1954-1961. From 1961-1963, Dr. Henry was the Assistant Chief Medical Examiner for the Commonwealth of Virginia.

In June 1963, Dr. Russell C. Henry accepted the position of Oregon's first full-time Chief Medical Examiner. During his tenure from June 1963 until December 1968, Dr. Henry averaged over 25,000 miles a year on the back roads and highways that were and are Oregon. From the mud of a murder scene to the courtrooms in every county seat in the State, Dr. Henry made a 'road-show' out of the fledgling medical examiner program.

Dr. Henry's 'facility' was composed of the trunk of his well-traveled car, which became a virtual rolling forensic laboratory. Bringing the investigation to the scene was a concept that Dr. Henry pioneered in Oregon and a process that has gained merit nationwide.

By the end of 1968, Dr. Henry had become the first *'victim'* of the now infamous term "unfunded mandate". Working alone with the help of just one full-time secretary and one part-time transcriptionist, Dr. Henry was at the mercy of those in control of the State Health Division for funding and support. Eventually, the lack of toxicology funding, proper facilities for autopsies and an uphill battle against the status quo, Dr. Henry accepted a position in the Los Angeles County Medical Examiner/Coroner's Office as Director of the Medical Division.

Dr. Henry's time in Oregon, although fraught with frustration over support and understanding, was not without its highlights. In 1967, for example, Dr. Henry received national attention when he reported on a two-year study that indicated an apparent relationship between "rainbow" diet pills and the deaths of six Oregon women. Dr. Henry subsequently testified in Washington D.C. before a Senate subcommittee investigating the diet pill promotion.
Dr. Henry was also the author of an article on death investigation for the Federal Bureau of Investigation that was circulated internationally in the official FBI publication. As an associate professor at the Oregon Health Sciences University, Dr. Henry also lectured to forensic pathology and medical students regularly.



Dr. Russell C. Henry served as Oregon's first Chief Medical Examiner from 1963-1968. Dr. Henry is credited for initiating uniform medical investigation and reporting procedures for suspicious or unusual deaths in Oregon.

Enter the 'father' of the Oregon Medical Examiner law

Although not the *first* Chief Medical Examiner in Oregon, perhaps the most colorful and influential was Oregon's *second* Chief Medical Examiner, Dr. William J. Brady. Dr. Brady served as Chief Medical Examiner from 1969 until 1985. Dr. Brady is perhaps best known as the co-author of the Oregon medical examiner law (formerly the Oregon coroner law) Oregon Revised Statute 146. Others credit Brady with 'shining a light' onto the death investigation system for prosecutors, legislators and lobbyists in order to reinforce the credibility and importance of a competent medicolegal investigation.

William J. Brady graduated from the University of Oregon Medical School in 1958. He worked as a pathologist in the New York City Medical Examiner's Office from 1963-1964. In 1965, Dr. Brady became Coroner for Multnomah County (one of the last remaining vestiges of the coroner system in Oregon after the change in Oregon law in 1958). He served as Multnomah County Coroner until 1968. In 1969, Dr. Brady closed the door on the Coroner system in the most populous county in the state and took the helm of the medical examiner system in Oregon.

Through continuous political maneuvering and well-placed allies in the legislature, Dr. Brady crafted the essential elements of the Oregon Medical Examiner law. By 1973, the vision of a county-based medical examiner program, supported and overseen by the state was finally recognized. Although the process took 18-years to accomplish, the transition from Coroner to medical examiner in Oregon moved at light speed when compared to old England and even most of the US.

The cornerstone of Oregon's medical examiner system was a substantial series of revisions to the law. From 1965-1970, every legislative session had taken a crack at making adjustments to the medical examiner law. It became clear that the law (ORS 146) lacked organization and frequently had no delegation of authority and responsibility. With the support of the Oregon

Fig. 4

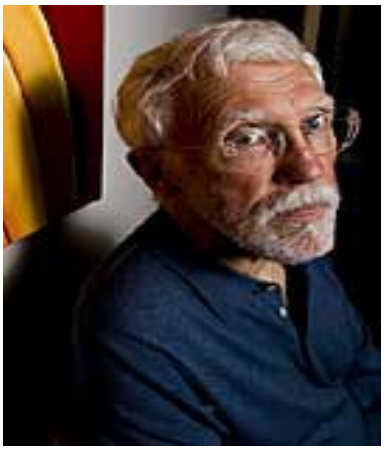
M P Dr. Russell C. Henry served as Oregon's first Chief Medical Examiner from 1963-1968. Dr. Henry is credited for initiating uniform medical investigation and reporting procedures for suspicious or unusual deaths in Oregon.

Criminal Law Revision Committee in 1971, a new, comprehensive state death investigation statute was drafted by representatives of the State Medical Examiner's Office (Brady) and the Oregon District Attorney's Association. With relatively few modifications, the drafted bill was passed unanimously by both the House and Senate of the 1973 Oregon legislature.

The new Oregon statute was drafted on three premises:

Investigation of death is a medical problem
To be effective, county programs must receive state support and direction.
Experienced medical specialists (forensic pathologists) must be available to help local physicians and to supervise and review the work of each county office.

While Dr. Henry promoted the Oregon medical examiner system as a 'boots-on-the-ground' forensic presence at as many death cases as he could find, Dr. Brady found greater success in the 'top-down' approach, preferring changes in the law and administrative alignment of the program to meet the visionary requirements of a progressive system. Modern historians reflect that the style used by Dr. Brady led to recognition (both personal and institutional) that greatly enhanced the stability of the blossoming program. Many consider Dr. Brady as the 'father' of Oregon's medical examiner system. Although chronologically inaccurate, certainly the contributions made by Dr. Brady have survived the test of time and he is often given deserved credit for laying the foundation for a forward looking death investigation program that serves the people of Oregon with considerable efficiency.



Dr. William J. Brady, Oregon's second Chief Medical Examiner. Dr, Brady served as State Medical Examiner from 1969-1985. Credited with writing major changes to Oregon's medical examiner law, Dr. Brady worked with legislators and the Oregon District Attorney's Association to bring organization and authority to the death investigation system. Politically savvy and respected as a forensic practitioner, Dr. Brady left state service in 1985 amidst a cloud of controversy.

The clouds of controversy

Taylor Clark at Portland's Willamette Week newspaper reported on the controversy surrounding the demise of Dr. Brady's colorful tenure as Oregon's Chief Medical Examiner. Clark writes: "Dr. William J. Brady had a spotless reputation. Over his medical career, he performed 10,000 autopsies and signed 20,000 death certificates. In 1964, he became the state's last elected coroner, having made a campaign pledge to eliminate the office and establish a medical examiner system in its place. Brady kept his word, modernizing Oregon's

death-investigation system and serving as the state's chief medical examiner from 1969 until 1985."

"But it's amazing how fast one little scandal can sink all that", Clark explains.

"In June 1985, the *Oregonian* revealed that Brady's office had been harvesting skin samples and pituitary glands from cadavers—without the knowledge of the victim's families—and selling them. Brady funneled the cash, which totaled $16,000 over nine years, into office amenities such as flowers, coffee, interior design, a sofa for the lunchroom—even an office Christmas party."

Clark summarizes: "You could say Brady's career was dead on arrival."

For Brady's part, he contended: "The law was unequivocal that we had the right to remove and submit these glands for research purposes. I ran the office with dignity and respect for the families of the people whose bodies we handled. Always have."

According to Clark, each pituitary gland, a pea sized part of the brain that regulates growth, fetched $2-$4 from the National Hormone and Pituitary Program. The glands were used to produce growth hormone for stunted children. "Some kids would not grow to normal height without these injections," Brady reported. "At that time, the only source of the growth hormones was pituitaries collected from cadavers."

Though he broke no laws, Brady offered to resign in the face of the controversy. Kristine Gebbie, State Health Division Administrator, declined his offer but three months later, she terminated him.

Convinced he had done nothing wrong; Brady filed a lawsuit against the State. Eventually, in March 1987, a jury awarded Brady $300,000 but refused to reinstate him as Oregon's medical examiner. The appeals eventually found their way to the US Supreme Court but in the end, the award and its ramifications stood.

Brady maintains, however, that he didn't *win.* "I lost and everybody lost," he said. "I got a lot of money from the state of Oregon that I didn't want, so the state lost. The program lost, and my family lost. So nobody wins in a case like that. I got caught up in a political crossfire, and it was ugly."

In the end, Dr. Brady managed to dodge the proverbial bullet. His previously "spotless" reputation and formidable credentials have served him well in the private sector. Although Brady's reputation now includes more than one *unconventional* footnote, he is often considered the "go-to" expert in forensic pathology outside of the public arena in the northwest. Dr. Brady continues to practice forensic pathology in cases of malpractice, worker's compensation and of course defense work in criminal homicide.

While his colleagues at the State Medical Examiner's Office have mixed feelings about the former chief, all agree that Dr. Brady's work and contributions to the modern medical examiner program deserve acknowledgement.

New leadership from a familiar face

With the unanticipated departure of Dr. Brady from State service, the Medical Examiner Advisory Board (a component ironically written into the Oregon Medical Examiner law by Dr. Brady) met with the responsibility of selecting a replacement for the vacated chief's position. Although this may seem a straightforward task, the number of board certified forensic pathologists with the experience and reputation to lead the State program were (and are) scarce.

While the State Medical Examiner Advisory Board conducted its exhaustive search for a replacement, Deputy State Medical Examiner Dr. Larry Lewman was promoted to acting chief medical examiner for Oregon. Not wanting to carry the administrative and political burden of the position without support, Dr. Lewman negotiated the hiring of a program administrator to assist with these aspects of the system. Public Health Administrator Herb Hirst was hired to manage the program while Dr. Lewman provided leadership to the operational aspects of the program.

Dr. Lewman received his medical degree from Kansas University School of Medicine in 1967. He completed internship and residency training in anatomic pathology at the Institute of Pathology, Case-Western Reserve University in Cleveland, Ohio in 1971. Dr. Lewman then completed subspecialty (Fellowship) training in forensic pathology at the Cuyahoga County Coroner's Office in Cleveland, Ohio.

During Dr. Lewman's medical career, he has testified before both the US House of Representatives and the US Senate on the topic of Sudden Infant Death Syndrome. He has also made a presentation before a US Senate Subcommittee on propoxyphene related deaths.

Dr. Lewman has authored hundreds of scientific papers and articles for such publications as the American Journal of Cardiology, the New England Journal of Medicine and the American Journal of Forensic Medicine and Pathology.

During this same time (1985), Dr. Edward Wilson and Dr. Karen Gunson were assigned to the Portland office of the State Medical Examiner and served as Deputy State Medical Examiner's alongside Dr. Lewman. Although the search for a permanent Chief Medical Examiner continued, the day-to-day operations of the program stabilized and settled into a routine that was less politically charged.

The process of selling tissue specimens and pituitary glands was abolished (although this was, in fact, legal) and the focus of the program became one of supporting the local medical examiner

offices around the State. All forensic cases were customarily handled through the Portland office or by having the forensic pathologist from Portland travel to the rural areas of the State to perform the autopsy there.

In 1987, the Medical Examiner Advisory Board concluded that the leadership being provided by Dr. Lewman, with the assistance of Mr. Hirst as program administrator was meeting the needs and expectations that the Board had prescribed for the program. Dr. Lewman's "acting"-chief status was changed to chief and the program carried on as it had for the previous two years.



Dr. Lewman took the reins as Oregon's third State Medical Examiner in 1985, serving until 1999 when he 'retired' as State Medical Examiner but continued in his practice of forensic medicine as a Deputy State Medical Examiner. Seen here in 2005, Dr. Lewman is a knowledgeable and respected pathologist who brings a wealth of experience to the State Medical Examiner's Office.

While the State Medical Examiner program appeared to become stable, it was certainly not free of its share of challenging matters. In 1987, the Office of the State Medical Examiner consisted of three forensic pathologists, one administrator and two secretarial staff members. There was no facility, no equipment and no assurance that the program would receive sufficient funding from year to year.

The forensic pathologists for the State practiced their science at the Multnomah County Medical Examiner's Office/Morgue. An antiquated funeral home built in 1928 and located in inner-northeast Portland, the building was a two-story brick building with full basement and detached garage. Renovations to the old funeral home were made to accommodate the immediate needs of the forensic pathologists and the investigators for the Multnomah County office. What had once been the embalming room for the funeral service was now the autopsy room. The chapel area had been modified to hold 12-horizontal freezer trays and a walk-in refrigeration unit capable of holding five bodies on roll-in trays.

Although this facility may have met the needs of 1960's Multnomah County, it was a far cry from what was needed in the late 80's, not to mention the burden of cases from throughout the entire State that found their way here. Recognizing that the rapidly aging and insufficient Multnomah County facility could not meet the requirements of a growing state's medical examiner's office, Dr. Lewman and the balance of his staff began working toward the goal of a new facility as early as 1987.



The Multnomah County Medical Examiner's Office & Morgue, located in northeast Portland was a refurbished funeral home originally constructed in 1928. The facility became the home of the State Medical Examiner's Office in 1958. The facility served the death investigation requirements of the State until October of 2004. The severely limited and outdated facility could hold no more than 5-bodies in refrigeration.

The Multnomah County Medical Examiner's Office became the ad-hoc home for the State Medical Examiner. Office space, telephone support and many budgetary and secretarial functions were merged over time, making it difficult to distinguish between the Multnomah County program and that of the State.

Interestingly, one area of the old funeral home that remained unchanged was the upper level, which had been built to accommodate an embalming student or two. These students would ply their newly learned skills in the funeral home by day and answer the phone and make body removals for the funeral home at night. Once the building was converted into the Multnomah County morgue, the upstairs apartments were rented to university students who, as part of their rent, would take turns answering the phone at night and open the back door at all-hours to allow for bodies to be delivered or picked-up.

Adding to the pathology staff and changing alignment

As discussed previously, the death investigation program in any jurisdiction is far too small a public service to be politically significant when it comes to funding. Therefore, virtually every death investigation program is somehow funded through other, larger programs. In Oregon, this parent organization *had* been the State Health Division.

By the end of the 80's it was patently obvious that the medical examiner program was competing with other public health programs for vital funding. Unable to find adequate political support within the health division to sustain even its most basic program needs, the State Medical Examiner reached out to the Oregon State Police for support.

After conferring with a Blue Ribbon Task Force including then Attorney General Ted Kulongoski and acting upon their recommendation, the State Medical Examiner's Office became a division

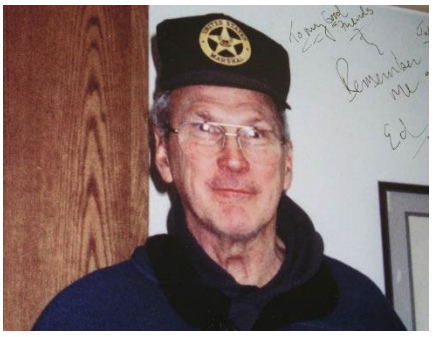
within the Oregon Department of State Police in 1995. While the program's operational features remained generally unchanged, the structure and support of essential services met with more realistic acceptance and less competition for tight budget dollars.

As the workload for Dr. Lewman and his deputies, Dr.'s Wilson and Gunson continued to grow throughout the late 80's and early 90's, it became increasingly apparent that another forensic pathologist was necessary to keep the cases moving through the office without undue delay. In 1996, Dr. Clifford Nelson joined that staff after completing his residency in Atlanta and serving as Deputy Coroner in Vancouver, Washington.



Dr. Clifford Nelson joined the office in 1996 as Deputy State Medical Examiner. Dr. Nelson has conducted significant research on unexplained infant death. His research has led to changes in the way deaths involving infants are certified throughout the state. These changes reflect a more accurate diagnostic protocol.

During this period of realignment for the State program, Deputy State Medical Examiner Dr. Wilson retired from Oregon and accepted a position in Pennsylvania. Dr. Nicholas Hartshorne was hired in 1998 to fill the resulting vacancy in the Portland Office.



Dr. Edward Wilson served as Deputy State Medical Examiner until 1998 in the Eugene and Portland Offices.

After seeing to these realignments and staffing increases, Dr. Lewman decided that his preference was to step-down from Chief Medical Examiner in favor of working as a Deputy State Medical Examiner. This process allowed for Dr. Lewman to continue to provide forensic pathology services for the State, but reduced some of the pressures borne by the Chief alone.

A changing of the guard

With Dr. Lewman's decision to relinquish the Chief Medical Examiner position in 1998, the State medical Examiner Advisory Board began a rigorous search for a suitable replacement Chief.

During this process, Deputy State Medical Examiner Dr. Karen Gunson was appointed acting chief.

Dr. Gunson received her medical degree from the Oregon Health Sciences University in 1981. Her internship and residency in clinical and anatomic pathology were completed at the Oregon Health Sciences University in 1985. In 1987, Dr. Gunson completed her subspecialty (Fellowship) training in forensic pathology at the Oregon State Medical Examiner's Office.

Dr. Gunson has served on the Advisory Committee to the American Board of Pathology and has been active in test development for the American Board. Dr. Gunson has also served on the executive committee and board of directors for the National Association of Medical Examiners. She is the author of numerous manuscripts and abstracts published in the Journal of the American College of Cardiology, Heart Rhythm and Circulation journals.

The search for Dr. Lewman's replacement garnered national interest. Although the field of qualified forensic pathologists is but a few hundred in the country, the attitude adopted by the Advisory Board was to do their best to find the best. To the credit of the existing program, the Board's recommendation to the Superintendent of the State Police was to appoint Dr. Gunson to the permanent position of State Medical Examiner.

To the relief of many at the State and County level, Dr. Gunson accepted the appointment and was promoted to the permanent position of Oregon's fourth State Medical Examiner in 1999.

Although Dr. Gunson faced many challenges, one of her first priorities became the need for improving the facilities used by the State Medical Examiner. Although it was easy to convince even the most stalwart politician or bureaucrat of the *need* for a suitable facility in which to conduct Oregon's death investigation work; finding the funding, location and plan that would fit into the budgetary constraints facing the Oregon State Police and please the Oregon Department of Administrative Services became a formidable matter that required several years of effort.



Oregon's fourth State Medical Examiner, Dr. Karen Gunson has served as Chief since 1999. Credited with the vision and leadership to take a state-of-the-art medical examiner's office from pipe dream to reality, Dr. Gunson oversees the State Medical Examiner program from her office at the Clackamas facility.

Tragedy visits the medical examiner's office

Although death is the staple of the medical examiner's office, when it visits one of our own, we are all shocked into realizing the gravity of our work. We learn quickly that the wall of anonymity separating us from the deceased is all we have to keep us from experiencing the feelings of loss and grief that are the reminders of our mortality. Sadly, in August of 2002, we were all painfully reminded of this fact.

Dr. Nikolas Hartshorne, who joined the office in 1998, was known to many of us as "Doctor Nik". A wiry Brit with a charming accent and the metabolism of a hummingbird, Dr. Hartshorne was as colorful as he was skilled. Quick with both his autopsy protocol and his humor, Dr. Hartshorne enjoyed heavy metal rock music while in the autopsy suite and collecting heroin spoons seized from overdose death scenes. While these seem like odd but benign passions, Dr. Hartshorne's interests away from the office were far more extreme.

Dr. Hartshorne once observed a Base jumper plunge from some fixed object at break-neck speed toward the earth, sparing certain death at the last possible moment by deploying his chute and gently gliding to the ground, seemingly unharmed and unhindered by it all. Fascinated, Dr. Hartshorne asked how he could learn to be a BASE jumper. He was told that he would first have to complete a number of conventional skydiving jumps and then learn the sport from an experienced instructor.

Undaunted, in fact stimulated by the challenge this represented, Dr. Hartshorne completed his *tame* skydiving requirements in near record time. It was on to BASE jumping, learning from the best he could find.

Over time, Dr. Hartshorne pushed the limits, jumping from bigger, higher and more dangerous locations with almost every opportunity. His colorful personality and contagious humor won the hearts of base jumpers the world over. He was known in this circle as Doctor Nik, who was always good for a laugh and who was there to mend the broken bone or nasty cut sustained by a bad landing or hasty retreat over the barbed wire as the authorities closed in on the unauthorized jumper.

In August 2002, Dr. Nikolas Hartshorne was killed in a BASE jumping accident in Switzerland. He was just 38. His life and death touched the hearts of everyone who knew and worked with him. We were all at a loss for words. The inevitable had happened and many lost a trusted friend.



Dr. Nikolas Hartshorne joined the Oregon Medical Examiner's Office in 1998 as a forensic pathologist. He was killed in a BASE jumping accident in Switzerland in August, 2002.

Moving forward

In the wake of Dr. Hartshorne's death, Dr. Gunson and the staff of the State Medical Examiner's Office initiated the search for another forensic pathologist to fill the vacancy. In the spring of 2003, Dr. Glen Rudner was hired to serve as a Deputy State Medical Examiner in the Portland Office.

After just 13-months, Dr. Rudner left the program and was replaced by Dr. Christopher Young who joined the office as Deputy State Medical Examiner in July of 2004.



Dr. Christopher Young joins the Oregon State Medical Examiner program in July of 2004 as a Deputy State Medical Examiner.

The new facility

With a staff of four forensic pathologists and the ever-increasing demands for more and better services, Dr. Gunson carried the need for a new facility to house the medical examiner to every corner of the state.

With the help of the Oregon State Police, Dr. Gunson and Forensic Laboratory Director Dave Schmierbach convinced the Department of Administrative Services and the State Legislature of the necessity for a new combined Medical Examiner/Forensic Laboratory facility.

The solution to the new medical examiner's office was found along with the need to relocate and expand the overburdened State Police forensic Laboratory that had served metropolitan Portland. The solution also included retrofitting an existing and vacant building, rather than starting from bare earth. The solution included a compromise in locations, finding the facility located where it was available rather than where Dr. Gunson and others would have preferred it to be.

The building, formerly the research and development laboratory for an area metal fabrication company, is located in the rapidly growing Clackamas area, a few miles south of Portland. The 60,000 square foot building underwent substantial remodeling and in the end, only portions of the exterior really resemble the former structure.

In the end, the new medical examiner's office represents only about 1/3 of the total square footage inside the shared building; the balance being occupied by the metropolitan forensic laboratory.

While it would seem that compromise was the name of the game, the end result is a facility that is about 4 ½ times larger than the dilapidated Multnomah County morgue from whence the State Medical Examiner came. The refrigerated body storage area went from a capacity of five bodies to about 65. The freezer capacity grew from 12 bodies to about 30. And autopsy stations went from two to five.

Added in the new facility is an on-site radiography suite, forensic anthropology suite, biological hazard- refrigeration area, histology station, and prep room, body receiving area, scaling station and intake photo/fingerprint identification station. A police autopsy viewing room has also been added to afford safe and effective viewing of the forensic examination by law enforcement or district attorney personnel.

The administrative areas of the new facility include a conference room, compressed file storage and enough work stations/office space to house the investigative staff and support services of the Clackamas and Multnomah County Medical Examiner's Offices as well as the State administrative positions.

Measuring just less than 14,000 square feet, the medical examiner's office has incorporated many of the features found in larger facilities throughout the country. Maximizing the use of space and employing technology with an eye on both current and future needs, the facility is anticipated to meet the needs of the State of Oregon for the next 50-years.

The new facility and its neighbor the Metropolitan Forensic Lab are among the most secure facilities operated in the State. Over 20 surveillance cameras keep a constant watch over the facility and detailed security measures segregate, separate and confine areas within the facility in order to constantly maintain the integrity over the chain of evidence. Coupled with a facility

operations philosophy that emphasizes security and safety, the facility is well hardened and does not lend itself to public access.

Still, amenities such as a family meeting room have been included to meet the needs of the people the building and its purpose were designed to serve. Even the mandated artwork reflects the seriousness of the work that is done here. Inlaid graphics in the granite entry tiles depict tire skid marks, footwear impressions and fingerprints among others.

Dedicated to public service in October of 2004, the facility is fully operational and has taken on the continuation of the medical examiner's work.



The new combined State Police Medical Examiner's Office/Metropolitan Forensic Lab located in Clackamas will serve the growing needs of Oregon for the next 50-years.

The next steps

One of the fundamental concepts of Dr. Brady's pitch for revisions to the death investigation program in Oregon was that death is a *medical problem*. This premise, served to support the argument in favor of moving to an appointed medical examiner instead of the elected coroner. It served to demonstrate the need to have a medical professional investigate and certify the cause and manner of death. It formed the basis for the physician based medical examiner we know today.

Still, virtually every death investigation begins at the scene of the death, not in the laboratory. The scene and the circumstances found there are essential elements to the accuracy of the death investigation process. Without the information and evidence found at the death scene and in the story accompanying the death, the forensic pathologist is left with a dead body and perhaps little else.

The death scene investigator serves as the eyes and ears and hands of the forensic pathologist at the death scene. He or she must observe, recognize and report the scene in an understandable fashion to the forensic pathologist if there is to be any benefit of the scene investigation.

With this said, the death scene investigator must have a thorough command of human anatomy and physiology. He or she must understand the workings of the human system and how and why it dies. He or she must be able to interpret what is present, what is absent and correlate the data from the scene with the story he or she is told about the deceased and what led to the death.

While keen investigative skills are essential, the core issues remain a *medical problem*. Yet, since the inception of the modern medical examiner program in Oregon, the physician medical examiner has relied upon the *police officer* to perform these functions.

The standard, established with the revisions to the medical examiner law in 1973, calls for the County Medical Examiner and the County District Attorney to appoint and confirm the Deputy Medical Examiner (County) or death scene investigator. In many cases, this individual has received nothing more than a single 8-hour death investigation seminar provided by the state forensic pathologists. Just like the coroner of yesteryear, the death investigator of today may or *may not know anything about medicine*. Still, he or she is expected to observe and report on the "medical problem" that is death.

While attention has been paid over the past 50-years to improving the professional end of the death investigation system in Oregon, nothing has been done to address the field half of this equation. In most areas of Oregon, when a death occurs, the death scene is investigated by a police officer or deputy sheriff who has received a one-day class sometime in the distant past. Although his or her training in law enforcement matters has continued to advance to keep pace with the demands of public safety; the medical and diagnostic skills necessary to accurately observe and report the findings at the death scene have gone unaddressed. When we remind ourselves that death is a medical problem, we can clearly see the need to improve the standards for death scene investigation in Oregon's communities.

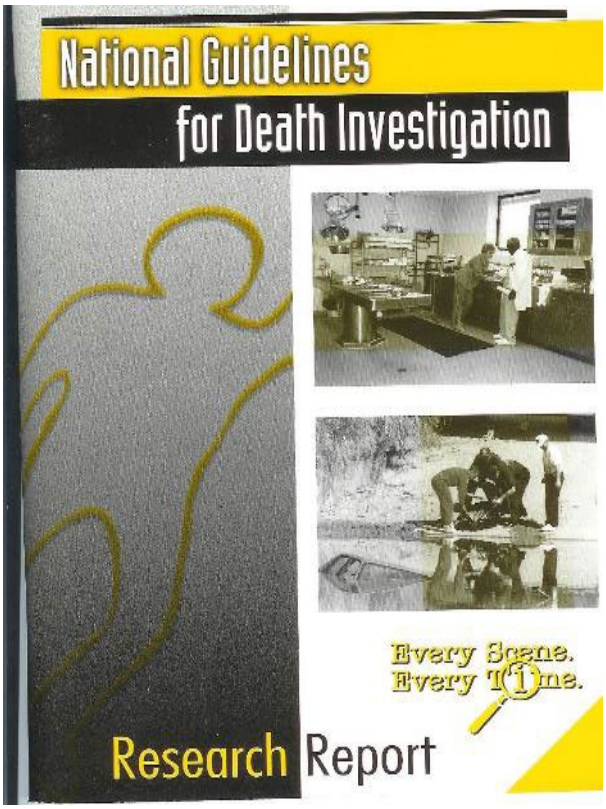
Oregon is not alone in this dilemma. Most, if not all states suffer from this disparity between advancing laboratory and professional services and stagnant death scene investigation skills.

To address this issue, the US Department of Justice, through the National Institute of Justice (NIJ) launched a study in 1995 to assess the needs for standards in death scene investigation. An overwhelming majority of those surveyed reported deficiencies in the death scene investigation component of their programs. In 1997 the first draft of the NIJ standards for death scene investigation was published. The second addition, with a few revisions was released in 1999.

Finally, a national standard had been established for death scene investigation. Still, only a scant few jurisdictions embraced the concept for the first few years after the standards were released.

Professional standards come to the death scene investigation

To promote and oversee the development of professional standards and training in the emerging field of *medicolegal death investigation*, the US Department of Justice and its National Institute of Justice collaborated with the National Association of Medical Examiners and formed the American Board of Medicolegal Death Investigators. This oversight and professional standards board was charged with the training and evaluation of death scene investigators nationwide. Emphasizing the use of the NIJ guidelines for death scene investigation, the American Board of Medicolegal Death Investigators created a modular training program designed to assist the death scene investigator in many aspects of their daily work. Combined with the use of the step-by-step procedural guides found in the NIJ standard, the curriculum developed by the American Board of Medicolegal Death Investigators provides a solid foundation for the death scene investigator to build upon using state, regional and local laws or practices.



The National Guidelines for Death Scene Investigation represent the second addition of the step-by-step procedural guideline created by the National Institute of Justice for the medicolegal death investigator.

The first addition (shown at left) was published in 1997. The revised edition, with the updated title, was released to the public in 1999.

Following a 22-step procedure, the updated guidelines address standards that are applied to each death investigation conducted by the medicolegal office.

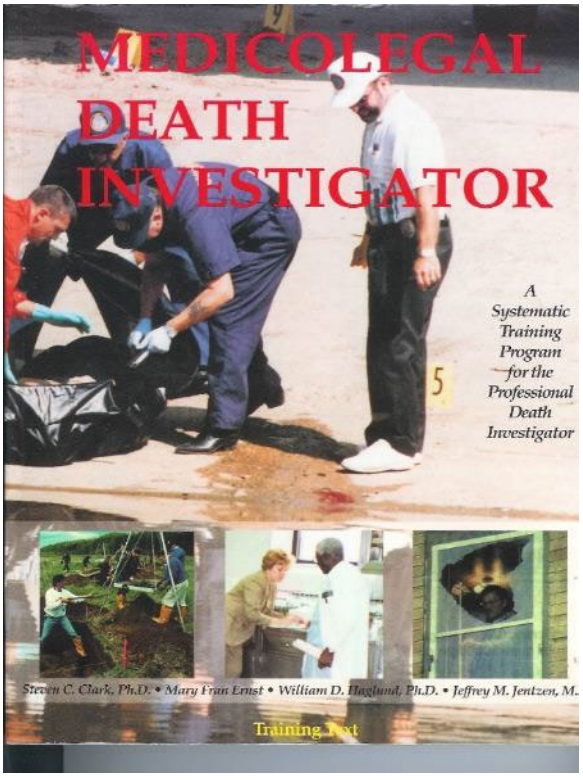
A comprehensive medicolegal death investigator training text was developed by several members of the Board of Directors for the American Board of Medicolegal Death Investigators in 1996. This text forms the basis from which the national training curriculum is presented in

classrooms at the St. Louis School of Medicine and various satellite locations across the country. Death scene investigators attend these training programs and draw from the experience of well-prepared instructors who focus upon a national standard for investigation rather than state or local systems.

The net result of this training program is a general overview of the death investigation process, minus any specific training for the death investigation system used in a particular jurisdiction.

The American Board of Medicolegal Death Investigators offers national registry and board certification to individual applicants who complete an approved course of initial instruction, background evaluation, 260-point externship and modular written examinations. Board certified Fellows must also have significant work experience and complete a supplemental written examination including a variety of essay-style questions.

Both nationally registered Diplomates and board certified Fellows are required to maintain their certification through annual continuing education in the field of medicolegal death investigation.



The training text for the course of initial instruction prepared by the American Board of Medicolegal Death Investigators provides the death scene investigator with a solid foundation of death investigation tactics necessary to facilitate the 22-step National Guidelines of Death Scene Investigation recommended by the National Institute of Justice.

The training program is administered and evaluated by the Board who offers national registry and board certification levels for its members.

Fast becoming the national standard, many death investigation programs now require standardized training and certification as a hiring requirement.

The Oregon Solution

Recognizing that death investigation entails not just the laboratory and forensic pathologist; Dr. Gunson has worked diligently to promote a *medicolegal death investigator* training and certification program in Oregon. This program, designed around the 40-hour course of initial

instruction developed by the American Board of Medicolegal Death Investigators, targets specifics in the Oregon Medical Examiner law and the dynamics found within the boundaries of the State to create a program that is based on national standards but emphasizes Oregon issues.

Knowing that the majority of Oregon's death scene investigators (County Deputy Medical Examiners) are cross-trained as police officers, the Oregon Certified Medicolegal Death Investigator Training Program does not include the extensive externship requirements of the national training program. Rather, a one-day laboratory experience for the applicant is substituted for the 260-point externship. Although abbreviated, the one-day externship includes a variety of performance requirements for the applicant and provides the student with a hands-on opportunity to view, participate and discuss forensic work with the physician medical examiner in a one-on-one environment.

The Oregon Medicolegal Death Investigator Training Program was first offered in the summer of 2005. 27-students participated in the 40-hour classroom course. The instructor cadre included four forensic pathologists, a prosecuting attorney, several nationally registered or board certified medicolegal death investigators and a variety of subject matter experts who presented the knowledge objectives found in the national training text to the students.

In this first offering, all 27-students successfully completed the course with a minimum final examination score of 80%. Many have gone on to complete their externship requirement and the goal of certifying medicolegal death investigators in Oregon is being recognized through this effort. Those who have met the requirements for initial certification must maintain their training and development by completing annual continuing education.

Valuable feedback was obtained from this first group of students, and significant revisions to the training program were undertaken immediately upon completion of the first course. This text and the course curriculum, now relying heavily upon scenario based training and group interaction has served to create an enhanced learning opportunity for the novice and experienced death scene investigator alike.

The goal

As Oregon takes aim at improving the standard of death investigation services throughout the State, Dr. Gunson's vision is to have every death scene investigator currently serving a county program in Oregon participate and complete the Oregon Certified Medicolegal Death Investigator Training Program by 2010.

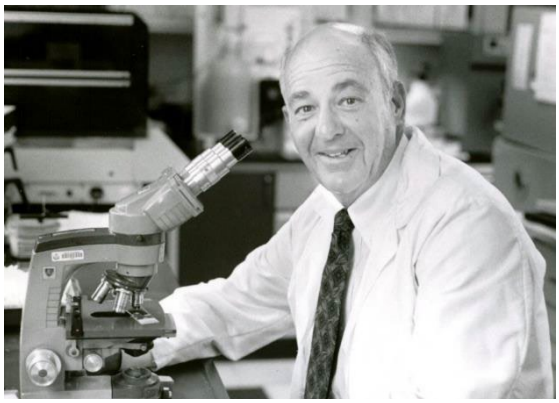
In order to meet this goal, the training team at the State Medical Examiner's Office has planned to offer the course of instruction twice annually over this five-year period. Courses will be offered free of charge to those currently serving as Deputy Medical Examiners in Oregon and will include all materials necessary for the course.

Upon completion of this five year training project, discussions will include making changes to the Oregon Medical Examiner law to recognize and require Oregon Certified Medicolegal Death Investigator training for appointment as a death investigator in any Oregon county.

By enhancing and standardizing the training provided to the death scene investigator, the medical examiner program will benefit through improved reliability and efficiency. The citizens served by the program will benefit from improved effectiveness and service, and community standards statewide will improve through an enhanced understanding of the death investigation process.

Pennsylvania

History of Modern Day Development of Official Governmental Medical-Legal Investigation in the Commonwealth Of Pennsylvania



Cyril H. Wecht, MD JD

February 2016

There are 67 counties in Pennsylvania. Up until 1950, each county had an elected coroner. In 1950, there was a home rule charter adopted in Philadelphia, and an appointive medical examiner system was implemented to replace the elective coroner system in 1955.

Dr. Joseph Spelman was appointed as the first Chief Medical Examiner. I first met Dr. Spelman in 1962 when I visited his facility as part of an opportunity provided to me by my Chief, Dr. Russell Fisher, during my fellowship at the Maryland ME Office, to visit three other facilities. (I went to Cuyahoga County and visited with Dr. Lester Adelson; New York City to visit with Dr. Milton Helpern; and Philadelphia where I visited with Dr. Spelman). Dr. Spelman was considered one of the top forensic pathologists at that time along with Drs. Helpern, Moritz, Fisher, Mann, Adelson and a few others. Dr. Spelman did a good job in developing the ME Office in Philadelphia, including an excellent forensic toxicology program headed up by Dr. Fredric Rieders.



Lester Adelson



Milton Helpern

Subsequently, in 1979 an M.E. system was also adopted in Delaware County in 1979. There are two counties that now have Coroners who are appointed. The remaining counties in Pennsylvania continue to have elected coroners. There are no specific qualifications for this position. Probably the single largest category of individuals occupying this position in Pennsylvania is Funeral Directors. There are a couple of forensic pathologists.

In 2005 the electorate voted for a change in the system in Allegheny County (Pittsburgh and surrounding communities). The first Allegheny County Medical Examiner System commenced on January 1, 2006, and I was appointed to that position by the Chief Executive of Allegheny County. The building in which the Allegheny County ME Office is located was officially dedicated in my honor as "The Cyril H. Wecht Institute of Forensic Science and Law" in the fall of 2009.



The most significant and important change in Pennsylvania pertaining to official governmental medical-legal investigation is the utilization of forensic pathologists. To my knowledge, I believe that forensic pathologists are performing autopsies for coroners throughout Pennsylvania almost exclusively. There still are a few small counties that use hospital pathologists, but such affiliations have been decreasing with each passing year. Elected coroners, no matter what their background and limited degree of medical knowledge may be, have come to realize, along with their respective county District Attorneys and law enforcement officials that it is necessary to have autopsies performed by forensic pathologists if cases are to be properly prepared and presented at trial, especially homicide cases.

More and more universities and colleges in Pennsylvania have implemented programs in forensic science and criminal justice, just as has occurred elsewhere throughout the United States. Numerous high schools have also developed introductory courses in forensic science. I have had the opportunity to give lectures at many of these colleges and universities as well as high schools over the past years. I have even given some talks on forensic science to elementary school children.

I have been teaching a course in legal medicine and forensic science at Duquesne University School of Law since 1963. I have always encouraged my law school students to attend an autopsy and have provided the opportunity for them to do so.
Over the years I have organized numerous programs dealing with legal medicine and forensic science for attorneys, health care professionals, and law enforcement officers. Such programs

continue to be offered on a regular basis at the Cyril H. Wecht Institute of Science and Law at Duquesne University.

I also meet with pathology residents at the University of Pittsburgh, School of Medicine each year and give lectures at the University of Pittsburgh, Duquesne University, and Carlow University where I have faculty appointments.

As we move ahead in the year 2016, I believe that it is fair and accurate to state that the quality of forensic scientific services throughout the Commonwealth of Pennsylvania within the realm of official governmental services has changed dramatically in less than half a century. Things are far from perfect, but vastly improved from what existed prior to 1955 in Philadelphia, prior to the late 1960's in Allegheny County, and prior to the 1970's and 80's in the remainder of the state.

A major problem, however, that regrettably continues needs to be highlighted and addressed by forensic pathologists throughout the country. This has to do with the failure of public defenders and court appointed attorneys to be provided sufficient funds to consult with independent experts in forensic pathology and other forensic scientific fields when appropriately necessary in various kinds of homicides and other criminal cases. Too many judges remain ignorant of the significance and critical importance of forensic science, and many simply have a prosecutorial bias because of their earlier professional affiliations. This is a serious matter that should be addressed in my opinion by individual forensic pathologists and organizations such as NAME and AAFS throughout the country in a more dynamic and concerted fashion. Until that is done, it cannot be said that forensic science is being utilized to an optimal degree in the pursuit of both civil and criminal justice.

South Carolina – Charleston

Reversion from a Medical Examiner/Coroner Dual System to a Coroner System



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Abstract

The death investigation system for the state of South Carolina is a coroner system. The state has 46 counties and each has one elected lay coroner. The educational requirement is a high school diploma. Many physicians and legislators have repeatedly attempted to change the state and large counties' death investigation systems to medical examiner systems. Due to the politically strong coroners, these attempts have been largely unsuccessful. In 1972, Charleston County converted to a medical examiner/coroner dual system. This system was constantly challenged until it reverted back to a coroner system in 2001. The establishment of the dual system, hurdles and road blocks confronted, and reasons for the ultimate reversion are discussed.

Introduction

The state of South Carolina has a rich history. It was one of the first original colonies, experienced the most American Revolutionary battles, and was the first southern state to secede from the union in 1860 (1, 2). South Carolina's death investigation system, a coroner system, has just as rich a history. Beginning with colonization, the English settlers brought their death investigation procedure with them, the coroner being a representative of the English crown. At this time, the coroners in England were not physicians. The first coroner with a medical background and deemed "medically qualified" was appointed in London in 1840 (3). Likewise, few of the early coroners in the colonies had any medical background or training. This was and still is true of South Carolina coroners. Since 1868, South Carolina coroners are elected

officials, one for each of the 46 counties, who serve unlimited four-year terms. The only educational requirement is a high school diploma. Some have been or currently are part-time coroners with second professions such as hairstylist, banker, construction worker, jeweler, and funeral director. For many years, one county even had a blind coroner.

Since 1955, individuals and professional groups, such as the South Carolina Medical Society, have attempted to create a statewide medical examiner system (4) (Table 1). Such efforts have been repeatedly opposed by the politically strong South Carolina coroners and the South Carolina Coroner's Association. The coroners are constitutional county officials. Proposed legislation for a statewide medical examiner system would give authority to the medical examiners over death investigations and thus restrict the coroners. Initially, such legislation was viewed as expensive and superfluous; a cost versus efficiency dilemma. As legislation was repeatedly defeated at the state level, others began lobbying for a medical examiner system at the county level, especially for those counties with populations over 250,000. In 1968, Greenville County successfully implemented its own medical examiner/coroner dual system (which is still in place today) (4). Finally, in 1972, after years of continued perseverance, the State passed legislation for Charleston County to have a dual death investigation system operated by both a coroner and a medical examiner (4). For the first time, Charleston County would have a medical examiner's office, which would be housed within the state medical school, the Medical University of South Carolina (MUSC), working in supposed concert with the coroner's office. This article describes events since that time, including reversion from a dual medical examiner/coroner system to a coroner system.

Having worked in Charleston as a medical examiner, the author has relied upon personal experience, office and public historical documents, and other literature to describe the transition from a coroner system to a dual medical examiner/coroner system with eventual reversion to a coroner system. The reasons for these transitions are discussed, along with the impact of such change and lessons learned from the transition.

Discussion

The Medical Examiner in an Academic Institution

Once legislation was passed, converting Charleston County from a coroner system to a medical examiner/coroner dual system seemed ideal and easy to accomplish at the time. Barriers experienced during such conversion in other locations in the nation, such as small population base, lack of tax revenue, lack of forensic pathologists, or lack of local body transport, were not appreciated (5). The new South Carolina law approved a medical examiner's commission and a medical examiner based on population, qualifying Charleston County. The location of the medical examiner would be in the MUSC department of pathology, which was chaired by the main proponent of state and county medical examiner systems. The autopsy facility was in place and equipped. The Department of Pathology had available resources to financially and administratively support the medical examiner component of the dual system. The board-certified forensic pathologists were well-trained, experienced, and nationally known as experts

in their field. The Charleston County medical examiners would be funded by MUSC and its affiliate, University Medical Associates. Charleston County would budget for the coroner's and deputy coroners' salaries and benefits, coroner vehicles, administrative personnel, and the coroner's office and overhead. For the medical examiner component, the county budgeted only for the fee of individual autopsies, one secretary, three investigators, and two body transportation vans. Police dispatch would notify both the coroner and the medical examiner on call. The medical examiners and the forensic investigators would be on call for scene investigations and death notification 24 hours per day, seven days per week, and 365 days per year.

Hurdles and Roadblocks

Over the years, many hurdles and roadblocks were encountered as the medical examiners, board-certified forensic pathologists, functioned in a dual death investigation system. The inequitable division of operational costs was apparent and would become even more so as leadership within MUSC changed, the economy of healthcare changed, and the technologies behind the forensic sciences moved forward. The only monies coming into the MUSC department of pathology section was payment for individual autopsies. MUSC was financially responsible for salaries and benefits of three forensic pathologists, pathologists' offices and supplies, educational and/or travel expenses related to continuing medical education, autopsy technicians' salaries and benefits, the autopsy suite, morgue/cooler/freezer for storage, autopsy supplies and equipment, photography equipment and processing, in-house toxicology, microbiology/virology analyses, serology and chemistry, histology laboratory services and special histological studies/stains, postmortem dental analyses, and radiographic studies. For MUSC, the Charleston County medical examiner component was a money-losing endeavor. The MUSC pathology department had to justify having three medical examiners on staff with a net annual loss. To continue sustaining the medical examiner component within the university, each medical examiner assumed additional duties, such as director of all hospital and satellite clinic point of care testing laboratory sites, liaison to the organ and tissue procurement organizations, hospital autopsy service and directorship, hospital laboratory accreditation, surgical pathology, teaching, research, directorship of medical and dental pathology education programs, and the pathology residency training program directorship. Furthermore, the three medical examiners, and later only two, also served many of the other 46 counties of the state performing death investigations and testifying in court. Having a medical examiner benefited the Charleston County residents, but at a price to the medical examiners and the university.

Furthermore, no operating procedure was initially developed to structure and prioritize how the two offices would interact during the numerous death investigations. Not surprisingly, smoldering "turf battles" erupted into an interoffice conflict involving the media, law enforcement, and the justice system. Some of the disputes included who is actually in charge of a death investigation, who directs the scene investigation, who is called first by police dispatch or the hospital upon a death, who decides whether to autopsy or not to autopsy a body, who certifies the cause and manner of death on the death certificate (the coroner had the power to

change the cause and manner of death), who approves organ and tissue recovery for donation, who sets the cost of an individual autopsy, and who communicates with the media.

At the same time, the medical examiners were also providing forensic pathology services to other counties in order to generate revenue. Often there would be disagreement over which county's case would be autopsied first. Since Charleston County partially funded the dual system, the Charleston County coroner felt that Charleston County cases should take precedence. Coroner inquests, although rare, were held in an attempt to clarify any disagreement over the mechanism, cause, or manner of death between the coroner and medical examiner, as well as other questions related to the death investigation. The coroner "played prosecutor, police investigator and judge" (6). Who owns the body, the scene, and the death investigation and death certification authority became heated questions between the offices and eventually other constitutional officials and the public. When disagreements arose over these and numerous other issues, there was no organized hierarchy or legislative ruling to consult. The medical examiner was supposedly supported by a county medical examiner commission (South Carolina Code 17-5-220) when, in fact, the commission had no power to intervene in the politics and provided little input. The commission was nonfunctional. The coroner sought county council support and budget approval but, in actuality, a South Carolina coroner answers only to the governor and to the voting public.

Arguments ensued over budget and alleged duplication of efforts with the Charleston County coroners, claiming that their office performed the same duties with the same degree of expertise as the medical examiner. Further worsening matters were intense personality "differences" between the Chief Medical Examiner and the Chief Coroner; they just didn't get along (7). The dual system was "plagued by personality conflicts" (8). Politics began to take its toll on the individual medical examiners due to the stress and pull of serving the public and serving medicine under such a dual system. Poor communications continued not only between the coroner and medical examiners, but also between the medical examiners. Disagreements and accusations were made public through the media. As the media became involved, it was even more frustrating as the medical examiners attempted to educate the public on the benefits of their role while fighting an uphill battle of wills between the two offices. The coroner wanted control of the county death investigations and had the political backing. The medical examiner wanted to improve death investigations and had the medical and forensic scientific knowledge and training. In the end, the question repeatedly raised was the following: what does a county gain with a medical examiner that is not already provided by the elected coroner? The coroner suggested that "a medical examiner isn't needed because [the coroner's office] can call upon forensic pathologists' expertise when necessary" (9). No one wanted to see tax dollars spent inefficiently with seemingly unnecessary duplication of efforts. The value of a medical examiner system with board-certified forensic pathologists was not adequately conveyed and, despite excellent service to the state of South Carolina over the many years, the medical examiner component of the dual system was deemed ancillary. This was and remains a nationwide problem: the public image and unperceived value of forensic pathologists/medical examiners, their imperative contributions, and their fundamental role in death investigation.

Downfall

In 1997 and 1998, the coroner presented to the Charleston County Council that the two offices, the medical examiner's and the coroner's, resulted in a duplication of efforts and unnecessary expenses to the county with no benefit for dollars spent. Both offices admitted to interpersonal difficulties but would not elaborate. The public wondered, "Why don't they get along and what type of impact will their apparently secret, personal conflict have on death investigations?"(7). Even other coroners addressed the county council, further alienating the medical examiner. Therefore, all funding was pulled from the Charleston County Medical Examiner's office. After numerous controversies between the two offices, including a South Carolina Coroner's Association's boycott to cease sending any forensic cases from any county to the medical examiners, the Chief Medical Examiner stepped down (10). The medical examiner "faced the political reality that resignation was the only chance of saving the [dual] system" (11). With no budget from the county and the Chief Medical Examiner stepping down, the two remaining forensic pathologists served the county as Chief and Deputy Chief Medical Examiner, assuming the previous duties and services for the county. In addition, these two medical examiners also continued their previous and increasing university duties. The schedule, caseload, and stress of only two forensic pathologists serving as medical examiners with no compensation from the county, aside from the payment for autopsies, and increasing university responsibilities and obligations, took its toll. In 2001, the Chief and Deputy Chief Medical Examiners rightfully stepped down from serving as medical examiners; no physician should provide services for free. The dual system reverted back to the antiquated coroner system. When Charleston County's last medical examiner resigned (2001), the media reported: "Without a properly funded and fully functional medical examiner system in Charleston County, the pursuit of justice in our courts [has] taken a 40-year step backward" (12).

Why Did the Coroner Win?

How can a coroner system that requires only a high school diploma and no necessary medical training or credentials be seen as preferable to a medical examiner system run by educated physicians with extensive training, experience, and forensic board-certification? The answer is that the coroner is empowered by the state legislation. Even with the dual coroner/medical examiner system, by law the coroner has the decision making authority. Two chiefs, a chief coroner and a chief medical examiner, have different charges, roles, agendas, resources, and personalities. With no fundamental change in the state's death investigation legislation, the dual system was doomed to fail. The Charleston County Attorney stated, "the only way to give the medical examiner – who must be a forensic pathologist – as much authority in the investigation of deaths as the coroner is through state statute, not county ordinance" (11). In 2001, when the last medical examiner resigned, a Charleston County Council member remarked, "Just as a paralegal doesn't practice law, a nurse is not the same as a doctor who is trained to investigate deaths" (9). The correct application of the skills, education, and training of the forensic pathologist medical examiner in death investigation was virtually prohibited by law. Legally trumped by the political and business savvy county coroner, who was a nurse at the

time of the dual system downfall, the medical examiner was powerless. As created, the dual system never really worked.

Charleston County Death Investigation Today

Today, Charleston County's death investigation system remains a coroner system with one elected coroner and six deputy coroners. The coroner and two deputies are nurses. The state law remains the same: counties with a population of 100,000 or more may establish a medical examiner commission that will employ a medical examiner (SC Code of Laws, Title 17, Chapter 5, Article 5, 17-5-220). At this time, no one has pressed forward to reinstitute either the dual system or a medical examiner system. The coroner's office performs all scene investigations, determines which forensic cases are autopsied, consents or restricts organ and/or tissue donation on forensic cases, issues cremation permits, completes death certificates, and holds inquests. The Charleston County coroner still consults with the forensic pathologists at MUSC to perform forensic autopsies. Aside from the performance of the autopsy and the toxicology analysis performed at outside laboratories, all aspects of death investigation are handled by the coroners. The county does not benefit from the expertise of board certified forensic pathologists in any of the other aforementioned areas of death investigation.

Lessons Learned

The experience in South Carolina is discomfiting to remember because of such a lost opportunity to improve death investigation. If anything can be learned, it must begin with the law. It is difficult to change a constitutional government and state legislation. Change must begin with a change in state legislation as well as county legislation. To change to a county as opposed to a state death investigation system is difficult when the state legislation still grants powers to the elected coroner, a constitutional official, that supersede the medical examiner. A coroner and medical examiner may work very well together, but will the next elected coroner and appointed medical examiner? Therein lies a crucial flaw. Intraoffice discussion of all cases, scene investigations, difficult issues, and business is needed. A contract or memorandum of understanding with the coroner's office should delineate crucial areas such as which cases are autopsied, scene investigation duties, and consents for organ and tissue recovery. One contact person should be appointed for the media and public to present a unified front. Medical examiners must control the budget. The medical examiners, trained physicians with expertise in the determination of cause and manner of death, are the best qualified for signing death certificates. Medical examiners have extensive training and one area is the performance of the autopsy, a medical procedure. Their findings are medical documentation and, though open to scrutiny, should not be overruled by a coroner.

Conclusions

The uphill battle over many decades to create a medical examiner system in South Carolina was repeatedly lost. When attempts failed, Charleston County settled for a dual system that, after almost 30 years, was also a failure. It was hoped by proponents of a medical examiner system that the dual system would prove the value of a medical examiner, and that the dual system

would eventually convert to a medical examiner system. In 2001, it was remarked, “The best way to ensure professional investigation of deaths in South Carolina would be to impose a statewide medical examiner system that could help coroners in their investigations and provide needed public accountability as they do so” (13). Why do some dual systems work and others do not? Why do most states that convert to medical examiner systems remain as medical examiner systems? As we look across the United States, the trend to improve death investigation is to convert to a better, scientifically and medically based system: the medical examiner system. Most will agree that a better system requires investigation by pathologists and offices with American Board of Pathology forensic pathology board-certification and the National Association of Medical Examiners accreditation, respectively. Forensic pathology is a branch of medicine performed by physicians and the autopsy, the major investigative tool used in death investigation, is a medical procedure.

Table 1: Time Table of Events Involving the Charleston County Medical Examiner, Coroner, and the Death Investigation System

Time Period	Event
1868	By law, South Carolina coroners are elected for four-year terms, are residents of South Carolina, and are registered voters
1955	South Carolina Medical Society lobbies for a statewide medical examiner death investigation system
1972	A dual medical examiner/coroner death investigation system is created for Charleston County
1997-1998	Charleston County Medical Examiner Commission is dissolved. County Council pulls all funding from the medical examiners
1998	After 16 years, the Chief Medical Examiner resigns. The Deputy Medical Examiner is appointed as Chief Medical Examiner
2001	The last Charleston County Medical Examiner resigns. The dual system reverts to a coroner system

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Tennessee

Office of the Chief Medical Examiner, State Of Tennessee 2010-Present

Karen Cline-Parhamovich D.O.

August 2014

Tennessee, at the state level, has made significant changes in a modern medical examiner system. The statutory requirement for NAME accreditation, strategically placed regional forensic centers, and credentialed medical death investigators establish a strong foundation from which to build.

The statute requires that all forensic autopsies in the state must be performed at a NAME-accredited facility. Generally, the regional forensic centers are the county medical examiner office for the county in which they are located and an autopsy referral center for the other counties. Therefore, the mandatory NAME accreditation ensures minimum standards of both death investigation and autopsy performance for a small number of counties that are home to a regional forensic center. Although the components of a statewide system are in place, the statutory and budgetary links necessary to connect them are non-existent, which results in a system that functions as a county medical examiner system.

In 2010, Dr. Teresa Campbell served briefly as the Interim State Chief Medical Examiner. Later in the year, after Dr. Campbell changed her career course to focus on academics, Dr. Karen Cline-Parhamovich was appointed as the Interim State Chief Medical Examiner. This was a part-time consultative position that was subcontracted through the Tennessee Department of Health. The main purpose of the position was to oversee autopsy reimbursements to the regional forensic centers and provide education and training to county medical examiners and death investigators.

In 2010, an autopsy bill was introduced by the legislature that would have had a deleterious effect statewide. Forensic pathologists from Johnson City, Knoxville, Chattanooga, Nashville and Memphis organized and successfully prevented progression of the bill, which was moving ominously fast.

The year 2012 was a major turning point for the Tennessee medical examiner system when Dr. John Dreyzhener, the State of Tennessee Commissioner of Health, recognized that the State Chief Medical Examiner position merited full-time status and integrated it within the Tennessee Department of Health.

In 2012, Dr. Karen Cline-Parhamovich was appointed as the state's first full time Chief Medical Examiner, fully integrated within the Tennessee Department of Health. The State Office of the Chief Medical Examiner (OCME) began its operation out of the William L. Jenkins Forensic

Center at East Tennessee State University, Quillen College of Medicine in Johnson City, Tennessee in July 2012.

Also in 2012, a two-day strategic planning meeting led by the OCME brought together leadership from the five regional forensic centers. During this meeting, the necessary elements for systemic improvement were defined: the need for a statewide case management database, standardized death investigation, and death scene investigation education.
The OCME educational budget is largely dependent on grant funding. Programs administered through the OCME include funding to attend established death investigation courses and providing equipment to perform scene investigations. The death scene investigation kits include basic supplies that enable digital scene photography, doll re-enactments and electronic entry of case information. To address the needs of the more distant counties, each kit was individually delivered by a medicolegal death investigator (Danny Cupples, D-ABMDI) who donated his time, traveling 3100 miles over two weeks delivering the kits across the state and providing individualized assessment and training.

The Tennessee State Mass Fatality Plan underwent a comprehensive revision, and a series of statewide seminars revealed that many areas of the state are ill-equipped to handle individual fatalities, let alone multiple simultaneous fatalities. This led to the establishment of the State Medicolegal Death Investigation Strike Team (MDI-Strike Team) in 2014. The MDI-Strike Team is a volunteer group of qualified medicolegal death investigators from different parts of the state who are deployed to assist with on-scene death investigations in counties with an incident that exceeds local resources but is well under the threshold to trigger federal resources.

In 2014, three Deputy State Chief Medical Examiners, one for each Grand Division of Tennessee, were appointed by the Medical Examiner Advisory Council: Dr. Karen Chancellor (West), Dr. Steven Cogswell (East), and Dr. Amy McMaster Hawes (Middle). Implementation of a comprehensive case management system that includes uniform investigative protocols and mass fatality capabilities is expected to begin in 2015.

The short term goal of the OCME is to establish a statewide case management system, update standards of practice under current law and develop standard protocols. The vision of the OCME is to connect the components in a manner that enables consistent and high quality medicolegal death investigation to all counties urban, suburban and rural. In order to accomplish this, clear lines of authority need to be statutorily established, and legislative options are currently under consideration.

The History of the Tennessee Medical Examiner System

Jerry T. Francisco M.D.

In 1961, using the Model Act published by the National Municipal League, the Tennessee legislature passed a postmortem act for the state. This act had the active support of the

Tennessee State Health Department, Tennessee Medical Society, Tennessee Society of Pathologists and the State District Attorney's General Conference.

The Division of Post Mortem Examination was housed in the Department of Public Health. The first State Medical Examiner was Thomas Littlejohn, M.D. After two years Dr. Littlejohn took a leave of absence to enter a forensic pathology training program. Jerry T. Francisco, M.D. was appointed on a contract basis to serve as the Chief Medical Examiner. He was to retain his position as Professor of Pathology at The University of Tennessee Medical Units in Memphis and have his office in Memphis. The contract also provided funds for a Forensic Pathologist Fellowship. Maurice Acree, M.D. was appointed as the trainee with the understanding that he would remain in the state for two years and provide forensic pathology services during this time. He practiced in Obion county of Tennessee for several years and accepted autopsy consultations from County Medical Examiners during his practice there.

In 1965, Dr. Littlejohn returned to the position of Chief Medical Examiner and Dr. Francisco was retained as consultant Forensic Pathologist to the Chief Medical Examiner.

The 1961 law provided that each county in the state should appoint a physician as County Medical Examiner and that certain categories of deaths should be reported to the Examiner. Following notification of a death that fit the statutory requirements, the Examiner would investigate and either assign a cause of death or—if a homicide was suspected—notify the District Attorney General who could recommend that an autopsy be ordered. The Medical Examiner did not have the authority to order an autopsy. Once an autopsy was ordered, the County Medical Examiner designated a pathologist to perform the autopsy. Some of the pathologists in the state were willing to perform forensic autopsies and some were not. In any event, the statute did not specify the amount of payment, and the amount paid by the state did not induce many pathologists to participate.

There are 95 counties in the state, ranging in population from a few thousand to more than 3/4 million. Two counties choose to exclude themselves from the postmortem act, including the county of the state capital (Davidson).

The Tennessee Department of Public Health established a laboratory subsection in the Industrial Hygiene Laboratory that would receive specimens from county Medical Examiners or consulting pathologists for analysis. The U.T. Department of Pathology established a Chemical Pathology and Toxicology laboratory to support the efforts in Shelby County (Memphis). Because the 19 counties in Western Tennessee could refer their cases to Memphis, the western part of the state had toxicology coverage if an autopsy was performed. The payment for these autopsies was covered by contract with the Tennessee Health Department.

In 1970, Dr. Littlejohn resigned and Dr. Francisco was again appointed Chief Medical Examiner. His office was to remain in Memphis as Professor of Pathology at the U.T. Medical Units. The

purpose of this arrangement was to emphasize the mission of education by the Chief Medical Examiner.

The educational efforts included:
The development of a microfiche card to show images of typical medical examiner cases that would be encountered by County Medical Examiners. These were mailed to all County Medical Examiners.
A Medical Examiner handbook was written and published to be sent to all County Medical Examiners. The handbook copied the pattern used by the State of Virginia.
A series of seminars was established throughout the state. These were to be afternoon or evening seminars of 2-3 hours each to accommodate the practicing physicians who were serving as County Medical Examiners.

Organizational efforts included:
The development of a standard report form to be used by the County Medical Examiner for each death investigated. The law required that one copy of the report be sent to the central office, one sent to the District Attorney's General if a homicide was suspected and one to the county coroner.
The development of a telephone network with a listing of all County Medical Examiners, District Attorneys General and all pathologists who had agreed to consult with County Medical Examiners and perform autopsies.
Due to the autopsy funding problem contracts were written for pathologists who had agreed to perform autopsies.
A plan to provide additional support was developed to have toxicological laboratories in the five major areas of the state:
Memphis(already established)
Nashville (already established)
Chattanooga
Knoxville
Kingsport

By 1976, all laboratories were in place, equipped and staffed. They were providing analysis of solid dosage drugs confiscated by law enforcement and alcohol testing in suspected DUI cases.

In 1979-80, The Tennessee Bureau of Investigation was separated from Safety and assumed the operation of the laboratory support for law enforcement for all areas of the state except the Memphis area.

In 1983, a task force of selected County Medical Examiners was convened and proposed the following recommendations for future development:
An Inspection and Accreditation program was to be developed for counties that chose to participate.
Forensic Centers be developed with county and state funding in the five divisions of the state.

Regional Forensic Centers

The purposes of a regional forensic center are:
To provide a location in proximity to the counties served to minimize the travel time for body transport for autopsy.
To locate adjacent to an academic medical facility in order to have access to scientific services not commonly needed but that might exist in an academic medical facility. Such services would include:
Anthropology
Serology
Specialized photography
Radiology and image analysis
Pharmacology
Microbiology
The logical location for these centers was
Memphis
Nashville
Chattanooga
Knoxville
Johnson City

It was an established belief that a physical structure would be best to house the forensic centers. Memphis already had a physical building for a Forensic Center, but it was built in 1929. The first new structure was built in Nashville, the second Chattanooga, the third Knoxville, the fourth Johnson City, and the last was opened Memphis in 2012. They were either built with local funds or built with state funds and leased at the county level. All serve multi-counties except Chattanooga. At present time the Chattanooga region only serves a single county.

Anthropology

In 1971, William M. Bass left Kansas to assume the chairmanship of the Department of Anthropology at The University of Tennessee in Knoxville. Dr. Bass was a physical Anthropologist with interest and experience in Forensic Anthropology. He was persuaded to involve himself in the state Medical Examiner system. Through his efforts and the graduates he produced the entire state is being served for the identification and/or recovery of skeletal remains.

Dr. Bass was honored as National Teacher of the year in the late 1990's. He originated the concept of "The Body Farm" to study human decomposition to allow a better estimation of time since death of found bodies.

The Enabling Law

The Postmortem law, passed in 1961, was taken from the Model Law published by the National Municipal League. It was to be a statewide law, but two counties opted to exclude themselves (Davidson and Marion). After many years they decided to become a part of the general law.

The most glaring defect in the law, as modified when passed, was that the County Medical Examiner did not have authority to order an autopsy in a case s/he was investigating. S/he could only recommend to the District Attorney General that an autopsy be ordered. It was required, before the General could execute such an order, that a suspicion of foul play exist in causing the death. After many years of trying, the legislature finally amended the law to allow the County Medical Examiner to order an autopsy in all cases that s/he was authorized to investigate.

A variety of other amendments have been added over the years, but a significant overhaul occurred in 2008 when the following changes were made:
An Advisory council was established.
The term of service of the Chief Medical Examiner was set as 5 years, with unlimited subsequent terms.
The positions of Deputy and Assistant Chief Medical Examiner were added to the law. These positions had been filled without compensation for years.
The term of service for a County Medical Examiner was specified at 5 years, with unlimited reappointment. Termination for cause was specified.
Credentials for Medical Investigators were specified and training was authorized.
Requirement that all Medical Examiner autopsies must be performed in a facility that had been accredited by NAME.

Chief Medical Examiners

1961-1963; 1965-1970 Thomas J. Littlejohn M.D.



1963-1965; 1970-1989 J.T. Francisco M.D.



Dr. Charles Harlan

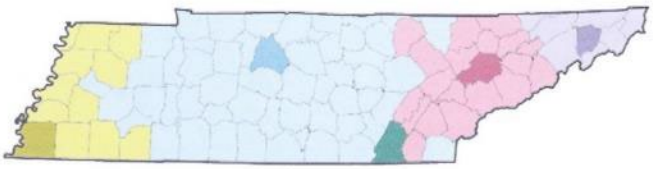
1989-1998 Charles Harlan M.D.



1998-2010 Bruce Levy M.D.



2010-present Karen Cline-Parhamovich D.O.



Forensic Centers of Tennessee

MEMPHIS (westTNCenter.htm)
NASHVILLE (middleTNCenter.htm)
CHATTANOOGA (southeastTNCenter.htm)
KNOXVILLE (eastTNCenter.htm)
JOHNSON CITY (upperTNCenter.htm)

Alphabetical List of Counties in Tennessee

Anderson	Decatur	Henderson	Marion	Sequatchie
Bedford	Dekalb	Henry	Marshall	Sevier
Benton	Dickson	Hickman	Maury	Shelby
Bledsoe	Dyer	Houston	Meigs	Smith
Blount	Fayette	Humphreys	Monroe	Stewart
Bradley	Fentress	Jackson	Montgomery	Sullivan
Campbell	Franklin	Jefferson	Moore	Sumner
Cannon	Gibson	Johnson	Morgan	Tipton
Carroll	Giles	Knox	Obion	Trousdale
Carter	Grainger	Lake	Overton	Unicoi
Cheatham	Greene	Lauderdale	Perry	Union
Chester	Grundy	Lawrence	Pickett	Van Buren
Claiborne	Hamblen	Lewis	Polk	Warren
Clay	Hamilton	Lincoln	Putnam	Washington
Cocke	Hancock	Loudon	Rhea	Wayne
Coffee	Hardeman	McMinn	Roane	Weakley
Crockett	Hardin	McNairy	Robertson	White
Cumberland	Hawkins	Macon	Rutherford	Williamson
Davidson	Haywood	Madison	Scott	Wilson

Tennessee – West Tennessee Regional Forensic Center

Jerry T. Francisco M.D.
Karen Chancellor M.D.



The University of Tennessee, Department of Pathology provided autopsy services to law enforcement beginning in the late 50's through the efforts of the Chairman, Douglas Sprunt. In 1957, Dr. Sprunt proposed a more formal relationship by remodeling a feed storage room in the basement of the Pathology building and constructing a cooler space for 9 bodies with an autopsy table to handle forensic autopsies that were requested through the District Attorney General. The fee was to be by annual contract. A private act was to be passed in the Tennessee legislature to authorize these services. Thus was born a long-term relationship.

In 1959, J.T. Francisco was returning from service in the U.S. Navy and was asked to continue to provide these autopsies. The faculty was reluctant to provide these services, since J. Robert Teabeaut, who was a trained Forensic Pathologist, had left the University. Dr. Francisco, having had some forensic experience while in the Navy, agreed to serve. Because Dr. Sprunt was grandfathered into the new specialty of Forensic Pathology, Dr. Francisco was allowed to sit for the Forensic Pathology Board exam in 1961.

The contract between Shelby County and The University of Tennessee was continued on a yearly basis. The enabling Medical Examiner law was passed in 1961, and Dr. Francisco was named as the first medical examiner for Shelby County.

Over the years other counties in Western Tennessee would refer bodies to this facility for autopsies. In 1987, because the pathology building was being remodeled, it was necessary to relocate the autopsy service, which included the autopsy service for John Gaston Hospital, which was essentially a safety net hospital. Shelby County Government agreed to purchase the

old Memphis Eye, Ear, Nose and Throat Hospital at 1060 Madison Ave. for the autopsy service. This Building was constructed in 1929 to serve as a training facility for EENT residents. For many years it had remained empty, as other hospitals in the area housed these programs. Limited remodeling created space for body storage, and autopsy space was created on the fourth floor operating suite. At this time it was signed as the West Tennessee Regional Forensic Center. Over the subsequent years additional remodeling occurred with new windows, addition of office space, new flooring, expanded environmental heating and cooling and a new autopsy room on the ground floor. It was still an old building, having been built as a hospital and not for forensic pathology services. The county and state agreed that a new building was required. This led to the opening of the West Tennessee Regional Forensic Center in 2012 at its new location 637 Poplar Avenue. This building is designed specifically for a modern death investigation system.

Shelby County Medical Examiners

1961 - 1998	Dr. Jerry Francisco
1998 - 2003	Dr. O'Brian Smith
2004 – Present	Dr. Karen Chancellor

Tennessee – East Tennessee Regional Forensic Center



Darinka Mileusnic-Polchan M.D.



The East TN Regional Forensic Center (RFC) and Knox County Office of the Medical Examiner have undergone many transformations over the last thirty years. It took a long time for the Office to actually become its own entity, since the first three medical examiners on the record were performing duties of the medical examiner on the "as needed" basis. Dr. Ira Pierce was the first Knox County Medical Examiner. Dr. Robert Lash, who established the local Lifestar™ service, was next and was succeeded in this role by Dr. Randal Pedigo, a former University of Tennessee Medical Center (UTMCK) surgeon. In those early years, the role of the medical examiner was more perfunctory. The medical examiner relied completely on police investigation, without conducting his own investigation. If an autopsy was deemed necessary it was delegated to a local pathology group. A pathologist would perform the autopsy, or more often than not, a pathology resident in training would perform the autopsy under the presumed supervision of a senior pathologist. The levels of supervision varied greatly, sometimes to the point of compromising the accuracy of forensic observation and/or the integrity of the recovered evidence.

With the arrival of the new chairman at the Department of Pathology, Dr. John Neff, the tides began to change. Dr. Neff recognized the need for a board-certified forensic pathologist to conduct the forensic autopsies. In 1994 he hired a freshly minted forensic pathologist, who had just completed the forensic pathology training, Dr. Sandra Elkins. Dr. Elkins trained under Dr. Jerry Francisco at the Office of the State Medical Examiner in Memphis, Shelby County. Dr. Pedigo's sudden departure in 1995 facilitated a series of events that in the long run proved to be exceptionally beneficial for the Office of the Medical Examiner (OME). By appointing a fellowship trained and board-certified forensic pathologist to the position of the Knox County Chief Medical Examiner, the County administration made great strides toward modernizing the Office of the Medical Examiner. Dr. Elkins held that position until 2008. Although Dr. Elkins was appointed by the Mayor and County Commission, she was completely beholden to the Department of Pathology at UTMCK.

Dr. Neff also recognized the need for a new facility to conduct autopsies, including forensic autopsies. Up to that point autopsies were conducted in a single room in the basement of the University Hospital. Dr. Elkins' office was the size of a broom closet in the Department of Pathology. Dr. Neff enlisted the renowned forensic anthropologist, Dr. Bill Bass, to help him convince the University of Tennessee leadership to invest considerable funds and build a new facility. The new 9,000 square foot facility was built on the ground floor of the UTMCK. It was a part of the multimillion dollar hospital renovation project that included a new emergency room and helicopter pad. The East Tennessee RFC opened for business in 1998. Up to that point the neighboring counties were sending their forensic autopsies to Dr. Cleland Blake, who was conducting autopsies in a transformed garage on his private property in Morristown, Tennessee. Dr. Blake was the medical examiner for Hamblin County and a forensic pathologist who contributed to the development of the Medical Examiner system in the State of Tennessee. By attracting a considerable number of out-of-county autopsies, the facility became the Regional Forensic Center in the true sense of the word. It also housed a forensic anthropology section dedicated to Dr. Bass.

Over the last decade, the Office and the RFC have undergone a complete makeover. In 2008, Dr. Darinka Mileusnic-Polchan became the Chief Medical Examiner for Knox and shortly after that, Anderson County. Between 2009 and 2013, the operation of the OME and RFC was contracted out to the Department of Pathology at UTMCK. Many factors lead to dissolution of the contractual relationship, such as privatization of the hospital operation, hospital expansion, growth of the RFC, as well as new state mandates that required all operational RFCs to become accredited by the National Association of Medical Examiners. In December of 2013, Knox County Government took over the operations and continued the contractual relationship through the intergovernmental agreement with Anderson County. Knox County Mayor Tim Burchett understood the importance of a well-run Medical Examiner's Office and dedicated his time and efforts to help the office recover and grow as a part of the executive branch of Knox County government. This project is one of many efforts by the mayor to support law enforcement and improve the medicolegal death investigation in Tennessee. Mayor Burchett and his team have continued to assist the Office of the Medical Examiner in their joint mission

to promote personal and public safety and public health initiatives for the citizens of Knox County and East Tennessee region.

As a result of all our hard work, including Dr. Bass and Governor Haslam's help, Knox and Anderson County Office of the Medical Examiner and the RFC will finally have its own home. A new facility is under construction at the site of a former surgery center in West Knoxville. The planned move-in date is January 2, 2015. We employ three board-certified forensic pathologists, five full time investigators, seven full time technicians, two part time technicians and four administrative support staff. The County also contracts on a full time basis with the board-certified forensic anthropologist, Dr. Murray Marks. The center has operated on the 24 hour/seven days a week schedule for decades and this is the first time that our investigators are able to respond to all death scenes. We continue to offer help and expertise through the autopsy service, death investigations, and courtroom testimony to more than twenty surrounding counties in East Tennessee.

Tennessee – Middle Tennessee Regional Forensic Center

Tom Deering, M.D.









After the Medical Examiner Law was codified by the Tennessee legislature in 1961, two Davidson county primary care physicians, Dr. T. E. Simpkins and Dr. Michael Patrone assumed

the title of county Medical Examiner for a number of years. Their role was to respond to law enforcement calls to sign death certificates, retrieve bullets and perform limited post mortem examinations of cases investigated by law enforcement. Dr. T. E. Simpkins and Dr. Michael Petrone would alternate call days, signing death certificates and performing limited or partial autopsies if needed to recover bullets.

Davidson County formed a commission in 1982, with the purpose of picking a county Medical Examiner. Dr. Charles Harlan, a forensic pathologist, was selected, becoming the first Davidson county ME who was also trained in forensic pathology. During the mid-1980's, the Dr. T. E. Simpkins Metro Nashville Davidson County Forensic Sciences Center was built on the grounds of the original General Hospital near downtown Nashville and the Cumberland River. In 1989, Dr. Harlan was also appointed State Medical Examiner, taking over for Dr. Jerry Francisco in Memphis who felt the State ME should be located in Nashville.

Dr. Harlan resigned as county ME in 1993, continuing as State Medical Examiner until resigning that position in 1996. Dr. Harlan continued to do autopsies for other counties as a forensic pathologist in a private warehouse office on the Cumberland River in Nashville until 2005. Davidson County experienced a series of Chief Medical Examiners over the next three years. Dr. Ann Bucholtz was chief beginning in 1995 until July 1996. Dr. Miles Jones filled the role from August 1996 to approximately March 1997, commuting to Nashville from a neighboring state to perform autopsies. From April to June 1997 the county simply contracted with Dr. Mete Altug to perform autopsies.

In early 1997, Drs. Ed Pierce and Ben Davis from Associated Pathologists in Nashville proposed to the Mayor's office of Nashville privatizing the Medical Examiner office, finding a strong ally in then Mayor Phil Bredesen. From this was born a contract between Metro Nashville and Forensic Medical Management Services, a separate physicians' corporation, owned by Associated Pathologists but operated independently with the goal to provide stability and ensure high quality forensics from the County Medical Examiner's office.

Associated Pathologists selected forensic pathologist Dr. Bruce Levy from New York City as the company's CEO, and Dr. Levy was appointed the Chief Medical Examiner of Davidson County. Forensic Medical moved into the Dr. T. E. Simpkins Forensic Sciences Center and began operating in July, 1997. Modular office space was installed next to the forensic center to provide room for the staff. Dr. Levy was joined by forensic pathologists Drs. John Gerber and Emily Ward as assistant medical examiners as the fledgling company initially served only Davidson County.

In 1998, Dr. Levy was also appointed the State Medical Examiner, filling the role that had been handled administratively since Dr. Harlan resigned. Later that same year, the Nashville office received accreditation by the National Association of Medical Examiners (NAME). As the need for space grew, with increasing demand for autopsy services from surrounding counties, a combined Metro Nashville and State of Tennessee collaboration built the more spacious

current Office of the Medical Examiner on state land several miles north of downtown Nashville. Forensic Medical moved there in July 2001 and functioned as both the Metro Nashville Medical Examiner and the State Medical Examiner office.

Over the following years, Forensic Medical slowly expanded services to over 60 counties in Tennessee, functioning as a regional forensic center for county MEs requesting autopsies on deaths in their jurisdiction. Forensic Medical expanded the role and number of death investigators for Davidson and Williamson counties and provided forensic odontology and anthropology through arrangements with local professionals. The office offered an accredited forensic pathology fellowship for many years and annual regional training for MEs, death investigators and law enforcement. The office continues an academic relationship with Vanderbilt Medical College, lecturing and offering forensic pathology rotations for pathology residents and medical students.

In 2010, Dr. Levy left Forensic Medical and Dr. Amy Hawes was appointed Chief Medical Examiner of Davidson County. Dr. Feng Li assumed the CEO position. The role of State Medical Examiner was eventually appointed to Dr. Karen Cline-Parhamovich of east Tennessee, moving the State Medical Examiner's Office away from Nashville.

During its 17 years of service, the company added four more forensic pathologists in Nashville, bringing the total to seven. The current (2014) Nashville group includes:


Amy Hawes, MD


Feng Li, MD, JD, PhD


Tom Deering, MD


Adele Lewis, MD


David Zimmerman, MD


Erin Carney, MD


Miguel Laboy, MD.

Tennessee – Southeast Tennessee Regional Forensic Center



James K. Metcalfe M.D.



Hamilton County Medical Examiner Office, Chattanooga, Tennessee

Dr. Shawn Gazaleh held the position of County Medical Examiner during 1985-1986, assisted by Dr. James Metcalfe. Dr Frank King was hired as Hamilton County Medical Examiner in July 1986 and continued until 2012. The Hamilton County Forensic Center on Amnicola Highway was opened in 1989.

Dr. Jack Adams served as County Coroner and Medical Examiner until 1985.

Dr. Frank King was assisted by Dr. John Cavanaugh during 1997, Dr. Marilyn Murr during 1998-2000, Dr. Stan Kessler during 2001-2004, and Dr. James Metcalfe from 2007-2012, when Dr. King retired and Dr. Metcalfe was appointed Hamilton County Medical Examiner. Dr. Steven Cogswell joined the office as Associate County Medical Examiner in 2013. The office received accreditation by National Association of Medical Examiners in April 2014.

Tennessee – Upper East Tennessee Regional Forensic Center



Kenneth E. Ferslew Ph.D, DABFT



The establishment of a forensic center to serve the Upper East Tennessee region was initiated in 1983 by Dr. Phillip Coogan, the first Chairman of the Department of Pathology at the Quillen-Dishner College of Medicine, East Tennessee State University in Johnson City. The first forensic pathologist was Charles J. Stahl, III, M.D. who had been the Director of Laboratory Services at the Veterans Administration Medical Center, Mountain Home, Tennessee. The Center consisted of a single autopsy room, a support lab, a cold room, a storage room and an office in buildings at the Veterans Administration Medical Center, Mountain Home, Tennessee. Dr. Kenneth E. Ferslew, Ph.D., DABFT was recruited by Dr. Ernest Daigneault, Chairman of the Pharmacology Department, to establish a toxicology laboratory to serve the fledgling forensic center as well as the hospitals and clinics associated with the College of Medicine. Later that year Dr. William F. McCormick was recruited to direct the VA's Autopsy Service and to be the neuropathologist for the medical school. As a forensic pathologist, he became Director of the Center and spearheaded its further development. It was Dr. McCormick who named the center the Upper East Tennessee Forensic Center.

Dr. McCormick would serve as Director of the Upper East Tennessee Forensic Center over the next 25 years (1983 - 1998, 2004 - 2006), return to cover services (2008 - 2009) and still serves as senior consultant in forensic pathology to this day. The Center serves the eight counties of Upper East Tennessee, performing all ordered autopsies on the deceased in our region,

especially cases of questionable deaths. Over the years the service has grown and the number of autopsies has continued to increase each year as the population of the area and the need for services has increased. During the first year of service (1983) the Center performed 4 autopsies. The Center has had a 42% increase in workload from 2009 to 2013.

Numerous forensic pathologists have directed or assisted over the years including:

Gretel Stephens (Harlan) 1996 - 2005
Ellen Wallen (Baker) 1998 - 2002
Mehsati Herawi 2002 - 2003
Alfredo Paredes 2003
Teresa Campbell 2005 - 2014
Paul Benson 2006 - 2008
Karen Cline-Parhamovich 2009 - current
Dawn Lajoie 2010 - 2013
Nicole Masian 2013 - current
E. Hunt Scheuerman 2014 - current

With Dr. William McCormick's initial retirement in 1998, Dr. Gretel Stephens (Harlan) became Director of the Center and performed all autopsy services. She was followed in 2005 by Dr. Teresa Campbell. With the continued growth in the area and increased demand for services being requested, a second forensic pathologist was needed and hired. Dr. Paul Benson was on the Center's staff from 2006 to 2008, followed by Dr. Karen Cline-Parhamovich in 2009. Dr. Cline-Parhamovich was appointed Director of the Center in 2010, and Dr. Dawn Lajoie joined the staff from 2010 to 2013. Currently Dr. Nicole Masian is on staff and will soon be joined by Dr. Hunt Scheuerman. In 2012, Dr. Cline-Parhamovich was appointed Chief Medical Examiner for the State of Tennessee and the Center underwent renovations to accommodate the additional staff and archives of autopsy reports from across the state. The State Office of the Chief Medical Examiner's daily operations occurs from the Center and the State Department of Health offices in Nashville, Tennessee. Currently, Dr. Cline-Parhamovich has continued as Director of the Center and helps cover the Center's regional service.

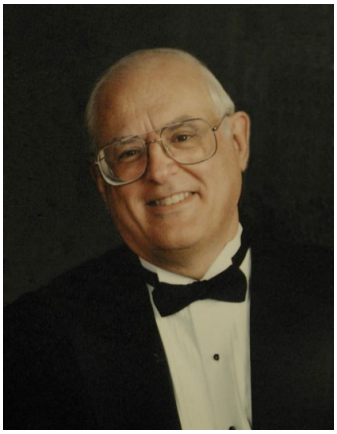
A permanent home for the Center was finally established in 2006 at the James H. Quillen College of Medicine of East Tennessee State University in Building 6 at the Quillen Veterans Administration Medical Center, Mountain Home, Tennessee. It was funded by a collaborative effort from the State of Tennessee, the Federal Government through The Veterans Administration and the county governments of the Upper East Tennessee region. This facility is 38,000 square feet and houses both the Division of Forensic Pathology and the Section of Toxicology. The Center was officially named the William L. Jenkins Forensic Center in 2006 in honor of Senator William L. Jenkins who had followed the late Senator James H. (Jimmy) Quillen for whom the College of Medicine and the VA Medical Center, Mountain Home are named. Senator Jenkins had been a champion for the Center in procuring matching funding from the Federal Government to renovate Building 6 into the current day facility.

Application for accreditation of the William L. Jenkins Forensic Center by the National Association of Medical Examiners (NAME) was initiated under Dr. Gretel Stephens (Harlan) and finally achieved under Dr. Teresa Campbell in 2009. Service continues to cover the eight counties of the Upper East Tennessee region. Over 400 autopsies will be performed this year, and the staff will consult and collaborate with the medicolegal community including the county medical examiners, district attorneys, defense attorneys, and law enforcement to provide forensic services and disseminate forensic knowledge within our region and the state.

Texas – Bexar County – San Antonio

Historical Summary of the Bexar County Medical Examiner's Office





Randall Frost, MD and Vincent DiMaio, MD

September 2012



BEXAR COUNTY MEDICAL EXAMINER'S OFFICE
7337 LOUIS PASTEUR
SAN ANTONIO, TEXAS 78229-4565
(210) 335-4053
FAX (210) 335-4052
www.bexar.org/medicalexaminer

Accredited by the National Association of Medical Examiners

Death investigations in early Texas are not well documented, though the laws of the Republic of Texas (1836-1946) do have references to the office of Coroner. However, these statutes do not reference death investigation practices to any significant degree, and it is likely that such investigation was quite variable and performed on an ad hoc basis on the Texas frontier. Texas became a state in 1846, and death investigation responsibilities were eventually assigned to the office of Justice of the Peace, though some early state constitutions and statutes continue to

reference the office of Coroner, including discussions of inquests on dead bodies. But by 1879, death investigation was clearly vested in the office of Justice of the Peace, as codified in the Code of Criminal Procedures of that year. It remained a part of the duties of that judicial office in the majority of Texas counties with little change over the ensuing years. However, a significant change occurred with passage of legislation in 1955 that allowed for the formation of Medical Examiner's Offices in certain counties having populations in excess of 250,000. Under the law, these counties could remove the responsibility for death investigation from the Justices of the Peace and vest this authority in a physician Medical Examiner.

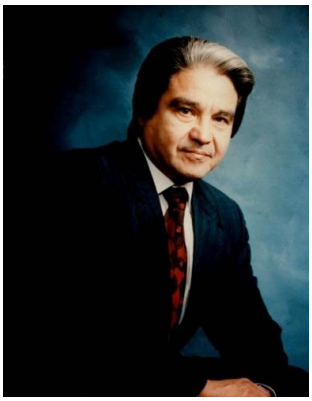
At that time, four counties fell under the provisions of this law: Bexar (San Antonio), Harris (Houston), Dallas and Tarrant (Ft. Worth). However, passage of the law was initially met by indifference, and none of the counties adopted the Medical Examiner System. Then, on December 5, 1955, an automobile accident occurred four blocks from the residence of one of the Bexar County Justices of the Peace. The police, thinking the victim might still be alive, rushed him to the hospital where he was pronounced dead on arrival. They then called the Justice of the Peace in the precinct where the accident occurred. He refused to hold an inquest because he felt the police should not have removed the body. The police then called the Justice of the Peace for the precinct in which the hospital was located. They asked him to hold an inquest. He refused because he was not called first. The body then remained in the hospital from the evening of the day of the accident until noon the next day when a Justice of the Peace was located who agreed to hold an inquest.

This incident was well-publicized by the media with charges of "prima donna" actions by the Justices of the Peace. At the next meeting of the Bexar County Commissioners' Court, a majority of the Justices of the Peace, the Police Chief, and other City and County officials, recommended that a Medical Examiner System be established. Most of these individuals had made a similar recommendation in the past. It was the strong public opinion in regard to the incident that won approval for the establishment of the Medical Examiner System.

The Commissioners' Court then went on to adopt the concept of a Medical Examiner's Office. On December 28, 1955, The Bexar County Commissioners' Court authorized the County Auditor to include in the 1956 Budget the sum of $25,000 to create the position of Medical Examiner, with the money used to defray the salary and office expenses of the Medical Examiner. On April 2, 1956, the Commissioners' Court appointed Dr. Robert Hausman as the first Medical Examiner effective July 1, 1956. He was given a salary of $14,000 per year with an expense allowance of $1,200. He was also allowed an assistant at $3,600 per year with $600 per year expense allowance, and a secretary at $3,000 per year. The Bexar County Medical Examiner's Office became operative July 1, 1956. Dr. Hausman, took the oath of Office on July 2, 1956, and received his first case, a suicide, two hours after the ceremony. Dr. Ruben Santos was appointed Assistant Medical Examiner in the summer of 1962. After Dr. Santos had been Assistant Medical Examiner for one year, Dr. Hausman took a 2 year leave of absence and Dr. Santos became acting Chief. Dr. Hausman resigned in 1968 and was replaced by Dr. Santos who was the Chief Medical Examiner until December 4, 1980.

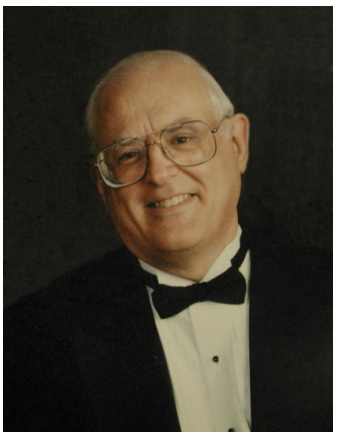


Dr. Robert Hausman



Dr. Ruben Santos

Dr. Vincent J.M. Di Maio was appointed Chief Medical Examiner, effective March 1, 1981, on a vote of the County Commissioners' Court of December 18, 1980. Members of the Court were County Judge Albert Bustamante and Commissioners Leo Mendoza, Jr., Tom Stolhandske, Jeff Wentworth and Tom Vickers. Under Dr. DiMaio's leadership, the BCMEO was transformed from a small, essentially one-man operation into a modern and highly respected medical examiner department. During his 25 year tenure as Chief Medical Examiner, a forensic pathology fellowship training program was established in the office, accreditation by the National Association of Medical Examiners was achieved, and the staffing and budget of the office was increased commensurate with the rapid growth of Bexar County. Dr. DiMaio's international reputation as a forensic pathologist contributed greatly to the stature of the office. Dr. DiMaio remained Chief Medical Examiner until his retirement on December 31, 2006, and was succeeded by Dr. Randall E. Frost, formerly Deputy Chief Medical Examiner, on January 1, 2007.



Dr. Vincent J.M. DiMaio



Dr. Randall E. Frost

In 1956, Bexar County had an estimated population of 710,451. The Medical Examiner's Office consisted of 3 full time and 6 part time employees. The Medical Examiner at that time, Dr. Robert Hausman, was a qualified Forensic Pathologist who performed both the administrative

duties of the office and nearly all the medical-legal autopsies. In 1957, the cost to operate the Bexar County Medical Examiner's Office was 4.2 cents annually per capita. In the first 4 months of the Office, 249 deaths (16.5% of all deaths in Bexar County) were investigated: 95 violent deaths; 154 natural. 131 autopsies were performed. Blood alcohol samples were initially sent to Austin to the State crime lab. Medical Investigators employed by the Medical Examiner's Office did not begin to go to death scenes until January of 1982.

On May 15, 1958, the first Toxicologist was hired, with the first toxicology test performed on July 31, 1958 for arsenic. The first Toxicology Laboratory was set up in a 7 x 8 ft. room next to the morgue in the Robert B. Green Hospital. After several months, the lab moved to a larger room in the County Courthouse where the Administrative Office was located. In 1961, the lab and administrative department moved to the Courthouse Annex at 203 W. Nueva.

In 1969, the Administrative Office and Laboratory moved to the Robert B. Green Hospital. It remained there until October 1978 when the BCMEO moved to a new 16,000 sq. ft. building at 600 North Leona. In June 1993, the BCMEO moved to a new 52,000 sq. ft. facility on the campus of the University of Texas Health Science Center at San Antonio which it shared with the Bexar County Criminal Investigation Laboratory.

The Bexar County Medical Examiner's Office (BCMEO) is accredited by the National Association of Medical Examiners. The office operates a fully accredited training program (fellowship) in Forensic Pathology, and provides pathology resident and medical student teaching services for the adjacent University of Texas Health Sciences Center School of Medicine and for the local military pathology training program. The Toxicology Section of the BCMEO is one of only approximately 30 institutions in the United States and Canada accredited by the American Board of Forensic Toxicology. The Toxicology and Medical Investigations Sections of the Office also offer competitive internship opportunities in their respective areas for interested and qualified university students.

Currently (2012) the office is staffed by five full time forensic pathologists (listed below with their fellowship training program) all of whom are certified in Forensic Pathology by the American Board of Pathology.
Randall Frost, M.D., Chief Medical Examiner (Dade County Medical Examiner’s Office)
Kimberley Molina, M.D., Deputy Chief Medical Examiner (Bexar County Medical Examiner’s Office)
Jennifer Rulon, M.D., Deputy Medical Examiner (Bexar County Medical Examiner’s Office)
Elizabeth Peacock, M.D., Deputy Medical Examiner (Dallas County Medical Examiner’s Office)
Rajesh Kannan, M.D., Deputy Medical Examiner (Bexar County Medical Examiner’s Office)

One or two fellows are also trained in the office each year. The forensic pathology training program is approved by the American Council on Graduate Medical Education for two positions, but historically only one position is funded by Bexar County. Occasionally a military

physician has occupied the second, unfunded, position. Physicians who have trained in forensic pathology in the office are:

Fellow Name	Entered Training	Completed Training
Dana, Suzanna E.	7/1/1983	7/30/1984
Yudt, William M.	8/1/1983	6/30/1984
Bux, Robert C.	8/8/1984	8/7/1985
Kaplan, James A	7/1/1987	6/30/1988
Brown, Tommy J.	7/1/1988	6/30/1989
Caballero, Eduardo	7/1/1989	6/29/1990
Somerset, Scott J.	7/1/1990	6/30/1991
Nielsen, Jody L.	1/1/1991	12/31/1991
Zivot, Udelle D.	7/1/1991	6/30/1992
Sikirica, Michael	7/1/1992	6/30/1993
Haas, Thomas	7/1/1993	11/15/1993
Erickson, Stephen A	7/1/1994	6/30/1995
Milovanovic, Alexander	7/1/1995	6/30/1996
Deidiker, Russell	7/1/1996	6/30/1997
Rulon, Jennifer	7/1/1997	6/30/1998
Farley, Norma J.	7/1/1998	6/30/1999
Humphreys, James L.	7/1/1999	6/30/2000
Kohlmeier, Ruth E.	7/1/2000	6/30/2001
Rouse, Elizabeth A.	7/1/2000	6/30/2001
Natarajan, Sridhar	7/1/2001	6/30/2002
Feig, James A.	7/1/2001	6/30/2002
DuPre, D'Michelle	7/1/2002	6/30/2003
Molina, Kimberley	4/1/2004	3/31/2005
Stash, John A.	7/1/2005	6/30/2006
Schmidt, Matrina	7/1/2005	6/30/2006
Kannan, Rajesh	7/1/2006	6/30/2007
Wood, Leisha	7/1/2007	6/30/2008
Kobayashi, Masahiko	7/7/2008	9/30/2009
Perez, Danielo B.	7/1/2010	6/30/2011
McClain, William D	7/1/2011	6/30/2012
Evans, Samantha	7/1/2012	Present

The office operations are divided into four sections, each led by a Section Head:

Administration: Gloria Delgado
Toxicology: Michael Neerman, Ph.D.
Investigations: Jimmy Holguin
Autopsy/Morgue: Kelley Beyer

There are currently a total of seven clerical staff, twelve Medical Investigators, ten toxicology staff, and seven Autopsy Technicians.

In addition to having jurisdiction over deaths occurring within Bexar County, the Bexar County Medical Examiner's Office also provides forensic autopsy services for many of the smaller, predominately rural counties in the surrounding area of South and Central Texas. In such cases, jurisdiction over the case investigation is retained by the Justice of the Peace in the county of origin, but the BCMEO will provide autopsy services and professional consultation on a fee-for-service basis. In recent years, these cases have decreased somewhat due to an increase in the number of medical examiner offices and private forensic autopsy facilities in the state.

A historical comparison of case load data is shown in the table below.

Year	**1958**	**1960**	**1970**	**1980**	**1981**	**1990**	**2000**	**2010**
Cases reported				2638	2987	4461	8125	9969
Cases accepted	662	729	939	1393	1549	1653	2059	2253
Autopsies	325	331	332	414	736	1048	1324	1335
Scene Investigations	0	0	0	0	0	342	425	850
Toxicology tests		345	1374	1689	5031	9017	33445	81,892
Out-of-county	0	0	0	0	0	185	331	95

The current annual budget of the office is slightly over $4 million, with income of nearly $1 million from fees for out-of-county autopsies, toxicology services in non-death cases, and other fees. This results in a per capita expense of approximately $1.75 per Bexar County taxpayer for current funding of the office.

All staff Medical Examiners are required to be board certified in Anatomic and Forensic Pathology by the American Board of Pathology. The Medical Investigators in the office all receive requisite training to obtain Texas Peace Officer certification, and are also required to obtain certification by the American Board of Medicolegal Death Investigation during their first two years of employment. Many Toxicology Chemists are certified by the American Board of Forensic Toxicology, and many have advanced degrees in their field. The Chief Toxicologist is required to have a doctoral level degree.

The Bexar County Medical Examiner's Office continues to expand to keep pace with a rapidly growing San Antonio metropolitan area, with a current population of approximately 1.7 million. The goal of the Office is to continue to provide the finest in forensic pathology and death investigation services to its citizens, while maximizing efficiency in the expenditures of taxpayer

dollars. We strive to provide outreach and training to the local medical community, civic groups, and law enforcement and judicial officials from Bexar and surrounding counties. To that end, an annual, highly reviewed death investigation course for police, attorneys, and Justices of the Peace has been established, and Medical Examiners give frequent presentations on topics of forensic pathology to a variety of local groups. Our staff members also support local interdisciplinary organizations such as Child Fatality Review Teams on a regular basis. The training of young physicians in the field of forensic pathology is an ongoing priority of the Office, and medical students, pathology and pediatric residents, and forensic pathology fellows train in the facility. The office has frequently hosted forensic pathologists, physicians, and investigators from other countries during visits to the United States to learn about American forensic pathology practice and death investigation.

While economic realities have constrained growth in most governmental agencies in recent years, the BCMEO has been able to maintain services at its traditionally high level of excellence because of a very dedicated staff that continually strives to increase efficiency throughout the office.

Texas – Dallas

History of the Southwestern Institute of Forensic Sciences



Joni L. McClain, MD

August 2012

History of the Southwestern Institute of Forensic Sciences

In Texas there are no coroners. The duties and responsibilities of the coroner's office are delegated to the justices of the peace. The justices derive their death investigation powers from the portion of the Texas Code of Criminal Procedure loosely designated as the "Inquest Law." This segment of the code is old and was originally intended to provide for the detection of homicide. It has been modified many times and in the process has been extended so as to include the authority of the justice to investigate suicidal deaths, deaths due to accident and other deaths.

In the late 1940's and early 1950s a coalition of physicians (both pathologists and others), attorneys, and others pushed for legislative action to permit heavily populated counties to establish positions for appointed medical examiners. These were to be physicians skilled in autopsies, that is, pathologists. The so-called Baker Bill was proposed at the 1955 session of the Texas legislature and was enacted into law. The new law provided that counties with a population of more than 250,000 could establish a medical examiner system. If such a county had within its boundaries a medical school then that facility would suffice. In 1965 the Code of Criminal Procedure was changed to mandate that counties with a population of more than 500,000 establish a medical examiner's office.

Dallas County adopted the law in 1969. Dallas County was unique in that the criminal investigation laboratory, the medical examiner, and the toxicology department were combined in the new facility and placed under the director. The director of the Institute is the Chief Medical Examiner. The new combined facility was named the Southwestern Institute of Forensic Sciences.

The Kennedy Assassination

On November 22, 1963, President John F. Kennedy was assassinated in Dallas, TX. At that time, Dallas was still under the Justice of the Peace system. The justice had the authority to conduct the autopsy in Dallas. Due to the media attention, he attempted to call the District Attorney. The phones had been commandeered by the Secret Service and FBI and the justice was not able to reach the district attorney.

Dr. Earl Rose, the forensic pathologist who performed the medicolegal autopsies authorized by the Justice of the Peace, was a relative newcomer to Dallas. He had been on the Southwestern Medical School faculty less than 6 months. Dr. Rose exhorted the Justice of the Peace and the President's staff to have the autopsy performed in Dallas. The body and the entourage left the emergency room at Parkland hospital and departed for Washington DC. Dr. Rose continued to lobby for a medical examiner system.

The Making of the Dallas County Medical Examiner System

During 1967-1968, there were 2 developments. First, an ad hoc committee of 5 was established and met frequently. The members of the committee included Frank Crowley, Commissioners Court; Alex Bickley, City Attorney; Jack Price, Parkland Hospital; Drs. Portman and Marchman, Jr; President of the Dallas County Medical Society and Dr. Vernie Stembridge, Professor of Pathology, UT Southwestern.

Second, Dr. Rose developed a seven page outline of a functional system combining Forensic Pathology, Toxicology, and the Crime Lab. The committee accepted and refined Dr. Rose's proposal, so the principle seemed established. Struggles occurred, with the location and organization being two main points. Issues as to location were as follows: 1) City: Police Department downtown - greater use - Crime lab; 2) County: courthouse – commissioners; and 3) Parkland Memorial Hospital – ruled out by District Attorney Wade, intended for use and care of indigent patients.

A remarkable opportunity presented itself: 1) the necessity for the facility to be recognized as independent, impartial, and not for the plaintiff or the defense, which would be reinforced by a neutral location, and 2) the necessity for a high quality professional staff, not under political control.

The ultimate recommendations were presented to a large assembly of officials in May 1968. The conclusions, presented to and generally accepted at that meeting were:

Construct a separate facility - $1.5 million certificates of indebtedness;
Located adjacent to Parkland and the Medical School – 0.24 acres of land to be consolidated from the Hospital District, the County, and the University of Texas adjoining the Medical School;
The professional staff had to be academically acceptable to the school and the school would nominate personnel for the professional vacancies; and

Negotiations would be open for future expansion of the building. The facility would have a single director over the three functions - Forensic Pathology, Toxicology, and Criminalistics.

Thus, in May 1968, everything seemed to be in place. Everyone was stunned that August by Dr. Rose's abrupt resignation. In retrospect, it took a shock of this magnitude to galvanize everyone into action. Dr. Rose became the sacrifice for our benefit. Who was to do the medicolegal autopsies? Dallas turned to two groups: 1) local pathologists including faculty – most responded to the call, and 2) the residents in pathology – the residents would agree to help but only after the county commissioners formally adopted the plan, which occurred shortly. The Board of Regents likewise accepted the plan. So, when a crisis dictates, the system really can move.

One of the tenets was that the professional staff had to be acceptable to the Medical School. Thus, the recruitment was a school responsibility. Within 3 months (Sept-Nov) the school had recruited one of the leading medical examiners in the country, Dr. Charles Petty. He arrived for duty in the summer of 1969. Temporarily housed at both the Medical School and the Hospital, Dr. Petty began assembling a staff and the design and construction of the 3 story, $1.5 million building. In the fall of 1969, Dr. Petty implemented the provisions of the Baker Bill. He spent countless hours laying the educational groundwork for this switchover.

With the occupancy of the building in February 1972, the system really started functioning well. The strictly service aspects of the Forensic Sciences Institute came under the purview of the Commissioners Court. For educational and research endeavors, that operation came under the umbrella of the Medical School. Educational activities of the Institute involved medical students, residents, pathologists, lawyers, and law enforcement officials. Continuing educations programs were also provided.

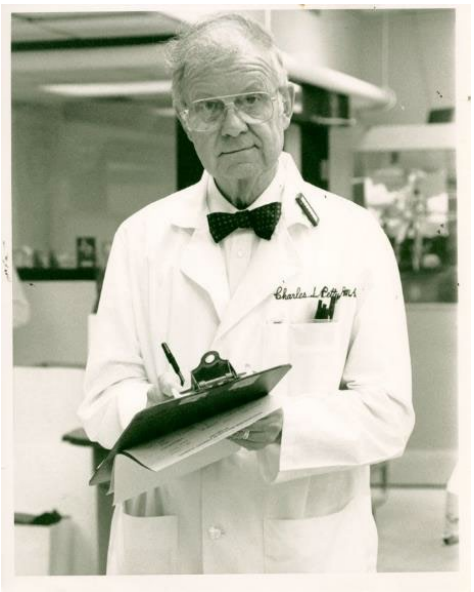
Dr. Petty continued as Chief Medical Examiner and Director of the Southwestern Institute of Forensic Sciences until his retirement in 1991. Dr. Jeffrey J. Barnard became the Director in 1991 and continues to this day in that post.



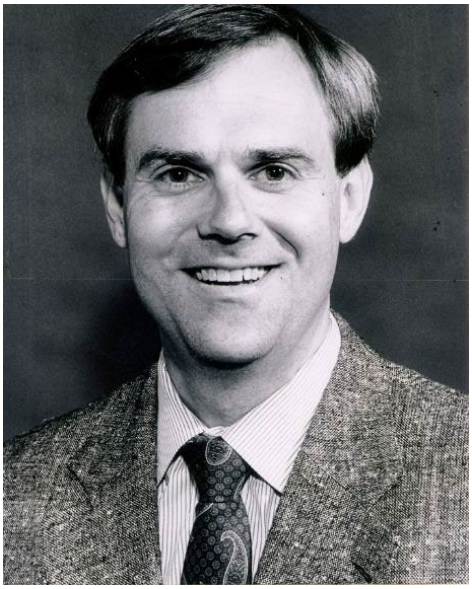
Dr. Earl Rose
Photo taken mid 1960s
(1963-1968)



Parkland Hospital Emergency Room
November 22, 1963



Dr. Charles Petty, MD
Director and Chief Medical Examiner,
SWIFS, 1968-1991



Dr. Jeffrey J. Barnard, MD
Director and Chief Medical Examiner
SWIFS, 1991-present

SWIFS – 5230 Medical Center Drive, Dallas, TX – 1971-2011





Construction of the original SWIFS, 1971





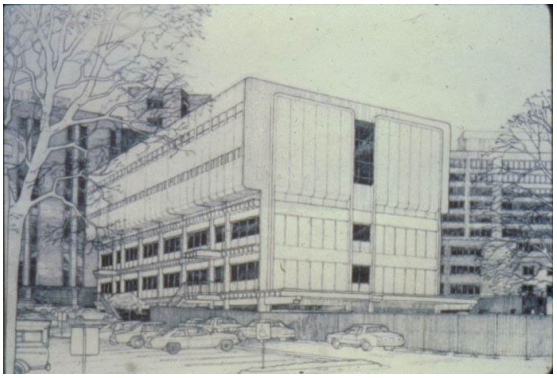
SWIFS original building 1972



Autopsy room 1972



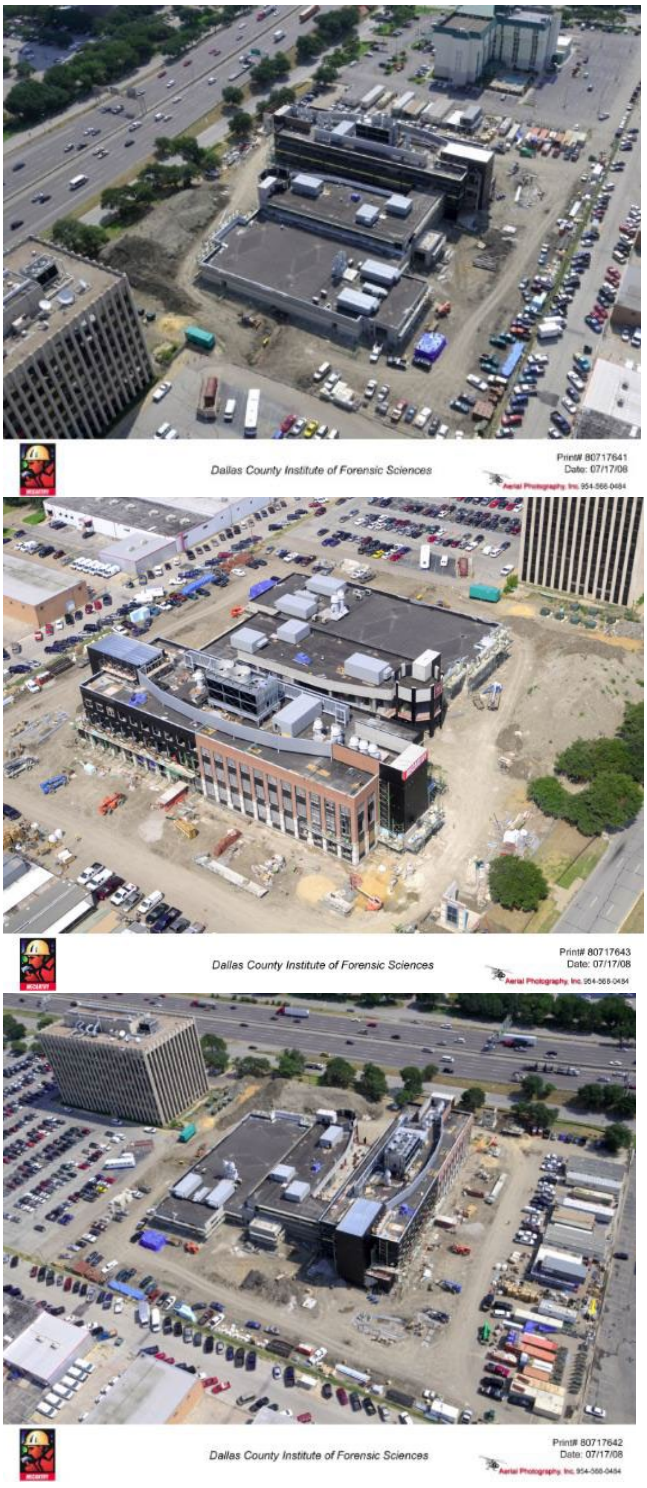
Concept for the new SWIFS



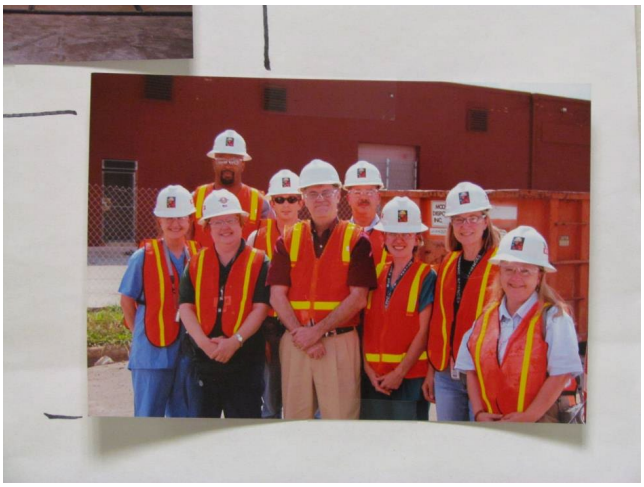
Concept for addition of top two floors



Aerial view of SWIFS with top two floors added



Aerial view of the construction of the new SWIFS
2355 N. Stemmons Freeway, Dallas, TX



Staff inspecting the building while under construction.
First row: Cathy Self, Forensic Coordinator; Joni L. McClain, MD, Deputy Chief Medical Examiner; Jeffrey J. Barnard, MD, Director and Chief Medical Examiner; Erin Duddlesten, Assistant autopsy technician supervisor; Elizabeth Todd, PhD, Chief Toxicology; Mary Brownlee, Chief Field Agent
Back row: Darrin White, Autopsy technician supervisor; builder representative x 2





August 2012
Southwestern Institute of Forensic Sciences
2355 N. Stemmons Freeway
Dallas, TX 75207



Autopsy room under construction



New autopsy room



Medical Examiners
August 1, 2012
First row: Chester Gwin, MD; Joni L. McClain, MD – Deputy Chief Medical Examiner; Tracy J. Dyer, MD, JD; Jill Urban, MD; Lynn Salzberger, MD; Janis Townsend-Parchman, MD; Stephanie Burton, MD
Second row: Reade Quinton, MD; Keith Pinckard, MD, PhD; Jeffrey J. Barnard, MD- Director and Chief Medical Examiner; William McClain, MD

Comparisons

SWIFS 5230 Medical Center Drive, Dallas, TX

44,000 square feet
Cost: 1.5 million

SWIFS 2355 N. Stemmons Freeway, Dallas, TX

112,000 square feet
Cost: approximately 50 million

Caseloads

	1970	**2011**
Medical Examiners	3	10 with 2 fellows
Autopsies	1214	3179
External examinations	1529	606
SWIFS total number of employees	40	110

Vermont

Death Investigation in Vermont: A History



Steven L. Shapiro, MD
Vermont Chief Medical Examiner (9/2006 –Present)

Adapted from:
Stress and the OCME – A Continuum: Eleanor N. McQuillen (Vermont Chief Medical Examiner May 1978-January 1990)

Establishing a Medical Examiner System in a Small Rural State: Joseph Spelman MD (Vermont State Pathologist 1948-1955) Paper presented AAFS 2/27/54 Chicago, IL

Special thanks to Paul Morrow (Vermont Chief Medical Examiner 1990-2004)

February 2013

Vermont became the 14th state in 1791. There has never been a coroner. In the early years justices of the peace were empowered to summon jurors, subpoena witnesses and hold inquests. This system was changed in 1886, when the first provisions for performing autopsies were established. The local health officer could alert a Justice of the Supreme Court, who could authorize any physician to do an autopsy.

In 1898 the Attorney General was given the authority to order autopsies and was responsible for prosecuting all homicides in the state. The State Health Lab was formed in 1900 and the director of the laboratory/state pathologist was required to perform all medico legal autopsies, making Vermont the first state in which all "official" autopsies were conducted by a central agency.

In 1949, early in Dr. Spelman's tenure as State Pathologist, a bill was introduced and subsequently withdrawn from the legislature which would have established a medical examiner law and system. The bill was not expected to pass, in part because two former attorney generals testified that Vermont had no unrecognized homicides and that the Chief Medical Examiner would be given too much authority.

Following this defeat, a public publicity campaign, complete with black and white and color slides showing case material and with support from Vermont Physicians, the University of Vermont, Vermont State Police (established 1947), most of the 14 county State Attorneys and the slogan "If you want to get away with murder, go to Vermont," traveled the State hitting various local clubs and organizations.

Things came to head during the spring of 1950, when the wife of a local businessman was found dead, bruised and naked in a snow bank outside an inn. The initial investigation by the town health officer, a cobbler by trade, ruled the death natural. A subsequent private autopsy, suggested a more sinister demise (I have personally reviewed this case and believe it to be an accidental death of an acutely intoxicated, chronic alcohol user with paradoxical undressing, see Death at the Waterbury Inn). Both local and national press descended and played up the story (some things don't change).

During the 1951 legislative session, buried in a bill to reorganize the health department, a provision which went unnoticed made it mandatory for Health Officers, the first line investigators, to report deaths due to a variety of causes to the state pathologist, who was also given the power to authorize autopsies. Unfortunately, lay investigators, health officers or selectman, were still left in charge of the initial investigation.

In 1953, a new bill was introduced which was designed to establish a state wide medical examiner system. It again met keen opposition, but with compelling testimony and some creative politicking the bill passed and in July 1953 the state wide medical examiner law went into effect. The law authorized 25 state wide physicians to act as regional medical examiners who are selected and serve at the pleasure of the state pathologist and would require investigation of deaths from violence, or suddenly when in apparent good health, or when unattended by a physician, in jail or prison or a mental institution, or in any unusual unnatural or suspicious manner or in circumstances involving a hazard to public health welfare or safety. Essentially all deaths which are not natural while under physicians care become medical examiner cases.

In 1955, Dr. Spelman left VT for Philadelphia leaving his then assistant Dr. Richard Woodruff in charge of the new system. Dr. L.S. Harris, trained in Cuyahoga County Ohio as a forensic pathologist came on board in 1969 to replace Dr. Woodruff. In this period the title State Pathologist was changed to Chief Medical Examiner in the statutes. During the 50's and 60's autopsies were performed throughout the state, including funeral homes, but by the late 60's the vast majority were being done in the mortuary of the state's largest teaching hospital. Dr. Eleanor McQuillen joined the staff in 1976, 3 months after becoming a board certified forensic pathologist. During this time, pathologists were University employees contracted by the state to run the medical examiner system. There were quite a number of conflicts regarding how they were paid, how they split their time between university and state duties, and who was actually in charge of the Medical Examiner's Office.

Dr. Harris left VT in the fall of 1977 leaving Dr. McQuillen alone. She was appointed Chief in May 1978. It wasn't until July 1979 that the employment shifted from the University of Vermont to the State of Vermont. During these years, Dr. McQuillen developed a regional pathology system in which hospital pathologists would do medical-legal autopsies for a fee. Not an optimum system but it worked, with all "complicated" cases being referred to her, and her being on call all the time. Dr. Paul Morrow, fresh out of training in Chapel Hill, joined the VT OCME in September 1981. The regional pathology program was abandoned and all autopsies were performed centrally; however, the physician-based Regional Medical Examiner system was maintained. Dr McQuillen retired in January 1990, passing the leadership role to Dr. Morrow. Stephen P. Adams, MD became deputy in November 1990.

Ever since the employment of the pathologists shifted to the State from the University, the administrative facilities of the medical examiner system were physically separate from the laboratory, and the pathologists had to travel back and forth to perform autopsies and body examinations, often carrying specimens and histology slides with them. This arrangement became increasingly inadequate, and in the 1990's, working with Governor Howard Dean (himself a physician and former regional medical examiner for the OCME) plans were made for a single administrative and laboratory facility conjoint with the autopsy service of the teaching medical center. This was completed in the late 90's.

It was also during these years that the Regional Medical Examiner System began to break down. People were expecting more from death investigators than in the past. Family practice and country doctors were having more pressures placed on their time, and it was increasingly difficult to recruit physicians to serve; so plans were made to move to a non-physician based investigative system with support from regional physicians all administered through the central office.

In April 1998, the Vermont OCME in partnership with VT EMS began a pilot program to study the feasibility of non-physician investigators. The experiment was a success and during the 1999 legislative session there was a change of the law to establish and authorize the Assistant Medical Examiner (AME) Program. Over the subsequent years, this program has flourished, completely replacing and eliminating the Regional (physician) Medical Examiners.

I (Steven Shapiro) arrived in Vermont in October 2001, 2 years after completing my Forensic Training in New York City with Dr. Hirsch. Dr. Morrow retired in 2004; I was appointed chief in 2006. Dr. Adams retired from the office in February 2007, leaving me the sole pathologist until I was able to hire another Hirsch trained pathologist, Dr. Elizabeth Bundock, my current Deputy Chief.

Currently the investigative branch of the Vermont OCME consists of: myself (Dr. Shapiro), Dr. Bundock, Lauri McGivern F-ABMDI and ~50 assistant medical examiners of which 19 are currently registered with the ABMDI

Comments

I find it interesting that many of my current frustrations/challenges – budget concerns, recruiting and hiring with low salaries, staffing and training a state-wide investigative field force, maintaining office independence and credibility – are the same as my predecessors. SLS-2/14/2013

Trainees

Although no forensic training fellowship exists in VT, our office maintains close ties with the University of Vermont College of Medicine. Residents from the Department of Pathology who have gone on to complete Forensic fellowship training over the years include:

Ron Wright; Marco Ross; Robert Stoppacher; Wayne Kurz; Christopher Tape; Erin Brooks; Michael Madsen; Kathleen McCubbin

Vermont Chief Medical Examiners:

Joseph Spelman 1948-1955
Robert Woodruff 1955-1969
L. S. Harris 1969-1977
Eleanor McQuillen 1978-1990
Paul Morrow 1990-2004
Steven Shapiro 2006- present

Dark History of the Waterbury Inn – The Murder (?)

The Inn once stood at the corner of South Main and Park Row. Built without blueprints shortly after the Civil War, the Inn continued to expand and improve until it became a "destination resort." Easy highway and railroad access made it a very popular vacation spot into the early 1950s. Tourists were drawn especially from New England, New York, and Canada. The Waterbury Inn was most popular with those of upper income levels.

On the morning of March 18, 1950, the partially clad body of the owner, Pauline Gill Molony (41) was found in a rear alley, face-up and spread-eagled in the fresh, wind-blown, snow. Waterbury doctors Orton and Wright were summoned, but despite the urging of the Eric Graves, the Health Officer, both were unwilling to sign a Death Certificate. Each doctor agreed that the cause of death was open to question since there was no obvious fatal mark on her body and no known prior medical condition. Other marks on her hands and knees appeared suspicious.

Finally, in the early evening, her husband – Edmond Molony, contacted the Waterbury Police Chief, Forrest N. Reber, who in turn seems to have contacted the three-year-old Vermont State Police. At the urging of an alcoholic doctor, Henry S. Antoine, who resided at the Inn, Mr. Molony requested an autopsy. Dr. Joseph W. Spelman, the Vermont State Medical Examiner, conducted the autopsy that evening inside the V.L. Perkins Funeral Home. It was discovered that Mrs. Molony had died of a blow low on the back of the head. A cerebral hemorrhage was the cause of death. The death certificates states that the cause remained under investigation and has never been amended.

The State Police then launched a full investigation. Immediately, it became obvious that there was some limited evidence she could have fallen on the ice, hit her head on the corner of the building, and crawled a short distance until overcame by her injury and the cold. On the other hand, there was a rich lot of possible suspects and nobody could explain why she was found outdoors with so little clothing in March. Likewise, nobody could fully explain the blood spotting and other evidence at the scene. For example, one of her socks was found the next morning several hundred feet away in Dr. Orton's driveway.

The suspects:
Edmond Molony (53): Husband who told a somewhat confusing story and admitted to having a fight the night before her death. He heaped suspicion on himself in a number of ways. One example was the immediate removal and washing of the limited clothing in which she had been found. He later had a hard time producing these items for the police. Additionally, he didn't notify any law enforcement agency of his wife's death for nearly 12 hours. He was transported out of state for a polygraph with the results having apparently been inconclusive.

Dr. Henry S. Antoine (59): The recently fired and alcoholic physician from the Vermont State Hospital. St. Antoine was living at the Inn and apparently not paying for his room and board. It would appear that the Molony's were planning to evict him.

Raymond "Buddy" Briggs (19): Mrs. Molony's nephew that worked as a bellhop at the Inn. It was he who found her body in the snow.

Rupert B. Cutting (67): Front Desk Clerk on duty and the last person to admit to seeing her alive. Investigators determined that Cutting had previously run a house of prostitution in Vermont's Northeast Kingdom. His past was clearly not a clean slate.

Richard M. Brown (46): Former patient at the Vermont State Hospital and employed at the Inn in exchange for room and board. Brown was apparently ill-treated by Mr. Molony. He made a poor witness.

MeridanJop H. Nelson (40): Refrigeration repairman that had worked on the freezer at the Inn. Mrs. Malony had been convinced that someone had been stealing meat from the freezer. There was initial speculation that she was checking the freezer and had surprised a thief in the act. Local rumor continues to indicate that he was a "womanizer."

The case remains as an official unsolved/untimely death. A key reason is the subsequent events that overtook the primary suspects.

Rupert Cutting died of a heart attack within eight months.
Dr. St. Antoine committed suicide in July of 1951.
Edmond Molony died of cancer in July of 1952.
Richard Brown was incapable of providing meaningful testimony.

With the subsequent disappearance of the building itself (burned on November 3/4 1953) and the loss of the entire Waterbury Police file and most of the Vermont State Police file, this case may no longer be solvable unless a new witness(s) comes forward.

Note: The WPD file is believed to be buried under the parking lot on the south side of the Waterbury Fire Department. When the town office on that location was razed in the 1970s, a decision was made to bury the old WPD files in the paved-over cellar hole to save the expense of trucking them to a landfill.

Dark History of the Waterbury Inn – The Fire

At about 02:40 in the early morning hours of November 04, 1953 smoke was smelled in an upstairs hallway of the Inn. Almost within the hour, the massive structure had burned to the ground. It took days for the ashes to cool.

By 1953, the Inn had fallen into serious financial trouble and was barely kept solvent by the sales in its bar. One the morning of the fire, Molony was set to appear in front of the Vermont Liquor Control Board to answer for a series of violations. It is highly probable that the Inn was about to lose its license to sell alcohol, the last remaining source of steady income for the business.

Arson was immediately suspected because the manager, Robert Molony (31) had helped to get the patrons aroused and safely outside. He then insisted on going back inside to rescue the handyman, Richard Brown. Molony tore himself away from a neighbor and dashed up the steps and into the now blazing interior. He did not come back out the front and witnesses later claimed to have seen him exit the rear of the building and run down the railroad tracks. Other witnesses later claimed to have seen Molony in Burlington during the days after the fire.

Once the ashes had cooled and volunteers were able to search, a collection of about 200 bone fragments, a set of car keys, and a belt buckle were found in the general area that had once been the lobby. In a detailed investigation, detectives were eventually able to conclusively prove that a specific false tooth found in the bones had belonged to Robert Molony. The belt buckle and car keys were both also identified as belonging to the victim.

Although never proven beyond all reasonable doubt, investigators eventually concluded that the fire was most probably “accidental.” Testimony revealed that Molony and friends had gotten intoxicated and one of them had probably dumped live cigarette ashes into a wastebasket near the front desk. These smoldered for a while but once erupting in flame, quickly consumed the wooden building. A photograph surfaced in the 1990s that clearly shows the fire just beginning in the lobby. The arson investigators never saw this dramatic photograph.

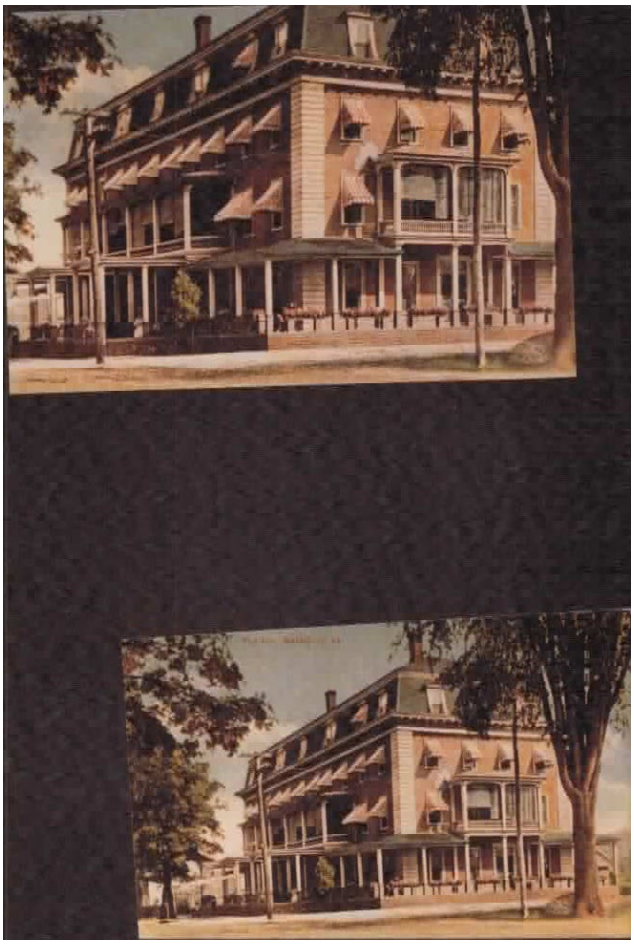
The handyman, Richard Brown, was found hiding in a horse barn several days after the fire. The fire further damaged his fragile mental condition and he was recommitted to the Vermont State Hospital. (Because of his hiding, it was initially assumed that he too had died in the flames.)

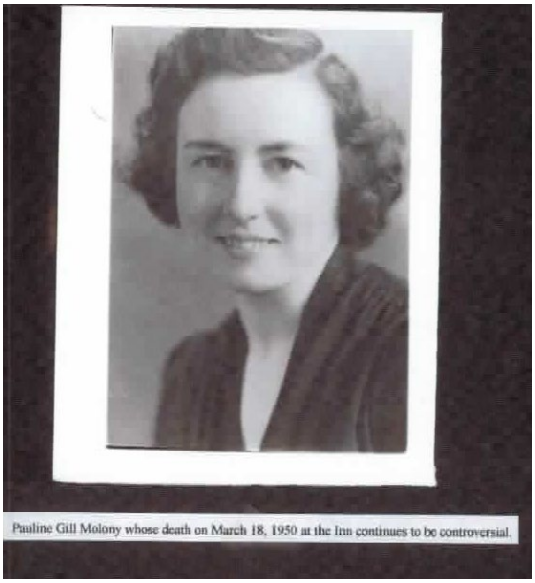
This remains as the largest fire in the history of Waterbury. Not only did the Inn burn but other buildings along Park Row were also consumed in the massive flames.

(The original structure on this location had been the Washington House, which burned in 1858.)

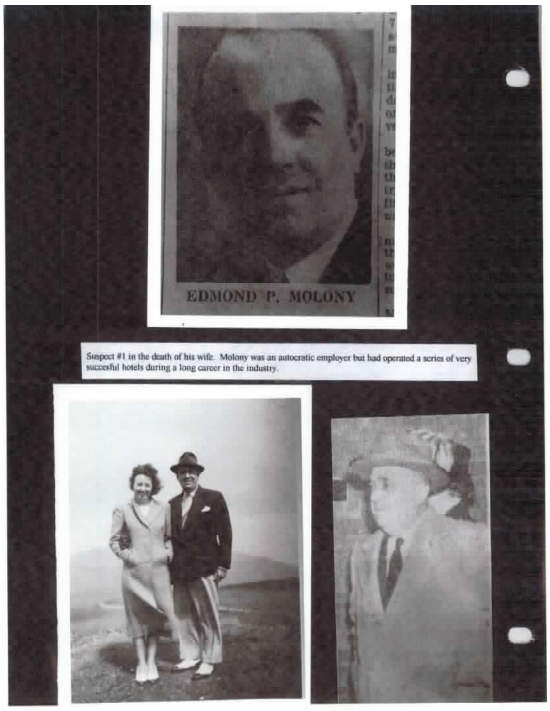
Note: The Vermont State Police fire investigative file (Case #49-200) contains a great deal of testimony from supposed eyewitnesses. A key question was where did the fire originate? Several witnesses made claims placing the origin at multiple locations inside and outside of the structure.

In 2000, the Waterbury Historical Society uncovered a photograph in the private hands showing patrons coming out the front door in their night clothes. The photo had been taken by 18-year-old Gwen Miller on her Kodak Brownie camera and retained by her family for 47 years. In the photo, the fire is seen clearly confined to the lobby at its early stage. The investigators in 1953 never had the benefit of knowing about or seeing this photograph.





Pauline Gill Molony whose death on March 18, 1950 at the Inn continues to be controversial.


EDMOND P. MOLONY
Suspect #1 in the death of his wife. Molony was an autocratic employer but had operated a series of very successful hotels during a long career in the industry.


Pauline Molony in an enlargement from a publicity photo.


Veronica Molony in front of the Inn's fireplace.
Happier times. Edmund Molony with his two daughters near the fire place in the Inn.

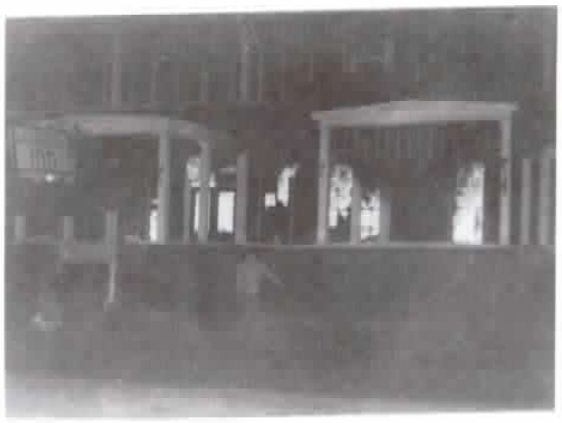


Photo taken by Betty McAllister (later Miller) showing the earliest stages of the fire. In 1999, Miller lived in Montpelier and stated that she had never shown the photo to fire investigators.

The flames in this view are concentrated in the area of the Lobby where the remains of Robert Molony were later found. With the benefit of hindsight, we now know that Molony was already dead and being consumed by the earliest flames of the fire.

Upon close inspection, four people are visible in this photo. One the left are two people coming down the front steps. One appears to be a tall female in a nightgown with a hood or blanket over her head. Under her left arm appears to be a child wrapped in a dark blanket.

Walking from left to right on the lawn below the deck are two men – one whom is either shirtless or wearing a light colored shirt.

Even if the Fire Department had arrived at this early stage, it is unlikely that they could have saved the Inn.



The Inn is fully engulfed. Photo taken from about the area of 83 South Main Street.



Death Investigation in Other Countries

Australia



Dr Dianne Little,
Forensic Pathologist,
Gold Coast, Queensland, Australia

2016

From NAME International Relations Newsletter, January 2016



As a former British Colony, Australia inherited the British coronial system which has subsequently been adapted over the years in the 6 states and 2 territories so that each has slightly different legislation. However, in all jurisdictions, the death investigation process is overseen by a Coroner, who is a legally trained person, often a magistrate. In general, the cases reported to the Coroner include non-natural

deaths (accidents, suicides, homicides), natural deaths where a death certificate is not forthcoming, unidentified bodies, and deaths in custody or police operations. Investigations required for the death investigation process are carried out by police and autopsies are carried out by Forensic Pathologists.


Refrigerator with electric hoist for trays


Viewing gallery for special autopsy room

Each state and territory has its own Forensic Pathology Departments, the number of such units depending on the population of the state/territory, but in all cases with at least one department located in the capital city. Some are stand-alone facilities, others are located within hospitals. Due to the large size (roughly similar to USA) and small population of Australia (24 million people, centered along the eastern and south-eastern coasts), in many jurisdictions it is necessary to transport bodies long distances for autopsy.


Main autopsy room


CT scanner

In the past, most coronial autopsies were “full” (3 cavity) examinations, but with the increased viability of CT scanning there is an increase in the number of partial internal and external only autopsies performed. Currently 5 Forensic Pathology departments have dedicated CT scanners and most of the remainder have access to CT scanning if required.

Forensic Pathologists in Australia undergo 5 years training and take examinations to obtain Fellowship of the Royal College of Pathologists of Australasia. I work at the Gold Coast in the state of Queensland. There is one main Forensic Pathology Department in the state capital (Brisbane) with 3 regional full time offices of which mine is Gold Coast. Our department, with 2 full time Forensic Pathologists, is located

within the Gold Coast University Hospital, which opened just over 2 years ago. It is a modern facility with a large main autopsy theatre and a separate room for infectious/decomposed/suspicious cases, both with viewing galleries and a dedicated CT scanner. Bodies are stored on racks in a large walk-in refrigerator and freezer. To minimize staff injury, the facility uses electric hoists for lifting bodies and trays. Autopsies are performed on mobile trolleys, with dedicated trolleys for bariatric bodies.

Canada



Dr. Chris Milroy

The Medico-Legal Systems and Forensic Pathology Practice in Canada

From NAME International Relations Newsletter, December 2017

Though European contact with Canada started with the Norsemen, it was in the 1497 Venetian explorer John Cabot, sent to by the English Monarch Henry VII, found Newfoundland. In 1583 the English founded St. John's Newfoundland and in 1603 the French explorer Champlain established Port Royal followed by Quebec City in 1608. For the next 150 years Canada was fought over by France and Britain, until the French were defeated in the Seven Years War 1756-1763 (the French and Indian War) and Canada was ceded to the British by the French, though leaving a significant French speaking population. Following the 1812-1814 war between Britain and the United States, the boundaries between British North America and the USA were established. The Oregon Treaty of 1846 established the westward boundary along the 49th parallel to Vancouver Island. Newfoundland was the last province to join Canada in 1949.

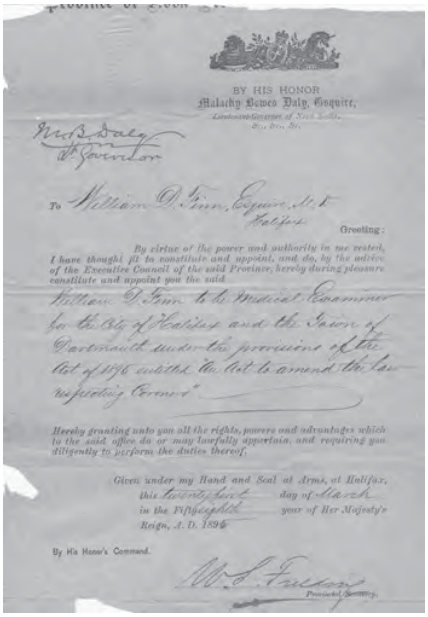
As a consequence of being a British colony, English Common Law and the coronial system were imported into Canada. The exception was that Quebec was allowed to keep its civil law, though not criminal law and they also received the Coroner system, at that time lay coroners.

Canada is a federal parliamentary democracy with a constitutional monarchy made up of 10 provinces and 3 territories, with a total population of 36 million. There are two official federal languages, English and French, which also means trials may be in either language (with translation), though each province decides its language policy and territories have official indigenous languages as well. Three groups of aboriginal people are recognized, First Nations, Inuit and Métis. The provinces are the equivalent of States in the USA. There is a single federal criminal code, but non-criminal law is a matter for each province. The provinces are thus responsible for their own medico-legal system and each has its own Coroner Act or other Act that covers Medical Examiner systems (e.g. Alberta Fatal Inquiries Act). The three territories, which cover the northern/artic parts of Canada (Northwest Territories, Nunavut and Yukon) are

all lay Coroner systems. Four provinces (Newfoundland and Labrador, Nova Scotia, Manitoba and Alberta) have changed to Medical Examiner Systems, with the remaining six provinces having Coroner systems. These vary from lay Coroner systems (New Brunswick, Saskatchewan and British Columbia) to medical Coroner Systems (Ontario and Prince Edward Island) and a mixed medical and legal system in Quebec, which is predominantly French speaking. Unlike in the USA, all Coroners and Medical Examiners are appointed and not elected. Halifax, Nova Scotia appointed a Medical Examiner in 1895, with Dr. William Finn as the first appointee.



William Finn, First Medical Examiner appointed in Canada



BY HIS HONOR
Malachy Bowes Daly, Esquire,

To William D. Finn, Esquire, M. D.
Halifax

Greeting:

By virtue of the power and authority in me vested, I have thought fit to constitute and appoint, and do, by the advice of the Executive Council of the said Province, hereby during pleasure constitute and appoint you the said

William D. Finn, M.D. Medical Examiner for the City of Halifax and the Town of Dartmouth under the provisions of the Act of 1895 entitled "An Act to amend the Law respecting Coroners"

Hereby granting unto you all the rights, powers and advantages which to the said office do or may lawfully appertain, and requiring you diligently to perform the duties thereof.

Given under my Hand and Seal at Arms, at Halifax, this Twenty-first day of March in the Fifty-eighth year of Her Majesty's Reign, A. D. 1895

By His Honor's Command.

William Finn's letter of appointment



Nova Scotia Medical Examiner Office – Dr. William D Finn Centre

The Nova Scotia Medical Examiner's Office building is named after him. Another early practitioner of Forensic Medicine in Canada was Dr. William Derome. Graduating from Université Laval in Montreal, Quebec, he studied legal medicine (médecine légale) in Paris in

1908-1909 before returning to practice in Montreal in 1910. In 1914 he established the first Government Forensic Science Laboratory in North America in 1914. J. Edgar Hoover visited his laboratory in 1929 before establishing the FBI laboratory. The current headquarters building of the Securité du Québec is named in his honour, which houses the Quebec forensic pathologists at the Laboratoire de Sciences Judiciaires et de Médecine Légale.

Manitoba became a Medical Examiner system in 1970. Alberta converted to a Medical Examiner system and Dr. John Butt, a past President of NAME, was appointed its first Chief Medical Examiner in 1977. Newfoundland and Labrador changed from a magistrate run system to a Medical Examiner system in 1996



Ottawa Forensic Pathology Unit staff with guests Drs. Mitchell Washington, DC, Byard Adelaide, Australia, and Pickup, Toronto

Ontario is the most populous Canadian province, with a population of 13 million and a single coroner system, making it the largest medico-legal system by population in North America. While the Ontario Coroner's Act requires a coroner to be a licenced medical practitioner, it does not specify any specific medical qualifications or specialty. Currently the majority of Ontario Coroners have a background in family medicine/general practice. The Ontario Coroner system was changed following the Ontario Government's Judicial Inquiry into Pediatric Forensic Pathology conducted in 2008 and commonly known as the Goudge Inquiry, after its commissioner, Honorable Mr. Justice Goudge. This resulted in changes to the Coroners Act in 2009 and the establishment of the Ontario Forensic Pathology Service with the Act defining of the Chief Forensic Pathologist in legislation. Forensic Pathologists are now also being sworn in as coroners in Ontario and certify manner in homicide cases.



Dr. Milroy in Iqaluit – it was -25 Celsius!



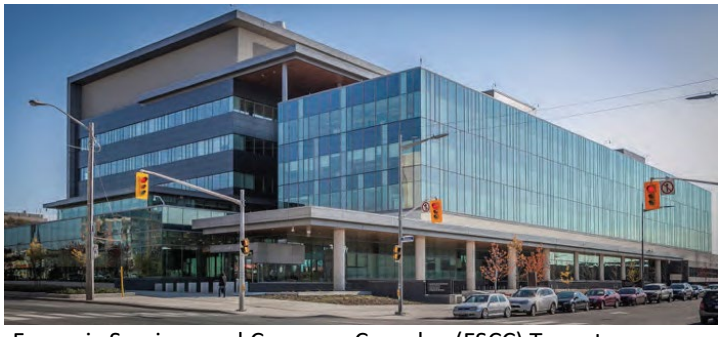
Cemetery in Iqaluit – providing services in remote areas is a challenge

One area that the Canadian Coroner and the Medical Examiner systems have in common is the use of inquests, sometimes called by other names such as fatal inquiries. While coroners, including lay coroners, conduct their own inquests, in Medical Examiner systems these are conducted by judges. Some inquests are mandatory, such as deaths in custody, while others are discretionary. A limited number of inquests are held in Canada in comparison with England.

Canada is the second largest country by geographic size in the world. This inevitably presents problems of geography and provision of service in remote areas. Ontario, for example is the size of France and Spain combined, covering an area of 1.076 km². Quebec is the largest province being 1.667 km². Texas by comparison is 695,662 km². The largest territory is Nunavut at 2.093 km². Different provinces have different solutions to these geographical challenges, with smaller provinces typically have one or two locations where autopsies are performed. Territories do not have any resident pathologists, so cases are transported south where a medico-legal autopsy service is available. For example, cases from Nunavut, because of its vast size, may be transported to Edmonton, Alberta, Winnipeg, Manitoba or Ottawa, Ontario depending on the nearest facility. Edmonton is 1762 miles from Ottawa! Because of its predominantly Inuit population, trials in Nunavut may be in Inuktitut, which can be a challenge to translate medical terms, among others



Medical Examiner Office Alberta



Forensic Services and Coroners Complex (FSCC) Toronto

Ontario has a hub and spoke arrangement to deliver forensic pathology services. The headquarters of the Ontario Forensic Pathology Service is in a 50,000 square metre state-of-the-art building, the Forensic Services and Coroners Complex (FSCC) in Toronto, which also houses the Office of the Chief Coroner for Ontario, the Centre for Forensic Sciences and the

Office of the Fire Marshal and Emergency Management. The OFPS will host the International Association of Forensic Sciences in August 2017 in Toronto. Other centres are in hospitals in regional cities in London, Hamilton, Kingston, Ottawa, Sudbury and Sault St. Marie. These units are linked to medical schools and the Forensic Pathologists hold academic positions in Universities. In Ontario approximately 7000 autopsies are conducted each year, with the majority performed in Toronto or one of the regional centres. As well as forensic pathologists conducting autopsies, there are hospital based anatomical and pediatric pathologists who conduct some medico-legal autopsies, though not on homicides or criminally suspicious deaths.

The Royal College of Physicians and Surgeons of Canada is the national professional association that oversees the medical education of specialists in Canada. It accredits the university programs and organizes the exams for certification. It was founded in 1929 by special Act of Parliament. Anatomical and General Pathology have long been recognized as specialties, but Forensic Pathology was not recognized until 2005, with the first accredited training program starting in 2008. Residency training may be undertaken first in Anatomical Pathology (AP) or General Pathology (GP). Residency is 5 years including a compulsory intern year. Fellowship training in Forensic Pathology (officially 6th year Residency) is for one year post AP or GP. Candidates who have passed the examination for Fellowship in Anatomical Pathology or General Pathology (FRCPC) may sit the exam in Forensic Pathology and thus also become a Fellow in Forensic Pathology as well as AP or GP. This can be done following Fellowship training in the USA, as long as they are already Fellows of the Royal College. Currently there are 15 accredited programs in Anatomical Pathology but only three in Forensic Pathology, the latter in Toronto (University of Toronto), Hamilton (McMaster University) and Edmonton (University of Alberta). Because Forensic Pathology is only recently recognized in Canada, many Forensic Pathologists have trained in the USA and are board certified by the American Board of Pathology. Others have postgraduate UK qualifications in Anatomical Pathology and Forensic Pathology.



Autopsy suite FSCC

There is no Canadian Forensic Pathology association equivalent to NAME, but there is a Forensic Pathology section of the Canadian Association of Pathologists, known confusingly for our American colleagues as the CAP. It meets annually in different Canadian cities. Many Canadian Forensic Pathologists have been active in NAME and AAFS and academically active.

Challenges in Canada for forensic pathologists remain its geographic size and its relatively small population for its physical size. The different systems mean there is variable practice in death investigation across the country, as there is in the USA. Other challenges include the diversity of the population, including interaction with aboriginal people, who often live in remote areas and have major health and social problems. However, there has been significant progress over the last decade with the establishment of training programs and exams and in Ontario the establishment of a provincial Forensic Pathology service has significantly increased the number of practicing forensic pathologists and supported academic activities.

China



Dr. Feng Li
Chief Medical Examiner, Metropolitan Nashville and
Davidson County Medical Examiner's Office.
CEO, Forensic Medical Management Services**.**

International Feature: The Death Investigation System in China

From NAME International Relations Newsletter, March 2017



Introduction to the Medicolegal Investigation System in China

The association of medicine and law can be traced back to the Warring States period in China, 475-221 B.C. A book on bamboo slips documenting inquest, seal up, scene investigation, and

medicolegal examination had been unearthed from tombs of late Warring States and Qing Dynasty.

One of the first books about postmortem examinations was written in Chinese by Song Ci, published in 1247 and entitled Xi Yuan Ji Lu (The Washing Away of Wrongs). Song Ci said, a forensic medical doctor must be serious, conscientious, and highly responsible, and must also personally examine each dead body or that of a wounded person. The particulars of each case must be recorded in the doctor's own handwriting. No one else is allowed to write his autopsy report. He must not avoid performing an autopsy because he detests the stench of corpses. He must refrain from sitting comfortably behind a curtain of incense that mask the stench, let his subordinates do the autopsy unsupervised, or allow a petty official to write his autopsy report, leaving all the inaccuracies unchecked and uncorrected.

He also said, should there be any inaccuracy in an autopsy report, injustice would remain with the deceased as well as the living. A wrongful death sentence without justice may claim one or more additional lives, which would in turn result in feuds and revenges, prolonging the tragedy. In order to avoid any miscarriage of justice, he must immediately examine the case personally. In modern day China, many pioneers in forensic medicine were educated overseas, including Germany, Japan, and the United States. When they returned to China, they created the Department of Forensic Medicine in many medical schools in China. In 1915, the Ministry of Education of the Republic of China published "Medical School Rules". Many medical schools throughout China adopted these rules and developed curriculums including forensic science and forensic chemistry, the terms still in use today. At the same time, the discipline of forensic medicine was established in some medical schools.

In July 1984, the Ministries of Health and Education decided to establish the Department of Forensic Medicine and later the School of Forensic Medicine, originally in six major medical universities, and later approximately thirty medical universities throughout China, including China Medical University, Southern Medical University, and Wenzhou Medical University.

The disciplines in forensic medicine include multiple subspecialties: forensic pathology, clinical forensic medicine, forensic biology, forensic psychiatry, forensic entomology, forensic toxicology, forensic odontology, and forensic anthropology.

Cases involving medicolegal issues must be investigated. These cases include violent deaths, suspicious deaths, deaths in custody, and medical misadventures.





There are generally two major Medicolegal investigation systems in China. One is under the Ministry of Public Security (police department) and is responsible for the investigation of most of criminal cases. The other is authorized by the Ministry of Justice, including universities, hospitals, and private companies. They handle most non-criminal cases and some of the criminal cases, such as deaths in custody.

In the Dalian District in Norther China, population about seven million, the Forensic Science Institute of the Dalian Public Security Bureau is responsible for all cases involving homicide, most motor vehicle accidents, deaths on the job, suicide, and deaths at public events. They are responsible for the crime scene investigations and are also part of the police force. In addition to forensic pathology, their services also include clinical forensic medicine and forensic anthropology. They perform approximately 2800 autopsies and examine approximately 3600 live patients every year.



School of Forensic Medicine, China Medical University

In the City of Shenyang, the capital city of Liaoning Province in Northern China, population more than eight million, there is a major medical university, China Medical University. This is one of the first medical universities to establish a Department of Forensic Medicine and later the School of Forensic Medicine. Currently, the School of Forensic Medicine has 42 faculty members including 10 forensic pathologists, 5 departments, an enrollment of 60 students majoring in Forensic Medicine, 15 postgraduate students, and well-equipped labs for teaching, research, and services. The School of Forensic Medicine affiliated with the Center of Medicolegal Investigation is involved in the investigation of 4000 cases including 350 autopsies.



Fada Institute of Forensic Medicine and Science

One of the major universities involving medicolegal investigation in the Capital City of Beijing is Fada Institute of Forensic Medicine & Science ("FIFMS") which was founded in 1986. FIFMS is one of the few nationally renowned forensic institutions in China. FIFMS now has three office locations: headquarters office, west end office, and a forensic pathology autopsy center (in total of 6600 square meters). It has eighty-five (85) staff members (87% are senior forensic experts), a major library, and well-equipped labs.





In April 2008, FIFMS was the first university-based forensic institution to pass the qualification evaluation test by China National Accreditation Service for Conformity Assessment and the Certification and Accreditation Administration of the People's Republic of China. FIFMS can

provide services for almost every aspect of forensic medicine and accept the most difficult cases from all over the country.

In the past decade, it has provided forensic services to a total of 80,000 cases at all levels of the judiciary bodies, the arbitration institutions, and the executive authorities.



Wenzhou Medical University Forensic Center

One of the major medical universities in my hometown is Wenzhou Medical University. Since 2002, it has had the Center for Forensic Medicine, affiliated with the Department of Forensic Medicine. It provides all aspects of forensic services to the region ever since. Currently, the Department of Forensic Medicine has 65 faculty members, enrollment of up to 60 students majoring in Forensic Medicine, and well-equipped labs for teaching, research, and services. The Department of Forensic Medicine affiliated Center of Forensic Medicine is involved in the investigation of 4000 cases every year.

In summary, China's medicolegal investigation system has a long history. Currently, there are two major systems in operation: one is mainly affiliated with the public security (police) department, which is responsible for the majority of criminal investigations; and the other is authorized by agencies dealing with all other cases of non-criminal and some criminal investigations. These systems are more inclusive by including not only forensic pathology, but also other forensic entities, such as clinical forensic medicine. They also focus on advocating research including basic medical research and forensic education. The School (Department) of Forensic Medicine can directly admit the students, and graduates will be divided in further postgraduate studies and recruited to work for different agencies, including police departments, universities, and forensic centers.

France



Dr. Marie Barbesier
Forensic Pathologist in France
2019

International Feature: The Death Investigation System in France

From NAME International Relations Newsletter, March 2017



Map of France, the Medical Examiner's Offices are indicated by blue circles

In the past, medicolegal autopsies in France were performed by a medical doctor but either in a hospital or in the setting of a private practice. Thus, forensic practice was very disparate. In 2011, a major reform took place under the leadership of the forensic community to standardize

practices not only in the country but also within the European Community. Most European countries already benefited of an institutional framework for the practice of forensics. However, in France a medical doctor was arbitrary assigned a case without much notice, guidelines or standards. Following the reform and the amendment of the legislation, forensic cases are now mainly performed by medical doctors who work for an office affiliated with a university hospital; in a dedicated building attached to the hospital. This is the reason medical examiner's offices are mostly found in the main metropolitan areas. The private practice has been eradicated. This reform also set up a National Observatory of Forensics, whose main objective is to record the caseloads of the medical examiners of the entire country.

Forensics is funded by the Department of the Justice, with each Court House awarding a certain amount of fund to university hospitals to operate the medical examiner's office. The amount of money awarded is based on the National Observatory of Forensics reports. In 2015, 9083 autopsies and 4186 external examinations were performed in France, which is very low for a total of approximately 66 million inhabitants (less than 1%).

Medical examiner's offices work under the authority of a Court House and cover its respective county. They may work for more than one Court House. Autopsies and scene death investigations are performed only at the request of the judiciary system and therefore the District Attorney. They cannot be performed without his agreement.

Most of the scene death investigations are carried out by a police officer. The presence of the medical examiner is only required in case of homicide or suspicious death. Therefore, in the absence of a medical examiner at the scene, law enforcement must ask a physician (more often a general practitioner) to certify the death and write the death certificate before the body can be transported by a funeral home vehicle. Indeed, bodies cannot be transported without a death certificate. Following the scene death investigation, the decision to perform an autopsy is again up to the District Attorney, who will however consult with the medical examiner. Most of the time, the autopsy practices are based on the European guidelines.

After the autopsy is performed, depending on the findings, the medical examiner can request toxicology and/or histological studies and/or radiology, but again he must obtain the permission of the District Attorney. The "usual" autopsy will be performed by one or two medical examiners depending of the county, and most of the time two medical examiners in case of homicide. In homicide case, the medical examiner must testify in Court House.



Court House of Lyon located in the old town, and which was built from 1835 to 1847.



Entrance of the Court House of Lyon

The judge can also request the medical examiner to attend a "reconstitution of the crime" before trial whose goal is to clarify whether the statements of the perpetrator are consistent with the autopsy's findings. It is a complementary action, but not automatically applied by judges.

Due to the affiliation of the medical examiner's offices with the university hospitals, most of the chiefs are professors who are appointed by the university hospital in charge. To be appointed, they must have a PhD degree in addition to their MD. The medical examiner's office ensures through its chief an academic appointment with achievement of lectures at the medical school. Indeed, university hospitals are working closely with medical schools, which are all public. That is why, the medical examiner's offices welcome such as the other departments of the university hospital, medical students in 4th, 5th or 6th years of medicine. The chief must also stimulate the research activity of the office, including the redaction of scientific papers.

Such as in the U.S.A, there is a French association of medical examiners (Société Française de Médecine Légale SFML, www.sfml-asso.fr), which has been established in 1867. This association organizes a conference biennially. In June 2017, will be held the 50th conference of our association at the medical school of Paris Descartes.

Forensics training in France

Medical school lasts 6 years. At the end of the sixth year, all the medical students take a national examination, and choose a specialty and a city depending on the rank they obtained at the examination. Forensic is not a specialty they can choose after the national examination. It is only offered as a complementary specialty. Unlike in the US where all the medical examiners are pathologists, medical examiners in France come from various specialties such as general medicine, medical specialties (e.g.; pathology, gastroenterology, pneumology, radiology, occupational medicine, laboratory medicine, psychiatry and even surgery specialties). So, forensic training is an additional two years of training. After the first year of forensic training the residents must take and pass a test to enter the second year of training which can be considered as a fellowship. This second year also ends with a test and comes with a diploma if passed with success.

In the coming years, a reform is planning for forensic to become a medical specialty of its own. Medical students after the national examination will be able to choose a specialty in forensic. The forensic training will last 4 years and will include rotations in forensics, pathology and radiology. Like the reform in 2011 of our practice, the aim is to standardize the training of the medical examiners.

The consultation of forensic doctors for patients

A feature that distinguishes France from the U.S.A. is the practice of forensic consultations for patients. In fact, it is not only a French feature because other countries like Switzerland, Belgium, Spain and Italy also provide this specific activity. Like for the post-mortem cases, this practice is performed at the request of the judiciary system but this time by a police officer.

These consultations are for the victims (child or adult) of physical and/or sexual assault, and lead to the redaction of a medical report. This report is sent to the police officer who forwards it to the judge in charge of the case. In the report, the medical examiner investigates the physical and/or sexual injuries that he or she observes during the examination following the assault. The medical examiner could also have to answer to specific questions asked from the District Attorney such as the nature of the weapon and whether the statements of the victim and/or the perpetrator are consistent with the medical findings. This report records for the judge evidence of injuries consistent with an assault. It also allows the judge to assess the medical consequences of the assault that he needs to judge the perpetrator. In summary, this examination is comparable to a post-mortem external examination. The only difference is that the body is alive! The role of the medical examiner is only to describe the injuries. The management of the victims is usually done by a general practitioner or by emergency personnel.

The medical examiner's office of Lyon

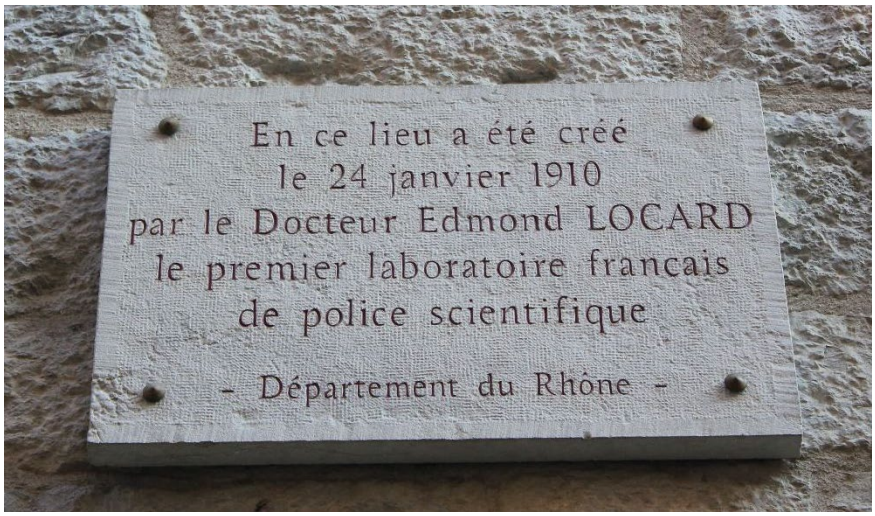
The medical examiner's office in Lyon has a long history. It started in 1885 with Professor



Statue of Professor Alexandre Lacassagne

Alexandre Laccasagne, who was a military physician and trained for a period of time at the Val-de-Grâce military hospital in Paris. He was the founder of the school of criminology in Lyon. He was an expert in the field of medical jurisprudence, criminal anthropology and toxicology. He was also a pioneer in bloodstain pattern analysis and the research of bullet markings and their

relationship to specific weapons. One of his students was Edmond Locard who in 1910 founded in Lyon the first police laboratory in France.



Commemorative tablet located at the Court House of Lyon

Lyon is the second largest urban area in France with approximately 1.3 million inhabitants. The medical examiner's office in Lyon provides forensic coverage for many cities Court Houses (Counties): Lyon, Bourg-en-Bresse, Bourgoin-Jallieu, Vienne, and Villefranche-sur-Saône. Our office is unique because it has two functional units which are geographically separated, unlike most other medical examiner's office which only have one unit. First there is the Medico-Legal Institute that is located within the Faculty of Medecine of Lyon and where the postmortem activity is performed. The forensic consultations for patients are held in the other unit located within the Edouard Herriot Hospital which is one of the Public Hospitals of the city (Hospices Civils de Lyon). In the coming years, a merger of the two units, within the Edouard Herriot Hospital, is planned, as a result of the 2011 reform. We have eight physicians, six secretaries, four autopsy technicians, and one psychologist in our office. In 2015, 914 autopsies were performed with 58% of suicide/accidental/undetermined, 38.5% of natural deaths, and 3.5% of homicide. In addition, we were consulted regarding 1843 patients of which 84% had been physically assaulted.

Acknowledgments
I would like to thank Elise Arbefeville, a French-American medical examiner that I met during the last NAME meeting, who helped me for the translation in English. It should not have been possible without her!

I would like to thank the last team of Minnesota Regional Medical Examiner's Office (MRMEO) who welcomed me during 9 months from February 2011 to October 2011 and without whom I will not have participate to the last NAME meeting in Minneapolis-MN and have the opportunity to write this article.



Medicolegal Institute of Lyon



Entrance of the Medical School of Lyon



Entrance of the unit of the forensic consultations for patients



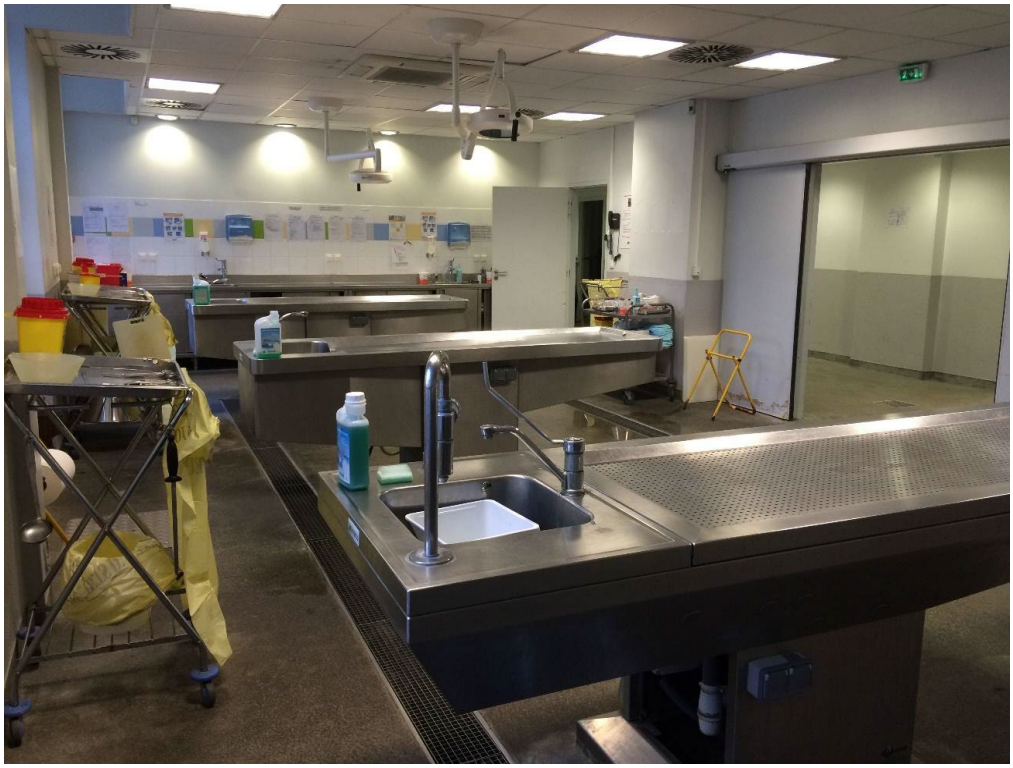
Entrance of the Edouard HERRIOT Hospital, which was built from 1913 to 1933, and is a part of the historic places of Lyon.



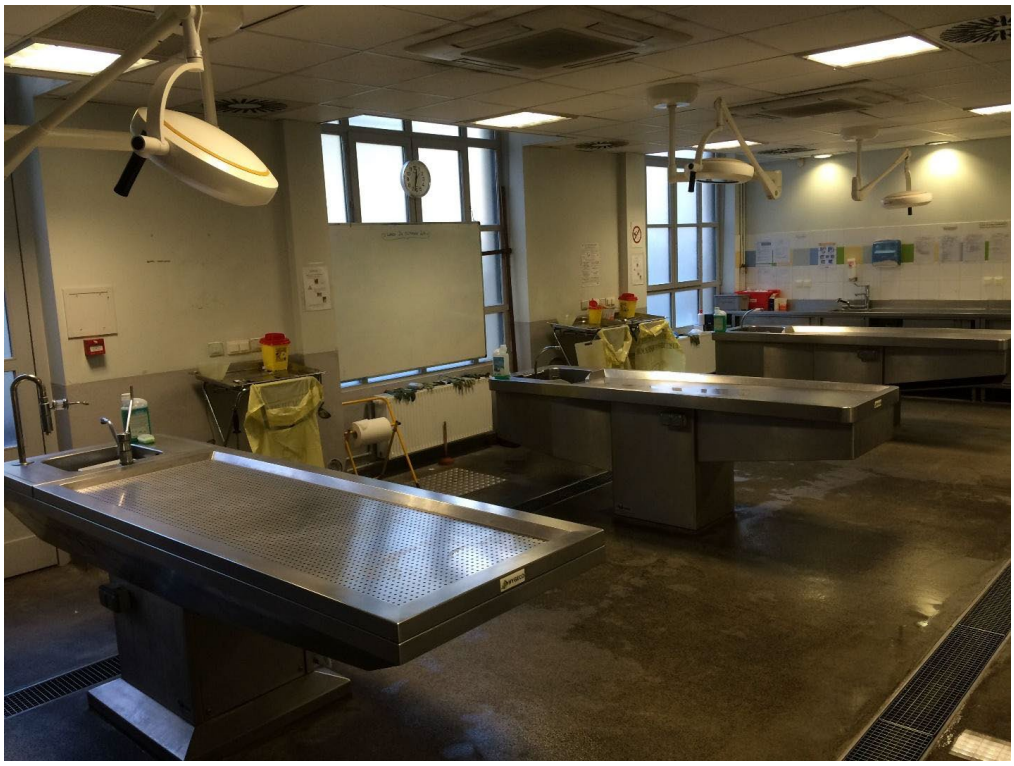
Medical Examiner Office of Lyon staff (Tiphaine Guinet, Hervé Fabrizi, Anne-Sophie Advenier, Laurent Fanton, Angélique Franchi and Stéphane Tilhet-Coartet)



Autopsy room for decomposed bodies.



Main autopsy room



Main autopsy room.



Amphitheater for autopsy demonstration, where is located the statue of Professor Alexandre Lacassagne

Hospices Civils de Lyon
Lyon University Hospital
your health,
our commitment

The logo of the Public Hospitals of Lyon



Minnesota Regional Medical Examiner's Office staff, October 2011 (Lindsey Thomas, Susan Roe, Shannon Mackey-Bojack, Adabell Morrone, Emily Duncanson, Jeanne Reuter, Sharon Blackie, Jill Romann, Chaia Herrgott, Lisa Robinson

Finally, I would like to thank Kim Collins for giving me the opportunity to present the death investigation system in France, and Sandra Conradi who was a wonderful host during the last NAME meeting.



Drs. Marie Barbesier and Sandra Conradi (US)

India

International Feature – The Medicolegal Death Investigation System in India



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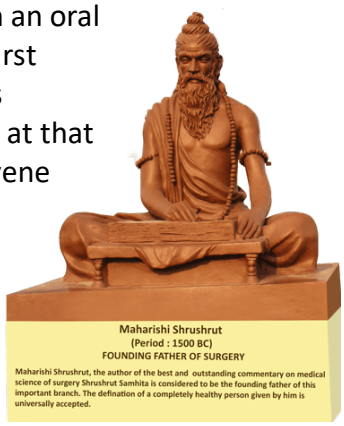
January 2019

In part from NAME International Relations Newsletter, July 2018

Cultural History of India and Jurisprudence

Ancient Indian civilization existed in periods much earlier than that of Mesopotamia, as evidenced by the excavation findings of the Harappan and Mohenjodaro civilizations of 2500 BC, and nearby Mehrgarh – the latter dated to 8,500 BC, making the latter a serious contender for the title of 'cradle of civilization'.

The code of civil and criminal society was enshrined in various Sanskrit texts of knowledge known as the Vedas, which are as ancient as these civilizations. They are oral traditions, sometimes transcribed to bamboo, cloth and paper written text, which were often lost the elements. These oral traditions continue till date, with Sanskrit couplets memorized and passed on as hymns, verses and incantations through generations by word of mouth. A subsequent derivation from these was Manus Smrithi or Law-Code of Manu, again an oral tradition, which was derived from the various Vedas, and which was first written down in 1900 BC, thus predating the Hammurabi Code. It thus appears to be one of the oldest law codes of the world. Jurisprudence at that time was in the hands of the monarchy, who were permitted to intervene only when the public forums or 'sabhas' of justice appeared biased or issuing unjust verdicts. Kautilya or Chanakya's Arthashastra described the various mechanisms of death and the necessity of autopsy.



Sushruta, who authored Samhita in 600 BC – an ancient treatise on practise of Ayurvedic surgery, wrote extensively on many aspects of forensic medicine, including appearances in various poisonings and injuries, mechanisms of death, etc. The ancient Indians believed in all landed assets belonging to the state, and their jurisprudence dictated greater civil restitution – i.e. greater punishments of the higher status individual, compared to the very poor (i.e. all men were not equal before law).



The complex region of India as we know today was invaded by many successive invaders, attracted by its economic might. From the 1st century CE to 1000 CE the Indian economy was the largest economy in the world. Successive waves of invaders from surrounding regions ruled parts of India, starting with the Scythian tribes of southern Siberia, then the various Greek dynasties including Alexander the Great, followed by Indo-Parthian rule, the Persian kings –- viz. Mohamed of Gazni – who named himself the 1st Sultan, overthrown by Mohamad of Ghor – who is credited with laying the foundations of Muslim rule in India, the Hunas and Hephthalite rulers, then Kabul Shahi kings, Babur and the Mughal kings of India-descendants of Timur -linked to Genghis Khan through marriage, and ending with last Mughal emperor Bahadur Shah Zafar, who, deposed by the British after the Indian Mutiny of 1857-58 and banished to Burma, died there in 1892.

Chinese and Arabic traders through trade exporting Indian spices, fine muslin, silk and jewels to the west for centuries, created a strong interest in trade with India directly from the West during medieval times. The first European traders with India were the Portuguese – led by Vasco Da Gama in 1498, who found the 'true' or 'East Indies' and reached India sailing around the horn of Africa. The Dutch East India Company set up its trading posts in 1616. In 1661, King Charles II of England was given Bombay as dowry for Catherine of Braganza's hand, which began the presence of the British in India. There was fierce competition between the Dutch and British, which was quelled when William Duke of Orange from Holland took the British throne, leading to redistribution of the trade, with the wealthier spice trade of Indonesia passing to the Dutch and the textile trade to the British. In time the latter flourished much more than the former. The French first established themselves on the east coast in Pondicherry (just south of Madras) in 1674 and tried to hold various small districts.

Meanwhile in the mid-17th century, the Nawab of Bengal's commanders betrayed the Nawab to the very small British forces protecting the East India Company, which resulted in victory for Robert Clive in 1757, leading to a change in the British East India Company's role as conquerors of smaller Indian kingdoms. During the rest of the 18th century, the 'Company' expanded the British Empire in Asia, leading to its Chinese opium trade and wars, and seizure of Hongkong as a minor settlement. Its corruption and mismanagement led to India coming under direct British

rule, with India as its jewel in the crown (literally –through the Kohinoor diamond) and Queen Victoria declared as Empress of India.

The 2nd world war, which saw a very prominent contribution and participation from India, saw the Japanese occupying the string of Andaman and Nicobar Islands in the Bay of Bengal for a brief period in 1942, when they occupied Singapore also.

Indian Independence


Help the Refugees
AHUJA SWADESHI STORES
Chandni Chowk, Delhi

DELHI EDITION
The Hindustan Times
LARGEST CIRCULATION IN NORTHERN, NORTH-WESTERN AND CENTRAL INDIA

QUALITY PUBLICITY SERVICE
DESIGNERS & PRINTERS

NEW DELHI, FRIDAY, AUGUST 15, 1947.

INDIA INDEPENDENT : BRITISH RULE ENDS

CONSTITUENT ASSEMBLY TAKES OVER

MOUNTBATTEN'S APPOINTMENT AS GOVERNOR-GENERAL ENDORSED

COLOURFUL CEREMONY MARKS BIRTH OF NATION

(By Our Special Representative)

NEW DELHI, Thursday – At midnight tonight the Constituent Assembly consisting of the chosen representatives of the Indian people, assumed sovereign power and the members solemnly took the pledge to serve India and her people. " We end today a period of all fortune and India discovers herself again," said Pandit Nehru in calling upon the members to take the new pledge.

NEW STAR RISES IN THE EAST

LEADERS TELL NATION OF TASKS AHEAD

Attlee's Greetings To Nehru

Governors Sworn In As Free India Is Born

India's independence, led by Gandhi, the Indian National Congress and others in 1947 resulted in a democratic republic union of Indian states and partitioning off of East (now Bangladesh) and West Pakistan. At this time all the 565 princely/ native states – covering 48% of its area, not conquered or annexed by the British, some under indirect British rule. Pondicherry (south of Madras) and its other French colonies were handed back to India in 1954, while Goa (south of Bombay) and its other Portuguese colonies had a war of Independence on its soil in 1961, led by freedom fighters supported by Indian commandos, resulting in its liberation and joining union of India in 1961. Sikkim, a princely state of the British, was a protectorate of India from 1947 (Indian Independence). In 1975, it joined the union of India after a referendum. In 1947, at the time of Independence, there were 565 princely/ native states – not ruled by the British directly, who later joined the union of India, including the King of Kashmir and the Nawab of Hyderabad.

Indian Jurisprudence

The 'ancient ways' of India held all property to be held as common property, without individual deeds or titles. Women had nearly equal status in society as men. Laws of possession came into existence when private ownership of property came into existence with modifications of these values, through codes like Laws of Manu – the latter introducing the dominance of patriarchal structure of society and inheritance, with the institution of marriage establishing the exclusiveness of sex relations through marriage – linked to retention of property after death, by passing it to his child – as a part of him. Subsequently, the dowry system was introduced to encourage the in-laws to give equal status to the bride in her new home, when her 'share' of property was given at marriage, or in lieu of her share, an equivalence for her inheritance.

Modern jurisprudence is linked to technical advances in modern industrial society, which brought about change in social relations, calling for new legal norms, which was not possible by

slow customary growth. Hence legislation became the most important source of law in modern society. However, there were often gaps in the statutory law, which did not always keep pace with social development, and advancement in technology. This required judge-made laws to fill in these gaps in certain circumstances.

From the 16th century, Britain's ship-surgeons served on Indian soil as the crown's 'surgeons', till the setting up of the Surgeon General by the British East India Company in 1610. The 17th century saw individual Indian state departments set up their respective Medical services, which were consolidated in the Presidencies of Madras, Bengal and Bombay after 1857, with a single Indian Medical Service – separate from the Civil Service, in 1858, under a Director General. At the time of the rule of the various states of India by various Western principalities, criminal law was left to the various princely rulers and kings and princes of small kingdoms scattered in these regions.

In an attempt to unify criminal procedures, various districts and, if consolidated under statehood by the British govt – viz. State of Punjab and Haryana (with Delhi as its capital) – which became 2 states and a federal capital region after independence, published state govt's promulgated medical manuals and rules, defining duties and responsibilities. At a district level, the Civil Surgeon, sometimes variously interchangeably called also Police Surgeon cum Chief Medical Officer (CMO), because he was designated the chief Medico-Legal expert in the district, oversaw and where required, reported on important medico-legal issues and cases, including autopsies. Fees for such examinations were separately prescribed in those manuals and their rules, differentiating separate fees for clinical examinations vs post-mortem examinations; the latter drawing greater remuneration. Unfortunately, none of these CMO's were or are trained in Forensic Medicine, hence a great laxity and variability in reporting of findings and opinions was and is seen.

Early Medico-Legal Investigations & Medico-Legal Training

The first recorded medico-legal autopsy in India was performed in 1693 by Dr Edward Bulkley on Mr. Wheeler, Chief Justice of Choultry, Madras, who died on 28 August 1693. The first medical school in India based on western medicine principles was established in Calcutta in 1822, and converted to a Medical College in 1835, at which time Madras Medical College also came into being. Meanwhile the French, ruling in Pondicherry, established the Ecole de Médicine de Pondichéry in 1823, which is now JIPMER- Jawaharlal Institute Postgraduate Medical Education & Research. The Portuguese established the Goa Medical College in 1842 in Goa. The first chair of Forensic Medicine was established in Madras Medical College in 1857. It was at this time that Sir William Hershel wrote up his principles of dactylography, which Sir Francis Galton made into the systematic method of fingerprints identification in 1892.

Today, medical education and standards are regulated by the Medical Council of India (MCI), a federal statutory body, founded in 1933 by act of parliament, who conduct periodic inspections of departments and their undergraduate and postgraduate exams. It prescribes the quality of teachers, curriculum, examinations and training hours, as the national registering body for medical licence to practise, with state govt. medical councils working on MCI's behalf in various states of India.



The Muslim rulers, including the Mughal kings and those surrogate rulers of the British, applied Mohammedan Criminal Law to all the territories. After the 1857 rebellion, the crown took over the administration of India. Unable to work with common law because the various customary laws and practises, which were alien to the western rulers, the Portuguese promulgated the Portuguese Civil Law System, all practised in Portuguese, and also included the Court of Inquisition for heresy, etc. Portuguese jurisprudence was repealed after liberation of Goa in 1961, with the Indian Civil and Penal Code in place, with practise in English. Lord Macaulay led the effort to pass the Indian Penal Code in 1960 and the Criminal Procedure Code (CrPC) in 1861. The coroner's system of death investigation was enacted in the presidencies of Bombay and Calcutta in 1871.

The Coroner's system was repealed from both cities by 1951, with the relevant sections of CrPC applicable to the whole of Union of India. The CrPC was revised in 1972, and has since gone through multiple revisions, the last amendment being 2013.

During British rule, appeals of judicial punishments by the Indian courts, after appeals in the Presidency courts in Madras, etc. culminated in the Privy Council, London, whose role as final court of appeal died out in India after Independence, the highest court of appeal being the Supreme Court of India. Capital crimes, if permitted, have a last resort for commutation in the President of India.

The medium of jurisprudence in India is English, with any of the 22 official regional languages or Hindi the national language permitted for recording evidence of those not conversant with English, in their colloquial tongue. The higher courts of appeal (the state High Court for each state and last-tier final appeal in the federal Supreme Court) all transact in English, after all recorded colloquial evidence has been officially translated to English. All arguments, verdicts and appeals are in English.

One Unified Death Investigation System in India



India has one universal death investigation system throughout the country. The CrPC (Criminal Procedure Code 1973, with amendments recently) dictates a magisterial system of inquiries into deaths. It requires reporting of all sudden, unexpected or unnatural deaths to be reported directly to the magistrate or to the nearest police station or police officer (who then report to the magistrate). If there is no District Magistrate or divisional magistrate (who may belong to the judicial services, or even to civil administration services), then superintendents of police or police commissioners (in Metropolises) undertake these coronial functions of inquiries into deaths. After reporting to the 'magistrate', the police officer proceeds to the location of the dead body to start his preliminary inquiry. Where death is unnatural or from unknown causes, the police officer – as investigating officer (IO) would accompany the body to designated places where a post-mortem examination can be conducted, to determine the cause of death. Full autopsies are expected, as the autopsy surgeon is expected to clarify that everything else was 'normal' or did not contribute to or cause death. The IO would also affect examination of toxicological and biological samples by state or central (federal) forensic science laboratories requested by the doctor conducting the post-mortem.

In deaths in custody, which by tradition includes 'officer-involved-homicides and shootings', and homicides and suicides within 7 years of marriage involving harassment for dowry, the law requires that the preliminary inquiry also be conducted by a magistrate himself/ herself. If the public prosecutor (DA) makes out that someone is to be charged as an offence for the death, the formal coronial inquiry is deferred till the prosecution is over; if conviction takes place, then that is adduced into the coronial findings of the Magistrate. Considering the vastness of India and its population and the non-availability of qualified forensic pathologists/ forensic medicine specialists, state health departments declare what experience the general duty medical officer (GDMO) should have in clinical practise, before he can conduct post-mortem examinations. Where required, these GDMO's may preserve tissue and send them to Pathology departments for histo-pathological reporting. There aren't enough funds allocated to Forensic Pathology services of districts and states to hire forensic pathologists for each and every district; large metropolises like Bombay and Delhi have nearly all their cases autopsied by forensically trained doctors (except the civil/ police surgeon), and more often than not, in teaching & research institutions/ medical colleges.

Here is where the Civil Surgeon comes into play. In most districts, as a legacy of British times, he/she as the senior-most medical officer, is also the senior medico-legal expert who would deal with clinical forensic examinations and forensic autopsy cases. Often, he/she has no training or interest in acquiring skills in Forensic Pathology, considering the need for senior expert evidence as a necessary evil of his status. Hence the quality of forensic pathology work in districts, and in small towns, leaves a lot to be desired. Often, he, i.e. the Civil Surgeon coerces the junior-most just-recruited GDMO to conduct post-mortems, and if the case comes

in the media spotlight, opines in place of, or instead of, that GDMO who actually examined the body, further denigrate expertise and opinions.

Indian Forensic Case Mix

The incidence of differing manner of deaths in India: The milieu of cases seen vary depending on the location of the forensic pathology centre. An approximation of cases seen in decreasing frequency is represented below, with variations from these, depending on region of the country.

Ranking of frequency – highest first	Manner of death	Cause of injury and death
1.	Accidental	Common mechanisms of motor vehicle crashes – are from motorised 2 wheelers, motorized 3 wheelers, 4 wheelers (cars), pedestrians, bicyclists, pedal trishaw, carts (horse/camel), etc. In certain areas with no safety barriers & overhead bridges – run-over by railway train are also present. Suburban Mumbai frequently has accidents on suburban rail network. Rarely – accidental exposure to noxious gases in large numbers – such as chlorine, ammonia, etc. (MIC in 1983) in Bhopal gas tragedy, from industrial plants, to deaths while cleaning sewers from sewer gases, etc. recur.
2.	Natural disease	Primarily sudden cardiac death – Ischaemic/ coronary artery – are seen in younger and younger individuals – now even in the 20's (males), followed by pneumonias (especially children), TB – including MDR & XDR TB, Chronic pulmonary diseases, acute infections – gastro-intestinal, viral hepatitis (waterborne – in summer months), malignancies, etc.
3.	Suicides	Depending on district – common means are hanging vs poisoning. Earlier $CuSO_4$ available in villages deaths common, then Organophosphate pesticides- but with successful treatment – and subsequent criminal charges on them for attempt to suicide, now in North India – Aluminium Phosphide, with no antidote, prevails. Occasional suicidal therapeutic overdose cases are seen.
4.	Homicides	Depending on district/state – assaults from sharp and blunt weapons, followed by firearms – both conventional – commercially made, & home-made (country-made) firearms. Dowry deaths (Bride burning, etc) though declining in numbers, still present themselves in North India. Asphyxial deaths – by strangulation, mugging, bansdola (Assam) etc, are less frequent. Occasional homicidal poisoning also seen.
5.	Industrial accidents	Construction accident deaths are quite a few, from crush injuries, falls from construction sites without safety equipment, fatal

		accidents in factories as well as in toxic gas leaks, etc., drownings again in industrial settings, etc.
6.	Terrorist - related deaths	With sustained militant/ terrorist activities occurring in certain states on a regular basis, deaths from terrorist shootings and explosions are a regular feature in certain parts of certain states like Kashmir, the South-Central states – where it's the Marxist – Maoist insurgent groups insurgency militants supported from across the borders in the Seven Sister States – those states north-east of Bangladesh, bordering China, Tibet Autonomous region and Myanmar. Delhi and Mumbai have also faced periodically their fair share of assault rifle and explosive attacks by terrorists infiltering from neighbouring countries and their proteges – disaffected Indians, taken and trained overseas and sent in with these foreign mercenaries.
7.	Police Officer – involved deaths	Many of these are from assaults using blunt force, or even 3rd degree methods, allegedly to extort confessions or recovery of (stolen) goods. Instances of water boarding have also rarely surfaced, as well as quite a few alleged 'encounter' firearm deaths, allegedly from stand-off between the deceased and cronies and the police. Some of these have led to convictions of the police officers through trials, for extra-judicial killings.

Accidental Deaths and Transport Safety

One can't be sure whether it is an effect of the large mass of humanity in India lowering the care and concern for safety and well-being of other human beings, engendering a feeling that life is cheap and easily replaceable, but there are frequent recurrent deaths from traffic accidents, especially heavy commercial vehicles likes buses and trucks, mowing down people, with large number of casualties. A similar apathy seems to be among car drivers versus smaller or light vehicles (two wheelers and bicyclists) and pedestrians. This impunity is reinforced by the long pendency of court cases, so that often the perpetrators don't face the legal outcomes of their acts till many years later, by which time witnesses have died, or forgotten details, and this is not particularly helped by their legal counsels 'playing the system' by taking frequent stay on proceedings, etc. Similar callousness has been seen with large number of persons occupying railway lines to witness events, unmindful of fast passenger and goods trains approaching them, which cause mass fatalities. Considering the vast network of the Indian Railways- 4th largest rail transport network size in the world, the number of rail accidents involving derailment of passenger wagons is much less on a statistical basis. But locally, these accidents lead to about deaths of 100 or more passengers at a time, from a couple of railway coaches derailing and capsizing after head-on collisions, or falling into rivers, etc. Aircraft accidents have largely been very few, but have resulted in many deaths, in different parts of the country, the worst being a mid-air collision between Saudi Arabian Airlines Flight 763 and Kazakhstan Airlines Flight 1907 on 12 November 1996 near Delhi, leading to death of all 349 passengers on both flights combined.

Nature of Forensic Pathology Practise in India Today

The advent of various medical schools/ medical colleges in many of the cities led to the public university colleges' forensic departments being designated centres for forensic autopsies. The work of these departments were at loggerheads with these GDMO's/ civil surgeon's work, but since historically as well as from seniority in govt. service, the civil surgeons, as health officers who issued medical certificates to civil servants – including judges, etc., held greater authority in appointments and recognition in courts, their opinions held sway over those of these teaching institutions.

Of late, quite a few private medical schools have sprung up, with forensic departments, who, due to lack of attachment facilities to hospitals, do not do any clinical (including autopsy) work. However, staff of such departments, by virtue of their designations as professors, directors, etc. claim seniority and try to fit into various regional and national expert committees on forensic issues, diluting and sometimes adversely affecting them. Meanwhile the southern state of Kerala has designated equivalent status of Police Surgeon to various professional teachers of Forensic Medicine departments there, viz Professor = Police Surgeon, Asst Professor = Assistant Police Surgeon, etc., with the same remuneration scales thereof for medico-legal work, including autopsies, as incentives to undertake such examinations.

Forensic Medicine Curriculum in Medical Schools

Every undergraduate medical student on graduation is expected to competently conduct a post-mortem and a clinical forensic examination as well as an age estimation report of a juvenile. Medical Council of India (MCI), to this effect, has a separate undergraduate para-clinical examination in Forensic Medicine and Toxicology, which they have to clear in order to progress to the final professional clinical subjects, with prescribed at least 88 contact student hours as lectures, demonstrations, tutorials and practicals with log books, etc. The examiners are expected to ensure that proper assessment of this competence takes place through effective theory and practical examinations. However, many private institutions, in trying to manage with fewer paid staff, gloss over this and try to cover up the deficiencies in the examination by mollycoddling the external examiners for favourable results for their students.

Difficulties of Forensic Practise in India

One of the major issues in forensic work in India is follow-up investigations. The actual toxicological examination of preserved material from postmortem cases start not earlier than 6 to 9 months after the autopsy, and many intermediary stores in Police Stations do not have dedicated fridges or cold rooms for storage of specimens – thus often these specimens are stored at room temperature in some back room of a police station. Hence the common



Mumbai (Bombay) struggles with poor working conditions, and extreme shortage of qualified staff and trained morticians, using ordinary cleaners & attendants for prosection of bodies.

practise, which despite vehement resistance by competent academics, etc. still continues, is that parts of the liver, spleen and kidneys are preserved in one jar, as well as the stomach and intestines with their contents, in another jar, all in saturated brine solution, along with blood and urine in vials. Often, by the time these jars and the tubes with the biological fluids are opened in the toxicology laboratories – anywhere from 6 months to even 2 to 3 years after their preservation, they have decomposed to a putrid mass, and hence, all their reports, despite sophisticated laboratory instrumentation available in the labs, is 'negative for common poisons' (till date, none of these official labs have agreed to list what 'common' poisons they look out for and test!).

Another difficulty in Forensic practise in India is funding of departments and facilities. Health departments, in trying to prioritise health expenses, accord forensic medicine departments and facilities with the least priority. The common retort is, we don't have enough for the living; you want us to prioritise the dead? Court evidence and opinions have managed with the minimum of facilities and very low standards, and so the authorities feel, if one has managed so far, then why fund further improvements? There are no institutions with in-house CT's or access to PMCT; the few that have radiological imaging do so by portable X-ray machines summoned from the hospital to the mortuary on an emergency adhoc basis. There are therefore none trained specifically in PM-CT interpretation, and as and when clinical radiologists intervene, if some VIP deceased has his/her PMCT done, they bring all their inexperience and biases of clinical vs post-mortem interpretations.

The Death Investigation Process

All deaths reported to the police/magistrate under the CrPC get investigated, and unless there is already existing certification by a hospital or a doctor of a natural cause, will get autopsied. The milieu of cases routinely seen for autopsies may differ from region to region, especially with regards to method of suicide and homicides.



Inspired by Bihar state's attempts to improve its forensic mortuaries with new modern mortuaries (above), other states are starting to implement improvements and refurbishments in their own morgues.

The usual frequency of cases is – in descending order – accidents –mostly traffic, also industrial and those from domestic accidents, followed by suicides. Homicides are the next commonest, with the two most common being from assaults with blunt objects followed by sharp weapons.

Firearm assaults are fewer due to restrictions on availability of these because of licencing under Arms Act to legally own one, but armed criminal gangs do get access to illegal regular firearms as well as others including small-time criminals use homemade (some of which are countrymade – viz. pipe-guns - muskets) revolvers and pistols, etc. Automatic heavy calibre

firearm fatalities are usually involve armed law enforcement or army officers, or terrorist shootings, the latter which have in the last few decades been quite a few.

The 80's and 90's saw young brides being killed by their in-laws because of dissatisfaction with quantum of dowry, by being set alight after pouring kerosene oil – cooking medium, later trying to pass them off as domestic accidents.

The next commonest group is the sudden unexpected deaths – in adults – commonest from sudden cardiac deaths – the ages of which have dropped to even the 20's in recent years in metropolises, followed by strokes, infectious conditions, undetected malignancies – or not known to the next-of-kin (NOK).

Among suicides, the method depends on the part of the country. Starting with Copper Sulphate as a suicidal agent, followed by organophosphate pesticides became common, but then they became treatable, so since the 90's it has been aluminum and zinc phosphide in north and west India. Hanging is a universal method present in nearly all districts. Local variants of suicidal poisons differ, from fruit of the cerebra species (cardiac glycosides), to the glory lily (Gloriosa superba) bulb, to rarely aconite root and other such poisonous plant parts.

Drug Related Deaths in India

Traditionally, for eons, the desert state of Rajasthan had poppy cultivation for opium and developed well ensconced village customs of offering honoured guests a teaspoon of concentrated decoction from boiling and concentrating the poppy fruit husk as a welcome 'sip', to offering crackers or crisps of fried dried poppy fruit husk with welcome tea, resulting in high levels of endemic addiction to opium. With the promulgation of the Narcotic Drugs and Psychotropic Act (NDPSA) 1986 superseding the Opium Act of 1878 with regards to opioids - the latter which was regulating and providing licenced opium to registered addicts, the use and trade of the listed Narcotic and Psychotropic substances brought harsh punishment to traffickers, doubled punishment on second and subsequent convictions, etc, except those using less than the prescribed limits and thus declaring themselves addicts, thus bringing down the incidence of free abuse and trade of drugs. This list is regularly being updated as new 'drugs' emerge.

In the 80's, a lot of heroin addiction was seen, from flooding from across the country's western border, as 'smack' or brown sugar, starting from the border states of Punjab – the usual route from Afghanistan and other intermediary states, also to Rajasthan. Many of the rich youth and bored scions of large-scale farmlands of Punjab and Haryana, to the very poor cart pushers and rickshaw pullers in Delhi, became slave to smack. Smack, made by diacetylating opium – hence the 'brown' colour and name, was usually smoked, often with crude paraphernalia such as a hollow 'pipe' like device fashioned from cigaratte packet foil liners, and heated over a flame and inhaled. In the late 80's, India fenced off its border with its western neighbour, choking off its supply and its abuse incidence. During this period of 80's, a lot of addict 'sudden' deaths took place, especially on the streets, which has since declined, except those from recreational

misuse using heroin, and those who can afford it – cocaine, and very few prescriptive drugs also being abused.

Recently, smuggling from the eastern (Bangladesh) and northeastern borders (Nepal, etc.) of prescription opioids such as Tramadol, etc. (the suspicions are they are manufactured in far east - countries), has led to institution of strategies to stop and search border vehicles and interventional measures to protect and rescue the youth who are falling prey to these addictions in these border states –viz. Bengal – especially Darjeeling district, Sikkim, some of the North Eastern states such as Nagaland, Manipur, Meghalaya, Mizoram, Arunachal Pradesh, etc. So far, deaths from fentanyl and its analogues have yet to be reported. Whether this is because of absence of good official govt. forensic lab analysis is a point that worries those Indian Forensic Pathologists who are conversant with its menace.

Death among Females from Burns

In and around Delhi and its northern and western neighboring states, suicide by burning oneself after pouring cooking medium kerosene oil on oneself and setting oneself alight is still prevalent and in these circumstances, where determining whether it was a suicide because she was being harassed for dowry or a homicide is difficult. This has led to laws have been amended to uphold presumption of the latter, unless proven otherwise in a trial, if her parents/siblings lodge a police report of harassment for dowry, within 7 years of marriage.

Death from Sectarian Violence

The creation of modern India during partition saw hundreds of thousands of people of both Hindu and Muslim background massacred during the partition, either in their native places, or while trying to cross over to either India or Pakistan, depending on their religious allegiance and faith in where they would feel safe. India has since lived with frequent upsurge of such violent deaths. Politicians cashing in on many of these ideological (such as caste differences) and religious bias, have capitalized on these, inflaming passions for vote-bank purposes.

In 1984, subsequent to the riots against Sikhs for celebrating the assassination of Prime Minister Indira Gandhi by her two Sikh and one Gukha (Nepali origin) bodyguards (the Sikhs were aggrieved because she ordered the desecration of their holy Golden Temple in Amritsar's premises by the army to flush out terrorists hiding there and firing down on the troops and para-military forces after them), many innocent Sikh families were chased and killed, in Delhi alone in quite a few thousand. At Maulana Azad Medical College morgue, we had more than 700 killed, dismembered and burnt (to prevent recognition) bodies arriving to our mortuary in about 2½ weeks.

Subsequently sporadic flare-ups of violence on religious grounds have continued till date, with the Godhra riots in Gujurat in February 2002, subsequent to a couple of coaches full of Hindu devotees returning from a pilgrimage being burnt when the train was set on fire by an alleged anti-Hindu (interpreted as Muslim) mob, which led to the widespread killing of Muslims, looting

and destruction of their property – termed by some as the Godhra pogroms, under the Chief Ministership of Modi in Gujurat (till date many of the politically-aligned perpetrators have yet to be brought to book!).

The current predominantly Hindu based BJP ruling party has listened to its militant activist wing and declared the cow in India as a protected animal based on its Hindu religious significance. Thus, cow slaughter, even those of old and sick animals, is prohibited, but is subject to implementation by the local authorities (states like Kerala and to some extent – Goa, and the North Eastern Christian states have resisted this enforcement to some extent). As a result, the cows are 'running amok' on the streets and everywhere else, with owners unable to dispose of unproductive animals, releasing them onto the streets, etc. They cause traffic accidents, hungry animals go on rampage to find food and invade premises and shops, and have sometimes been responsible for goring people, causing injury and death, with no one responsible enough to take the blame. Meanwhile 'gau rakshaks' or cow – protectors – vigilantes, have taken to assaulting and even killing people suspected of taking a cow or a few for slaughter – those who either were legitimately taking their animal somewhere or even taking a bought-animal home, with the authorities under pressure to not take these deaths seriously or prosecute, even if it is outright murder. Even sections of unlawful assembly are applicable to these hordes of people assaulting someone. These fatalities also generate a lot of tension for the pathologist, where attempts are made to try to influence his findings.

North Eastern states like Assam saw an upsurge of regional partisan spirit against those in power and possession – viz. the Bengalis, instated there by the British as landlords and subsequently owners of tea estates, with separatist parties desiring independence from India if this was to continue, with multiple homicides of these landowners in the 80's and early 90's. With time we saw a decline in this activism with many of these parties entering mainstream politics and even winning elections to rule. The border state of Nagaland in the northeast – a predominantly Christian Indian state, has cross border state-sponsored insurgency from its eastern border with Myanmar, where provision of these insurgents with Chinese supported arms and ammunition result in sporadic attacks of the army patrolling there as well as the official administration.

Kashmir presents a different problem. Because of concessions offered exclusively to them to join the Union of India & a special status introduced into the constitution for them alone, Kashmiris get a lot of goods and food at very preferential rates – subsidized by the Central (Federal) Indian govt., yet a vocal strong group amongst them favor their Muslim Pakistani neighbors. Social media has been very effectively used by insurgents and cross-border activists from the Pakistan Occupied Kashmir (POK). Many of these insurgents/terrorists, after they have been shot in Indian Kashmir while either attacking public places or military establishments, on examination turn out to be regular Pakistani troops, who entered Indian territory to incite violence against the army and paramilitary forces patrolling there, and even muster mobs to attack them by stone pelting, etc., when these security forces manage to corner or even capture some of these infiltrating terrorists. A few of them turn out to be local Indian Kashmiri

youth, radicalized by social media to slip across the border into POK, train in the 'madrassa's' there, and re-infiltrate back to disrupt, kill and blow up places and people. The army has a difficult policy of a soft approach with the locals, but aggressive approach to these insurgents, making defending themselves against the attacks by local youth, etc. extremely tricky and life threatening. During these, deaths by rubber bullets and cane charges become big issues in the media, who go into a frenzy of 'police atrocities' and 'excesses by the armed forces', putting the security forces on the back burner. In these circumstances – conducting free and fair forensic work of such decedents and even those innocent bystanders and others injured by these attacks is fraught with danger from accusations and even physical assault, with accusations that we 'doctors' are 'police stooges'!

Abortions & Pro-Choice

The 1860 Indian Penal Code, which became de-facto the Penal Code of all the Asian colonial countries including Malaya, etc., covered deaths from attempted miscarriage – with or without consent. Miscarriage legally represented aborting the products of conception from conception to full term. With this draconian oversight, it was difficult for women to get medical termination of pregnancies for whatever reasons, unless her life was threatened by the continuation of the pregnancy, a rather rare proposition. As a result, underground abortion clinics and quacks running so – called 'abortion centres' flourished, with many cases of maternal deaths as a result of untrained ill-equipped terminations of pregnancies causing uterine perforations, deaths from sepsis, etc. These were quite common in the 60's, 70's & early 80's.

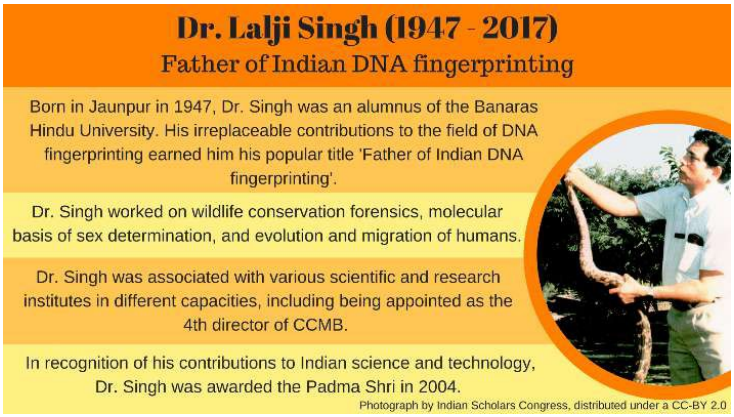
To address this lacuna, as well as in the interest of promoting family planning and restricting unwanted pregnancies, as well bringing down the complications and deaths associated with the illegal abortion centres, India passed the Medical Termination of Pregnancy Act in 1971, coming into effect in 1972. With this, conditions such as failure of contraception, and even perceived risk of physical or mental ill-health of either the mother or child if the pregnancy was allowed to continue, as well as humanitarian grounds of abortions of victim of rape were legally permitted in gynae centres and certified abortion centres, equipped with trained doctors and staff and proper equipment. Foreign agencies offering such services like Marie Stoppe Clinics, etc. entered the Indian market to offer up-scaled services to those able to afford. However the bane of deaths from criminal abortions – of the mother has not died down, as in certain communities, risking someone seeing that person queuing up for registration for an abortion and treatment at a public hospital or gynae centre, and the shame and trauma that may follow, still lead many of the women, especially the unwed mothers, to seek quacks running backyard secret underground abortions centres, with no medical knowledge, skills or proper sterilized equipment, leading to a few deaths still being seen from such risky procedures.

Accidental Deaths

In farming communities, the straw threshing/cutting machine –or hay cutter, has led to amputations and deaths from those. Therapeutic deaths, as adverse reactions of treatment, or

from therapeutic procedures (viz. death on table, etc.) are also been seen in small numbers. Though India is notorious for snake bites and snake-bite deaths, their numbers are rarer, but occasionally figure in rural communities near forests as a suspected cause of unexpected sudden death. Deforestation and reclamation of land for agriculture has been blamed for these, in these rural areas. Sea snake bites and other venomous sea and land creatures – causing sudden unexpected or unexplained deaths are fortunately very rare. There are no fatally venomous arachnids and reptiles other than its venomous elapids and non-pit viper snakes in India (the forest vipers are not usually known to cause fatalities).

DNA Forensics in India



The advent of commercial DNA fingerprinting by paying for the services of ICI Industries – possessors of the patents of UK's Sir Alec Jeffrey's patented restriction enzyme methods in the early 1980's was too expensive for India when converted from Indian Rupee to GB£, so Dr Lalji Singh of CCMB (Centre for Cellular and Molecular Biology) Hyderabad, developed his own restriction enzymes from the Banded Krait's venom and successfully set up his own DNA Fingerprinting method, which was regularly in use. Recently, more universal methods and automated systems using SLP's, STR's and SNP's have been implemented, and DNA profiling is robust, with the govt. trying to pass the DNA Profiling Bill 2007, which would allow profiles of suspects to be saved in databases with deletion from it – if acquitted. This bill in this present form is vehemently opposed by many groups, especially where misuse of the sensitive or personal data attracts a mere US$ 1000 fine, and the absence of strong privacy laws in the country.

Diligent Forensic Practise – The Need of the Hour

India needs a robust system which holds its so-called experts accountable. Currently, many so called experts get away with all kinds of statements and opinions, confident that they would not be challenged, or even if so, the court would uphold their opinions as final because of their professional titles, and there are no punitive consequences of such opinions in the form of civil suits or even criminal cases against them.

Periodic skill up-gradation (through course credits) and re-certification is non-existent. The Daubert principles should come into play with the higher courts holding the scientist accountable with reproducible results. Forensic Pathologists and Forensic Medicine practitioners need to not be influenced by the politics and importance of cases to 'shift their emphases' in opinions, to play to the circumstances. And with experience comes circumscription in opinions, and a desire to keep out of the limelight.

India also needs to invest in updating facilities and training in its Forensic Medicine departments/centres, with funding for research, updating existing facilities and attending international conferences and overseas training. To have forensic pathologists in each district is a medico-legal dream at the current moment, because of the paucity of budget allocation for posts and equipment/ facilities.

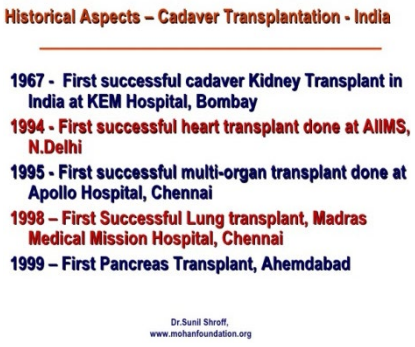
Organ Donation and Tissue Recovery for Forensic Cases in India

By Maneesha Pandey, MD

Traditionally India has very low organ donation rate. As per Directorate General of Health Services (DGHS) Transplantation of Human Organs Act (THOA) 1994 was enacted to provide a system of removal, storage and transplantation of human organs for therapeutic purposes and for the prevention of commercial dealings in human organs. The most important aspect of the act was to recognize brain death as legal which paved way for organ donation. Transplantation of Human Organs (Amendment) Act 2011 was enacted.



Some of the important amendments made under the (Amendment) Act 2011 was to include tissue recovery along with organs, definition of near relatives (to include grandparents and grandchildren), having retrieval centers, swap – donation provision and to have mandatory transplant coordinator in hospitals, who are registered.



The brain death certification was also simplified to give intensivist and anesthetist the power to pronounce it as long as they are not members of the transplant team. DGHS (Director General of Health Services, India) is also encouraging promotion of organ donation from deceased persons with post-mortem or autopsy being possible after organ retrieval. Much advancement has since occurred, with organ transplantation with cadaveric harvesting also, with the first successful cadaveric transplant of both hands to one individual taking place in 2015.

Education in Forensic Medicine in India

By Maneesha Pandey, MD



I was a third-year medical student from a class of 100 when I was first introduced to Forensics. It was early 1990's and at that time, all the third-year medical students had to rotate for about a month through Forensic Medicine. I studied medicine in Kottayam Medical College, Kottayam, Kerala India.



Image of hospital building from the Kottayam Medical College Website.



Ward in Kottayam Medical College, Kerala, India.

The rotation was not a choice. It was a requirement. I had been told a few horror stories of the rotation by some seniors who clearly did not like it. Perhaps if I had not been exposed to Forensics at that time, I may have never become a forensic pathologist.

All the students had to document 20 autopsies they observed in a notebook. The cases had to be deaths from different cause and manner. My first day I saw an autopsy of a person who had died in a motor vehicle crash. I remember it being very bloody. A large man just had an apron on and a pair of gloves. He removed the organs, weighed them, and then a Police surgeon came to examine them. Pieces of organs were taken in jars and saved for future evaluation. The autopsies I remember were those of a motor vehicle crash, motor cycle crash, hangings, dowry deaths (primarily thermal injuries), drowning, alcohol toxicity, falls from height, strangulation, young children with accidents, poisoning (drug related and also related to dowry deaths), upper gastrointestinal hemorrhage, abandoned bodies. I did not see a lot of shootings.

At the end of the rotation I was enthralled by the experience and I wanted to explore becoming a Forensic Medicine expert.

In India, Forensic Pathology is referred to as Forensic Medicine and Toxicology or as legal Medicine. First, one has to complete MBBS (basic medical education degree). A postgraduate degree in Forensic Medicine is given after three years of study. Most of the Forensic Medicine expert graduates work in Department of forensic medicine and Toxicology in medical colleges.

The job of a Forensic Medicine specialist consists of performing autopsies, clinical forensic examination, teaching medical students and being an expert witness. The number of autopsies conducted in each department varies from 100 to 5000 depending on jurisdictions. In addition, they are required to perform thousands of clinical forensic examinations.

Indian Academy of Forensic Sciences is the largest institute of Forensic Medicine experts in India with a membership of about 1000 specialists.

Police surgeon examined the organs, and then explained to us the cause of death. He would then meet with the families, and police of the deceased to tell them the cause of death. I was exposed to radiology, anthropology, odontology during the rotation.





The medicolegal autopsy unit of the Kollam district hospital, Kerala

A Police Surgeon is a designation which originated from United Kingdom. In India, one has to be a Medical Consultant in Forensic Medicine (MCFM). Home department can then appoint them as Police surgeons to perform medico legal autopsies in their jurisdictions.

As is true of forensic pathologist in USA there has been a shortage of Police Surgeons in certain states of India due to shortage of forensic medicine experts. Ordinary autopsies can usually done by any medical practitioner, however any medico legal death such as homicides, dowry deaths, and deaths under suspicious circumstances have to be done by a Police surgeon. In 2014 as per a circular, it was decided that there should be at least two forensic experts posted in all hospitals that report100 autopsy cases on an average each year (per The Hindu article from October 2015).

After graduating from medical school my path led me to the USA, and there I completed my residency in Pathology and fellowship in Forensic Pathology. Every day, I consider myself fortunate to have been exposed to the Forensic Medicine rotation in my medical school. I definitely owe my love for Forensics to that one month rotation.

Israel

International Feature – Medicolegal Death Investigation in Israel



Dr. Hadas Gips
Senior Forensic Pathologist

From NAME International Relations Newsletter, March 2017

Israel is a small and relatively young state. Emancipated in 1948 from the British Mandate, it has kept the coronial foundation of death investigation, but incorporated modifications based on traditional Jewish principles and 21st century ethics.

The Israeli National Center of Forensic Medicine (NCFM) is currently considered a department of the Ministry of Health. It renders its services to the investigating authority, which can be the police, the military or other departments in the Ministry of Health. The medicolegal part of death investigation is performed by forensic pathologists, but the extent of that investigation is determined by the referring authority.

Any case of sudden, unexpected death requires a police inquest. The officer arriving at the scene decides whether the body can be released for burial or transferred to the NCFM. If an autopsy is deemed necessary by the police, according to the 1980 amendment to the Anatomy and Pathology Law (1958), they need the next of kin's signature on a consent form. This form includes detailed information on the autopsy procedure, tissue and organ retention and burial options. The forensic pathologist in charge of the case has to contact that same family member and confirm that they had understood the contents of the consent form.

If the next of kin opposes the autopsy, or the decedent has no living relatives, the police may turn to the courts and petition for an autopsy under the Cause of Death Investigation Law. The family has the right to take part in this hearing and express their wishes.

The NCFM serves Israel's entire population of a little over 8 million people. The staff includes 7 senior forensic pathologists and 4 residents, supported by autopsy and radiology technicians, a photographer, an anthropologist and in-house histology and DNA labs. Forensic medicine in

Israel has a specialized 5-year residency, which includes 1.5 years of anatomical and surgical pathology, 3 years of forensic medicine training at the NCFM and a half-year of rotation, usually in radiology. The unique identity of Israel as a democracy, but with politically influential religious and traditional populations, makes for a very low autopsy rate – about 700 full autopsies per year – out of ~1600 bodies examined by the NCFM each year, with a national death rate of roughly 5 deaths per 1000 people. Instead, all bodies undergo a full CT scan and an external examination, and if those reveal suspicious findings we alert the police that an autopsy is necessary.

Besides routine death investigations, the NCFM staff performs clinical examinations of living victims of rape or abuse and of suspected perpetrators. We prepare expert opinions based on medical records and photographs. In times of war or conflict most of the staff is called into military duty to provide identification services and to estimate mechanisms of injury. Toxicological and other specialized tests are outsourced to accredited labs.

The NCFM also has a tissue transplant coordinator, and it is the source of more than 60% of the harvested corneas in Israel.

The NCFM resides in an old villa built before Israel's proclamation of independence, and donated for this purpose by the South-African Jewish foundation. The building falls under the Historical Building Preservation Act and therefore cannot be externally altered. The offices and autopsy suites were planned with that in mind: the ground floor has 4 autopsy rooms with 1 or 2 autopsy stations each, a reception office and a viewing area. The first floor contains the staff offices and the second houses the biology and histology labs. All additional facilities, such as the CT scanner room, the evidence room and the accounting offices are in external units.

The forensic DNA laboratory in the NCFM processes samples from criminal cases, and samples for identification and paternity determination purposes. It is the only laboratory in the country which performs identification from bones and other badly preserved tissues.

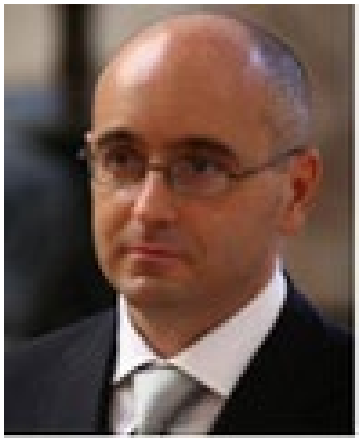
The staff of the DNA lab consists of six biologists that deal with an average of 200 criminal cases and 50 identification cases per year. The laboratory is accredited by the Israeli Accreditation authority.

Often, there is public pressure to quickly identify and release the bodies for burial. The location of the DNA lab in the same building as the autopsy rooms allows for swift sampling and processing. Blood samples of decedents are kept as stains on FTA paper, as well as samples from potential family members. This method enables the use of direct PCR without a DNA extraction procedure, which shortens the entire process of obtaining genetic profiles. For example, samples from five unidentified victims and from their relevant family members can be processed within about five hours to get a final identification.

In the last 3 years, under a new management, forensic pathologists of the NCFM strive to promote new legislation that will increase its autonomy in decision making, for a better death investigation. We have already received funding to increase the number of forensic pathologists and are hoping to establish a satellite forensic department in the north of Israel.

Italy

International Feature – Death Investigation in Italy


Giancarlo Di Vella[1], MD **Carlo Francesco Lupariello[3], MD**
Carlo Pietro Campobasso[2], MD
January 2019

[1]Full Professor of Legal Medicine - University of Turin - Italy
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[3]Fellowship in Legal Medicine - University of Turin - Italy

From NAME International Relations Newsletter, January 2019



To fully understand the Death Investigation in Italy and the role of the Legal Medicine discipline in this field, it is necessary to briefly consider the influences of other Mediterranean and Middle East areas on its origins and development. The **Hammurabi Code of Laws** (Babylonian King 1728-1686 B.C.) discussed *medical malpractice* and established specific punishments for physicians who caused patient injuries or death.

Hittite Laws (1460-1200 BC) contained criteria for determining the charges associated with homicide, abortion, rape, adultery; the **Assyrian Code of Laws** (1112-612 BC) inflicted harsh sentences for those who provoked abortion, personal injuries; it outlined precise definitions for illegal conduct or behavior. In Egypt and some surrounding regions, the physicians belonging to the state (***demosios***) had to write reports when suspicions were found

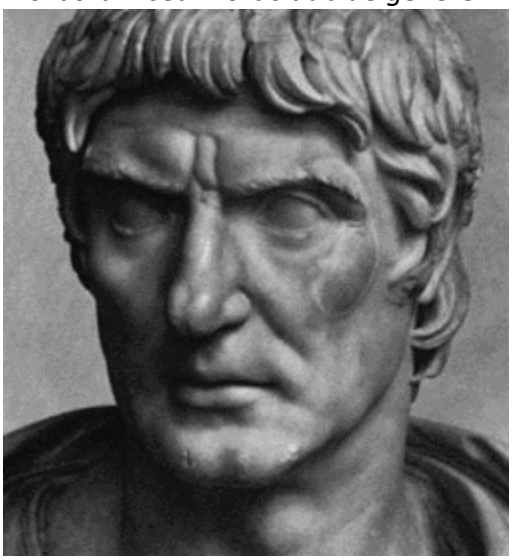


in the determination of cause and manner of death, especially when work-related fatalities occurred. In **Ancient Rome** medical testimony were consulted (*propter auctoritatem doctissimi Hippocratis)* in case of rape, homicides, Caesarean section prescription (mother's death and a surviving fetus). Autopsies were not allowed; however if the manner of death was unnatural, the bodies were exhibited for public viewing for two days: Julius Caesar's cadaver was exposed too and the physician Antistio, after the inspection of the 23 stab wounds, determined one lethal wound that penetrated the thorax, in the space between the 1st and 2nd ribs.



Lucius Cornelius Sulla, Dictator of the Roman Republic, promulgated ***Lex Cornelia de sicariis et veneficiis*** (81 BC) by which severe punishment was imposed in case of medical malpractice; criteria for *diminished responsibility* (or *diminished capacity*) were defined by which the *capacity* (criminally liable) was excluded before the offender was fourteen years old; it established “quaestiones perpetuae”, as specific judging system by which any “quaestio” was promoted by a citizen and prosecuted by a judge.

Claudius Galenus (September AD 129 – 199/217) wrote *De prohibenda sepoltura in incerto morborum seu mortis dubiae genere*. During the Middle Ages, the period of history covering roughly a millennium in the 5th century through 16th centuries, physicians and midwives (*expertae matronae*) gave judges testimony when special competencies were required in the trial; it was essentially a personal opinion based on experience as was customary for non-professionals such as woodworkers or blacksmiths.



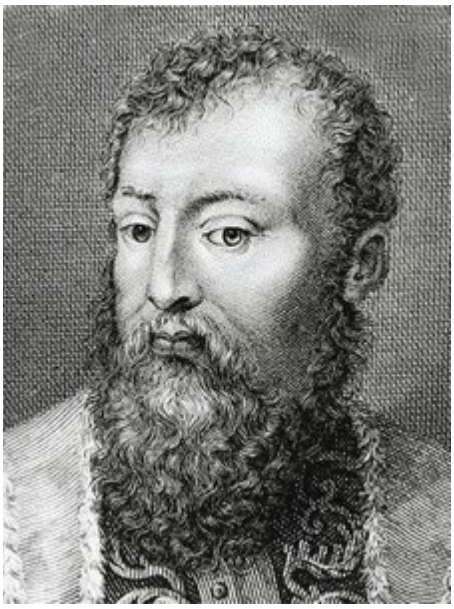
Cladius Galenus

In the XII-XIII centuries **Pope Innocent III** (1160 or 1161 - 16 July 1216 at Perugia) and **Gregorio IX** (March 19, 1227 to August 22, 1241) established (*Decretales*) an official role of legal-medicine ***“peritia”,*** as expert testimony or reporting during the trial when it is necessary to examine wounds or personal injuries. **Federic II,** in 1231, remarked details about medical

testimony in the criminal or civil trial by *Constitutiones augustales.* In 1249 **Ugo da Lucca**, who was born in Bologna, was required to give two medical examinations upon oath and the report was dictated to the notary who was keeping it within the law. The medical *testimonies* were called *medici plagarum,* meaning the physicians of wounds and, among those, the "*beloved surgeons*" who were required to examine cut or stab wounds related to a duel or assault.



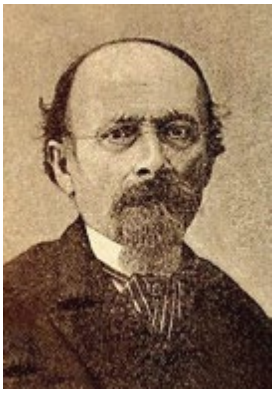
In 1302 **Bartolommeo da Varignano** performed first forensic autopsy in case of a suspicious poisoning. Later, in according to the **Caroline Law** (Charles V, *Constitutio criminalis carolina*, 1532) medical experts were charged to examine cases in suspected crimes (illegal abortion, infanticide, homicide, poisoning, medical malpractice). By this time legal medicine practice was becoming a specialty that required rules and training.



Gian Filippo Ingrassia di Racalmuto

Gian Filippo Ingrassia di Racalmuto, anatomist, in the 1578 wrote *Methodus dandi relationes* and *Constitutiones et capitula nec non jurisditiones regii protomedicati offici*.

Also, **Giovan Battista Condrochi di Imola** published *De morbis veneficis ac de veneficiis libri quatuor in quibus non solum certis rationibus veneficia dari demonstrantur sed eorum species causae signa et effectus nova metoda aperiuntur* (1595) and *Methodus testificandi***,** that described how the medical consultation had to be reported to the judge. These publications paved the way for legal medicine as an official discipline.



Giovan Battista Condrochi di Imola



Ambroise Parè

In the same period, Ambroise Parè, a very famous surgeon of the Kings in France, made additional contributions related to poisoning, drowning, asphyxia and more.

The first systematic editorial approach to legal medicine was attributed to **Fortunato Fedele** which wrote *De relationibus medicorum libri quatuor in quibus ea omnia in forensibus et pubblicis causis medico referre solent planissime traduntur*, that was also a bibliographic reference for medical testimony training in 1602. In 1621 **P. Zacchia** (1621) was author of the

"Quaestiones medicolegates in quibus eae materiae medicae quae ad legates facultates pertinere videntur, pertractantur et resolvuntur", which included all the forensic knowledge at the time, containing principles of medicine, philosophy, theology, human sciences, jurisprudence and legal sentences, verdicts and pronouncements. It is common opinion that Zacchia, Fedele, Ingrassia and Codronchi were the pioneers of the Forensic Sciences and that they gave great impulse to the discipline in all the European area. Then there was a large proliferation of contributions (*De partu hominis pro medici et juris periti – by* Paolo Emilio Bianchi, Milan; *questionium medico-legalium* by Lelio Zaccagnini, Rome). While the 18th Century was ending, Legal Medicine embraced the experimental method of positive sciences. Old dogmatic statements were dismembered and the research was based on observational procedures and on inductive reasoning. Legal Medicine was elevated to scientific courses that were introduced into the University (1797 prof. Ronchi, Napoli; prof. Ramponi 1786, Pavia) as part of the official curricula in the educational program within a school of medicine.

In 1818 **prof. Barzellotti** published a book that was entitled "*Legal Medicine in accordance with the spirit of civil and penal laws that are ruling different Governments of Italy*" that is believed to be the first scientific text for modern legal medicine. There was a broad discussion of topics which included research-based findings developed through the use of accurate scientific methods. The field received more publications by several authors (Martini, 1825 – The handbook of Legal Medicine, Turin; Tortora, 1836, Institutes in Legal Medicine). **Prof. Angelo Filippi** founded a prestigious school of legal medicine in Florence whose disciples were Severi, Montalti, Borri and Biondi. In Turin, **Cesare Lombroso** and his colleagues (Ottolenghi and Falco) studied criminal anthropology and behavior.

Legal Medicine eventually became the referee of the Social Security and Insurance System, connecting to clinical traumatology and to Occupational Medicine, both of which are involved in studying occupational-related accidents or diseases.



Professor Lombroso

On the 5th of October, 1898, prof. Lombroso inaugurated the ***first meeting of Legal Medicine*** and the lectures concerned the cadaveric examination (Foà - Ziino), the duration of illness and its importance in a Law System (Lombroso – Severi), the Toxicological Chemistry in Tribunal (Vitali), Methods in testimony (Ziino - Pecoraro), and the Unique and Irreplaceable Role of Legal Medicine in the Legal System (Ziino). The topics of the meeting elicited the Minister of Justice to approve on the 30th of June, 1910, the Memorandum - titled Fani by Minister's name - "Italian Rules for Forensic Autopsies" that was in force for larger part of the last century. The Circolare Fani describes in detail the minimum standards of a forensic autopsy, including external and internal body examination. Article 103 of Italian Health Law (RD n° 1265, 27 July 1934) states that only the physician who has cared for the decedent and has knowledge of that person's medical history can certify the death. If the death has occurred without an attending physician, or the cause and manner of death are uncertain, the

death certificate can only be signed by a physician appointed by the Local Health Authority as the *necroscopo* (a physician specifically tasked to certify the death based on an examination of the body). In the Italian public hospitals, the *necroscopo* is usually the chief of the Department of Legal Medicine or, if this position is not present, the director of the hospital or a physician delegated by him. In Italy, there is no official death investigation agency (such as a coroner or medical examiner system) that investigates and certifies suspicious deaths. Departments of legal medicine in universities can be a resource in managing the death investigations in their own regions, but this happens only in large cities. For this reason, the position of the necroscopo can be crucial in a death investigation.

The role of *necroscopo* was revised in 1990 by the Mortuary Police Rules (Regolamento di Polizia Mortuaria – RPM, law 285/90). Based on the RPM, the postmortem examination must be performed no earlier than 15 hours and not more than 30 hours after death. The examination can be performed sooner only in cases where there is certainty that death has occurred, such as dismemberment, decapitation, or the heart is electrically silent for not less than 20 minutes as recorded by electrocardiography. Furthermore, the decedent cannot be buried before 24 hours after death. For sudden deaths, the examination must be performed 30 hours after death. If the death has occurred without an attending physician, a hospital autopsy can be requested or performed by the necroscopo. Such nonjudicial autopsies are usually managed by the National Health Services, but a declining autopsy rate is occurring in Italy as in other countries. Factors contributing to the decline of autopsies include clinical reluctance, increased confidence in new diagnostic tools, cost containment, and concerns about legal action if a misdiagnosis is detected. In Italy, many nonjudicial or hospital autopsies can be changed to forensic autopsies. In every case of suspicious or violent death, as well as in potential medical malpractice cases, the physician completing the death certificate or the necroscopo must inform the Judicial Authority of the need for further investigation and request a forensic autopsy.



In Italy, as in many countries with Roman legal tradition, magistrates or prosecutors have absolute authority to proceed with further death investigation. Forensic autopsies are not mandatory, even when the manner or cause of death is unclear, or when a crime may be connected to the death. Law enforcement officers decide if an external examination is sufficient for the death investigation or if a forensic autopsy has to be performed. They can choose their medical expert based on training and competence, but sometimes poorly skilled

physicians are appointed as medical examiners. Based on the conclusions provided by medical experts and generally after only an external examination of the body, law enforcement officers select the cases in which a complete forensic autopsy will be carried out. In the Italian death investigation system, the majority of violent deaths are still certified without a full autopsy. In this Italian model, a forensic autopsy will most likely not be requested if the expert appointed by the prosecutor is able to find even a *presumptive* manner of death that is of no judicial interest. This model undoubtedly has contributed to the declining autopsy rate in Italy. Since external examinations are the most common method used to investigate unnatural deaths, toxicological analysis is often not performed since such additional testing would need to be authorized by law enforcement officers. Approximately 4-5% of the 580 000 deaths per year in Italy are due to non-natural causes, and the majority of traumatic deaths are certified without an autopsy or review of medical records. Therefore, misdiagnoses and misinterpretation of medical findings are inevitable. In contrast to U.S. death certificates, Italian death certificates do not offer an undetermined manner. It is our opinion that this option should be also listed in the Italian death certificate with an appropriate box. In several cases the findings at the autopsy do not explain the manner of death even after further testing (e.g., toxicology, histology, microbiology). Undetermined as an additional subcategory of manner of death could help to inform the relatives, the offices of public health and law officers (e.g., judges, magistrates, lawyers) that even a complete death investigation including body external and internal examination cannot always determine cause and/or manner of death. Forgoing forensic autopsies in trauma deaths is a violation of Recommendation No. R 99 of the Committee of Ministers (Council of Europe) adopted in 1999 (33, 34) and partially applied in several European countries. The main scope of the EU recommendation dealing with the harmonization of medicolegal autopsy rules in Europe was to underscore some principles and procedures, including 1) cases where death may be due to unnatural causes, the competent authority, accompanied by one or more medicolegal experts, should where appropriate investigate the scene, examine the body and decide whether an autopsy should be carried out; and 2) autopsies should be carried out in all obvious or suspected unnatural deaths including domestic and occupational accidents, suicides or suspected suicides, homicides or suspected homicides, sudden unexpected infant deaths, suspected medical malpractice, and deaths in custody or associated with police activities. For all these events, manner of death should not be classified only on the basis of the external examination of the body, and the death investigation should not performed by individuals with no specific training. Differences in legislation regarding cause and manner of death among territories of the same European country can lead to inaccuracy in death certification.

In Italy, each Tribunal has an official list of physicians who are willing to provide consultation for criminal trials or in lawsuits. In regard to forensic autopsies, there is no law that limits the competencies of the Specialist who does the external body examination or the anatomical dissection. It is not surprising, therefore, that specialists in other medical disciplines are



required by prosecutors to perform forensic activities, even though the absence of Forensic methodology and competencies appear later at the cross-examination. To assure the correct approach to the forensic autopsy, the G.I.P.F. (Gruppo Italiano di Patologia Forense) has approved and is promoting *autopsy procedure protocols* that may guarantee minimal standard in forensic cases; nevertheless those are not applied by who performs the autopsy in absence of forensic background or competence, such as the pathologists.

Even though the role of the medical examiner on crime scene is considered essential and mandatory at the forensic autopsy, many prosecutors do not require their participation. This is due to the participation of specialized Officers teams within the Carabinieri or Polizia di Stato and other, who have all legal authority at the crime scene. This gives them all the responsibility in the investigation, excluding the way that the ME later performs the autopsy on body found on scene. Biologists, chemists, and physicists are team members and they work on trace evidence and on reconstruction of dynamics of the event. This occurs many times without the Medical Examiner's expertise, even though the investigation started from finding of a dead body. That is the reason for controversial results in trials of forensic cases, also very popular outside the Country. Anyway the forensic autopsy is performed frequently by a medical examiner who is member of University Community, belonging at Institute of Legal Medicine: that is a guarantee of correct methodology and of adequate laboratory support. In the last twenty years, several cases of presumed medical malpractices flood the daily autopsy activity of the Italian medical examiner. Each of investigation is really complex and requires interdisciplinary competencies to verify the suspicion of medical responsibility. For these reasons it is obligatory by article # 62th of the Ethical Code of Italian Medical Association (last revision on 2014) and by Law (# 24/2017 that is also called Law Gelli - Bianco by the names of promotors), in a case of presumed malpractice by health care professionals, that the investigation has to be carried out by a team whose members are a specialist in legal medicine and a specialist in the discipline that is the object of controversy.



Procedures for accreditation of Institute of Legal Medicine are debated inside the Italian community of Forensic Pathologists and of other Forensic Scientists in order to verify the quality in the service and to calibrate the requirements to the Italian Laws System. So, the Italian system of death investigation has two main disadvantages: it is sometimes performed by



individuals with no specific training, and majority of violent deaths are certified without an autopsy or further testing. The forensic autopsy is a reliable form of quality control, which informs public health and the judicial system while lessening the risk of inaccurate certification of cause and manner of death. Italy has still no official system of peer review, or a method of quality improvement, to review death certificates or postmortem external examinations. Standard operating procedures in death certification, coupled with policies to evaluate the performance of the certifier of death, would be beneficial. Review of a death certifier's work by outside experts (external peer review) can be a useful part of quality improvement in in the future due to the changing nature of forensic practices. A peer review program should not have a punitive enforcement component, and should maintain confidentiality of findings. In Italy, as well as other European countries with similar death investigation systems, there is a strong need for a formal and/or federal entity that would oversee forensic science and death investigation. Such an entity could also improve the quality of forensic services, including medicolegal death investigation, in a multidisciplinary context and practice based on scientific principles. This could prevent the risk of misdiagnosis or missing autopsies, improving the primary task of any medicolegal death investigation, which is the reliable certification of the cause and manner of death. It is responsibility of university forensic community to transfer knowledge to a new generation when forensic sciences are opening new frontiers; anyway the methodology and the criteriology of the Legal Medicine in approaching various biological problems continue to be an unique guide.

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Russian Federation

INTERNATIONAL DEATH INVESTIGATION FEATURE – RUSSIA
MEDICOLEGAL DEATH INVESTIGATION SYSTEM IN RUSSIAN FEDERATION



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The medicolegal investigation system in Russian Federation is a highly centralized Federal Medical Examiners System functioning under the Federal Ministry of Health and Social Development (except for cases that fall under the jurisdiction of the Ministry of Defense).

In 1716, Russian Tsar Peter the First signed the first order permitting autopsies in cases of violent deaths. Thirty years later, autopsies were required in all the cases of sudden and unexpected deaths. Autopsies were performed by general practitioners without training in forensic medicine and under the jurisdiction of a police office. This system existed until the Socialist Revolution in 1917. In the beginning of the last century, a modern medico-legal investigation system began to form.

The main federal institute of the medicolegal investigation system is called Russian Center for Forensic Medicine. It was established in 1931 by merging previously existing the Central Forensic Laboratory and the Departments of Forensic Medicine of the Moscow Medical Institutes. The Center is the principal state forensic institution of the Ministry of Health and Social Development of Russia and provides scientific and legal support of the medico-legal examination system. The Center issues guidelines for all the regional offices and oversees training and professional development of all the forensic medical examiners in the country.



FIGURE 1. Postgraduate education, Russian Center for Forensic Medicine.

The Center is located in Moscow and includes 18 structural divisions (forensic research, forensic medicine and forensic laboratories). The medical staff consist of 67 researchers, 87 medical examiners, 10 PhDs, 22 PhD candidates, and 6 Merited Doctors of Russian Federation.

The local medical examiners offices in the republics, regions or large cities of Russia are called the Forensic Medical Examination Bureaus. The bureaus are united geographically in eight large federal districts: Central, North-Western, North-Caucasian, Southern, Volga, Ural, Siberian and Far Eastern.



FIGURE 2. Federal regions of Russia (Source: Quora)

The Forensic Medical Examination Bureau of the Voronezh Region serves territory of 52.4 thousand km2 with a population 2.3 million and located in the Central Federal district of the Russian Federation.



FIGURE 3. Voronezh region (Source: USRBC)

The Voronezh region incorporates 15 large towns and 32 districts with capital in Voronezh city (population 1 million). The Bureau is a non-profit organization that operates and finances by the Department of Health of Voronezh Region. Currently, the Bureau oversees eight small medical examines offices located in the towns of the region. The everyday work of the medical examiners, their training and the overall organization of a forensic service is different from a typical medical-examiner office in the United States.


FIGURE 4. Administrative building of The Forensic Medical Examination Bureau of the Voronezh region



FIGURE 5. Central morgue and garage of The Forensic Medical Examination Bureau of the Voronezh region

The Forensic Medical Examination Bureau of the Voronezh region has the following Departments:
Department of Forensic Medicine of Deceased: medical examiners working in this department are responsible for medico-legal scene investigations, postmortem examinations of corpses, death certifications and court testimonies. Thirty medical examiners work in this department (the main office and the small regional offices) performing approximately seven thousands full autopsies a year.
Department of Forensic Medical Examination of Victims, Accused and Others: medical examiners working in this department are responsible for medico-legal examinations of survived victims of crime, classification and certification of injuries, collection of the sexual assault kits and other procedures required for documentation of injuries for the medico-legal or health insurances purpose.
Department of Forensic Histology: medical examiners in Russia are not routinely trained to performed microscopic examinations of postmortem tissue. Scientists trained in clinical pathology, histology and biology perform histopathologic examination of tissues submitted during autopsies and issue a separate report.
Department of forensic examination of material evidence: Scientists in this department responsible for evidence storage and collection of DNA and other trace evidences.
Department of Forensic Chemistry: Performs chemical, basic toxicological and biochemical analyses of the postmortem fluids and tissues. It also functions as a central police laboratory.
Department of “comprehensive examinations”. Medical examiners of this department perform evaluation of the hospital medical records and autopsy reports in cases of suspected therapeutic or surgical complications, accidental deaths in hospitals, or suspected cases of medical neglect.
Department of Education: This department functions as a liaison between the regional and the federal governments, medical universities and the Bureau.

Chief of the Bureau is a physician trained in forensic medicine and appointed by the regional Department of Health. The chief appoints the first deputy and the heads of the departments. The Bureau employs sixty-seven medical examiners and scientists in chemistry and biology.

Graduate medical education in the State Medical Universities in Russia takes 6 year. Rotations in departments of Forensic medicine are required for all the medical students. In general, medical examiners in Russia do not receive postgraduate training in Anatomical or Clinical Pathology. Training in subspecialty consists of a 2-year program in forensic medicine at the regional Forensic Medical Examination Bureau.

Current challenges of the medicolegal investigation system in Russia include adequate state financing and a countrywide shortage of well-trained medical examiners.

Singapore

International Feature – Death Investigation System in Singapore



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Historical Origins

Singapore acquired its name by an Indonesian prince called Sang Nila Utam who landed on its shores in the 14th century. He named it Singa (meaning lion in Malay and Tamil) with the epitaph 'oor' – 'Singa – oor' or Lion City in Tamil (it is believed he mistook a Malayan tiger for a lion, but the tigers are now extinct in Singapore). Documentary evidence of Singapore's existence dates back to 3rd century AD. In the 13th century it was ruled by Iskandar Shah, who founded the Sultanate of Malacca, in south Malaysia, till the Javanese king Majapahit drove them out and incorporated Malacca in the large South East Asian Majapahit empire. Singapore was known as a fishing village called Temasek (from Tumasik – meaning Sea Town or Sea Port, or possibly 'Tasik' – Malay for lakes) – the large island, also called Pulau Ujong or 'main island' amongst a cluster of smaller Islands, in all totalling 63 islands. It was an ancient trading post – based on old Chinese coins discovered there. Singapore was under the Sultanate of Malacca till the Portuguese drove Iskandar Shah out of Malacca to the south to set up the Sultanate of Johor at the southern tip of Malaya, from where he also ruled Singapore. According to Alfonso de Albuquerque, Singapore was already a 'great ruins' by the 16th century, and of no interest to them. Sir Thomas Stamford Raffles on his exploratory expedition for East India Company, seeing the strategic importance of this swamp and lakes – island, set up a trading town in 1819, after paying a sum of money to Sultan of Johor, for southern Singapore. It became an important trading town for the Malay Archipelago. A treaty was signed in 1824 between the new

Resident, Dr John Crawfurd and the Sultan and Temenggong, when Singapore was ceded to the East India Company[1] – initially subordinate to Fort William in Calcutta, India. Later Singapore and Malacca was annexed to Penang to become one of the British Straits Settlements in 1826. John Crawfurd established the Court of Requests and a Resident's Court in place of the Magistrate's Courts. In 1826, leading merchants and government officials of Singapore were appointed Justices of the Peace. The Court of Judicature of Prince of Wales' Island, Singapore and Malacca was established to administer civil and criminal justice.[2] Law making powers were vested with the Supreme Government in India and the British Parliament. Robert Fullerton became the first Governor of the Straits Settlements.

The Recorder's Court was established in 1827. The Recorder was based in Penang and travelled on circuit to Malacca and Singapore and was assisted by Resident Councillors and the Governor. Sir John Claridge became the first Recorder of the Court of Judicature. He was recalled in 1829, and the Resident Councillor in each Settlement conducted the business of the Court till 20 June 1830, when the Straits Settlements came directly under the control of the Bengal Presidency, in India. The offices of Governor and Resident Councillor ceased to exist and the former Governor Fullerton was named Commissioner. This re-organisation brought legal chaos until 1832 when the titles of Governor and Resident Councillor were restored.

Singapore became part of the penal settlements for Indian civilian and military prisoners, earning them the title of the "Botany Bays" of India, with minor uprisings by convicts in Penang and Singapore in 1852 and 1853.

The Governor General in Council was the only source of legislative power in Singapore to legislate for the Straits Settlements and till 1867. Laws and regulations were promulgated either by the Governor General in Council or the British Parliament.[3] This set-up neglected the needs and interests of Singapore and no attempts were made to promulgate local regulations. Increasing frustrations led to a movement to end Indian rule August 1866. The Government of the Straits Settlements Act was passed and on 1 April 1867, the Straits Settlements was separated from the Government of India and placed the Straits Settlements under the Colonial Office in London. The Straits Settlements were granted a normal colonial constitution by Letters Patent dated 4 February 1867.

Legislative authority was vested in the Legislative Council which had the power to establish laws, institutions and ordinances and to constitute Courts and Officer.

[1]Sir Roland Braddell, The Law of the Straits Settlements: A Commentary, 2nd ed. (Singapore: Kelly & Walsh, 1931).
[2]Letters Patent Establishing the Court of Judicature at Prince of Wales' Island, Singapore, and Malacca in the East Indies (London: Printed by J.L. Cox, 1827).
[3]G.W. Bartholomew, "The Singapore Legal System" in Riaz Hasan, ed, Singapore: Society in Transition (Singapore: Oxford University Press, 1976).

The council consisted of the Governor, Chief Justice, the Officer Commanding the Troops, the Lieutenant-General of Penang, the Colonial Secretary, the Attorney-General, the Colonial Engineer and four unofficial Europeans[4]. By 1871, other Members were added.

The Governor ceased to be a Judge of the Court of Judicature but Resident Councillors sat in it as Lieutenant-Governors. The Recorder of Singapore became the Chief Justice of the Straits Settlements. By 1868, the Court of Judicature was replaced by the Supreme Court of the Straits Settlements and Resident Councillors ceased to be Judges of the court.

The Ordinance V of 1873 gave the Supreme Court jurisdiction to sit as the Court of Appeal. The Court sat as a Full Court of Appeal of not less than three Judges. Appeals had previously only lain to the King-in-Council.

In 1877, an Executive Council was introduced which empowered the Governor to appoint Judges, Commissioners, Justices of the Peace and other Officers and Ministers[5]. Thereafter, the structure of government and the powers of the Governor to legislate remained largely unchanged until World War II. The last Constitution of the Straits Settlements was that of 1924.

Following the UK Judicature Acts 1873-1875, the 1878 Ordinance was passed to restructure the courts in Singapore. In 1907, the 1878 Ordinance was re-enacted with amendments. The jurisdiction of the Supreme Court was more organised and the Court would exercise general jurisdiction, original civil and criminal jurisdiction and civil and criminal appellate jurisdiction. It also provided for the Judicial Commissioners of the Federated Malay States to be supernumerary judges of the Supreme Court of the Straits Settlements, where they could perform the duties of the Supreme Court Judge[6]. District Courts with both civil and criminal jurisdiction and Police Courts replaced the Magistrates' Courts. In 1934, the Courts Ordinance created the Court of Criminal Appeal, an extension of the Supreme Court's jurisdiction.

In 1941, the Japanese captured Singapore from the British, naming it Syonan-to (pronounced as Sho-nan-to), meaning Light of the South, during their rule. All existing courts ceased to function when the Occupation began. A Military Court of Justice of the Nippon Army was established on 7 April 1942 and the civil courts, including the Criminal, District, Police and Coroner's Courts, were re-opened on 27 May 1942. All former British laws are applicable so long as they did not interfere with the Military Administration. The Syonan Supreme Court sat at the apex of this judicial administration[7].

After the Japanese surrender of Singapore to the British in 1945, having suffered under the Japanese occupation, Singapore felt British rule wasn't as strong as before and sought

[4]R.O. Winstedt, The Constitution of the Colony of the Straits Settlements and of the Federated and Unfederated Malay States (London: The Royal Institute of International Affairs, 1931)
[5]Letters Patent dated 17 November 1877.
[6]Myint Soe, General Principles of Singapore Law (Singapore: The Institute of Banking & Finance, 1978).
[7]Goh Kok Leong, Legal History of the Japanese Occupation in Singapore (1981) 1 Malayan Law Journal.

independence. Singapore was temporarily administered by the British Military Administration (BMA) after the Japanese surrender on 12 September 1945. The BMA declared that all laws and customs prior to the Occupation will be respected. By the Straits Settlements Repeal Act 1946, the Straits Settlements were disbanded.

Singapore became a separate Crown Colony vested with its own constitution by the Singapore Order-in-Council 1946.[8] It was essentially a colonial one and was criticised as failing to allow local people to play an effective role in public affairs. A new Constitution came into effect on 1 March 1948 which allowed for local elections to be held for the first time on 20 March 1948. A Constitutional Commission headed by Sir George Rendel was set up in 1953 to introduce changes to the constitutional system. The Rendel Constitution, implemented by the Colony Order-in-Council of 1955, introduced automatic registration of voters and the Legislative Council became a mainly elected Assembly.[9] On 1 August 1958, the British Parliament passed the State of Singapore Act which made Singapore a self-governing state.[10] By the Singapore Constitution Order-in-Council 1958, the post of Governor was replaced by the Yang di-Pertuan Negara (meaning 'He who is head') as the constitutional head of state. The Yang-di-Pertuan Negara would appoint the Prime Minister as well as the ministers and Chief Justice on the advice of the Prime Minister. The new office of the British High Commissioner would act on Royal Instructions and chaired the new Internal Security Council. External affairs of the State of Singapore were under the British Government.

Under the Malaysia agreement concluded on 9 July 1963, the Colonies of North Borneo and Sarawak and the State of Singapore federated with the existing states of the Federation of Malaya to form the Federation of Malaysia. A new State Constitution was granted to Singapore to effect this change in status.[11] The judicial branch of the government was treated as a federal matter and did not exist as part of the state Constitution.

Lack of consideration by Malaya for free trade of goods from Singapore with Malaya, etc., led to Singapore breaking off independently in 9th August 1965.

Legal statutes and death inquiries in Singapore

Since 1965 Singapore has had its independent constitution. Singapore is a parliamentary republic with a Westminster system of unicameral parliamentary government, representing constituencies. Its constitution establishes representative democracy as its political system. Executive power rests with the Cabinet of Singapore, led by the Prime Minister and the

[8] http://www.singaporelegalhistory.org/index.php?title=Legal_and_Constitutional_History_of_Singapore#cite_note-14

[9] Statutory Instruments 1955 No. 187.

[10] Report of the Singapore Constitutional Conference held in London in March and April 1957 (Seasonal Paper, No. Misc 2 of 1957).

[11] The Sabah, Sarawak and Singapore (State Constitutions) Order in Council 1963 (Statutory Instruments 1963 No 1493), as published in the State of Singapore Government Gazette Sp No S 1 of 1963

President. The president is head of state and is elected through popular vote and has some veto powers for a few key decisions but otherwise occupies a ceremonial post.

Singapore practices the common law legal system, where the decisions of higher courts constitute a binding precedent upon courts of equal or lower status within their jurisdiction, as opposed to the civil law legal system in continental Europe. Some of the laws reflect the influence of its former colonial association with England and English and Colonial laws applicable to and prevalent in Singapore before 1867, as well as Indian Laws and Imperial Laws, and Strait Settlement Acts and laws after this period. In addition, certain Indian Laws such as the Penal Code and Evidence Act, of Indian origin, were adopted when Singapore was a crown colony. Criminal law, company law and family law are completely statutory in nature.

The legal system of Singapore is based on English common law, albeit with substantial local differences. The decisions of higher courts constitute binding precedent upon courts of equal or lower status within their jurisdiction, as opposed to the civil law legal system in continental Europe. Major areas of law – particularly administrative law, contract law, equity and trust law, property law and tort law – are largely judge-made, though certain aspects have been modified by statutes.

However, the criminal law of Singapore is largely statutory in nature. Trial by jury was entirely abolished in 1969 leaving judicial assessment performed wholly by judgeship, with multiple layers of appeal, and the Criminal Procedure Code[12] was amended in 1992 to allow for trials of capital offences to be heard before a single judge. Some of the laws are old colonial Indian laws, with a few local modifications, viz. Indian Penal Code, Indian Evidence Act, to name a few. Singapore has penalties that include judicial corporal punishment in the form of caning for rape, rioting, vandalism and some immigration offences. Previously the final court of appeal was the Privy Council in London, but in 1994, after a permanent Court of Appeal was established in Singapore, the process of appeals in death penalty cases to the Privy Council was done away with by the Constitution of the Republic of Singapore (Amendment) Act 1994 (No. 5 of 1993), repealing article 100 of the Constitution, with reference to the Privy Council of appeals from the Supreme Court (of Singapore). There is a mandatory death penalty for murder, and for certain drug-trafficking and firearms offences (US Department of State, 2013), though, with increasing public and legislative discussions on the need to be humane, certain situations among these cases have of



Institute of Science & Forensic Medicine –in National Blood Centre main building, with the mortuary housed in separate building around the corner on the Singapore General Hospital premises



[12] https://sso.agc.gov.sg/Act/CPC2010

late been attracting life imprisonment instead of the death penalty. The Court of Appeal is Singapore's final court of appeal after the right of appeal to the Judicial Committee of the Privy Council in London was abolished in April 1994. The President of Singapore has the power to grant pardons on the advice of the cabinet (Attorney-General of Singapore, 2013).


Old mortuary Reception & waiting area for NOK


Inside the old mortuary offices


Old autopsy suite in the old mortuary


Pre-flouroscope & CT – radiological facilities in the mortuary

In the late 18th and early 19th centuries, all toxicological and other forensic analyses were conducted by the Analyst, Government of Singapore. The Analyst was also responsible for all kinds of medical and other scientific investigations, including microbiological and parasitological investigations, and thus was an integral part of the health care system and was integral to the early Singapore Medical School for teaching and training in these subjects.

Inquiries into deaths were reportable to the Coroner (read State Coroner) under the tenets of the Criminal Procedure Code. After the enactment of the Coroner's Act 2010,[13] those relevant sections were deleted from the Criminal Procedure Code, with the Coroner's Act governing procedures and penalties related to reportable coroner's cases and inquiries into those deaths.

The Coroner's act (and the earlier Criminal Procedure Code) in essence dictated that, unless ruled otherwise by the Coroner, all sudden, unexpected, unnatural or suspicious deaths, homicides, suicides (unnatural) or where therapeutic deaths where medical therapy or procedures could have contributed to or hastened death, custodial deaths – where legally assigned to care or destitute, or judicial incarcerations, uncertified deaths, and any of these on vessels bearing Singapore registration, are subject to a coroner's inquiry, and if he/she so feels, a full autopsy (there are no partial autopsies conducted in Singapore). In addition, the State Coroner can conduct an inquiry in any other case he/she deems requiring his/her attention. Forensic autopsies were initially conducted firstly – up to the 2nd world war, by surgeons, some on their own treated cases. Subsequently, anatomical pathologists were rostered to do these cases turn by turn, with no mandated forensic pathologists' role in these investigations. In the early 60's, a forensic sub-unit began under the Singapore General Hospital's Department of Pathology, headed by Prof. ST Chao. Subsequently the department bifurcated from the ministry and General Hospital, along with the

[13] https://sso.agc.gov.sg/Act/CA2010

forensic scientists, to become the Institute of Science and Forensic Medicine, Singapore, with its own separate structure. In 2001, shortly after Ministry of Health formed two health clusters of the hospitals in Singapore – the General Hospital and the University group (currently there are 7 health clusters in Singapore), disenfranchising them from direct administration of the Ministry of Health, the Health Sciences Authority (HSA) Act was passed, under which this statutory body, consisting of pathologists, analytical scientists, regulatory scientists and examiners and blood banking and tissue matching services was clubbed together under its banner. The mortuary premises were leased from Singapore General Hospital to the earlier Centre for Forensic Medicine (CFM), and now the Forensic Medicine Division (FMD) of HSA. Dr Paul Chui has been the head and divisional director of CFM, HSA - since re-named FMD, HSA, since its inception in 2001 till date. He had also served for a short period, as the Group Director of the Applied Sciences Group, under which FMD and all the labs came. Paul Chui has spear-headed ensuring active participation in and accreditation by NAME, as well as many of the innovative initiatives that other centres in the region have started recognizing FMD-HSA for, such as use of LODOX, PMCT, RFID tagging of bodies and laboratory specimens directed to outside labs, development of a tailor-made mortuary operations management system (named FIONA-vs 2 now), networking with the armed forces and police in various civil and military defence initiatives, etc.

Who does medico-legal autopsies in Singapore

The only licenced forensic pathologists for Singapore are the forensic pathologists of FMD, HSA, who are gazetted by name by the Chief Executive (CE) of HSA in the govt. gazette. They need to firstly be registered with Ministry of Health's specialist register for Pathology (i.e. they should have a registrable specialist degree and preferably also a registrable undergraduate degree). They may supervise work by other medical officers – trainees attached to them from Anatomical Pathology or their own FP trainees/fellows, or medical officers doing attachment postings to try out this discipline.


SCIENCE

Super-safe mobile lab

Killer disease? No germs can escape biohazard unit

Newspaper coverage of FMD-HSA's BSL4 containerised portable autopsy suite.

FMD, HSA is currently an accredited centre under NAME bearing full accreditation. The main autopsy theatre is a BSL2 facility and after SARS in 2003, it has also a double vacuum sealed BSL3 autopsy suite in-house for the more infectious high – risk cases. Besides it has an external dual-containerised portable BSL4 facility in two interlinked 40-foot containers, at the back of its main building, equipped to handle BSL4 organism autopsies, with a world patent for its design. The latter had been recently pressed into use in cases of in-flight deaths from travellers from the Middle East as suspected MERS death cases (till date all those cases autopsied have so far been negative for MERS). In the new HSA building being planned, an updated newer version of this dual containerised BSL4 unit will be built, and

housed within its parking premises indoor, which is cheaper than a brick-and-mortar BSL4 facility with its maintenance costs. The BSL4 morgue is periodically started up with mock practise cases by taking one of the day's ordinary cases and treating it to the full BSL4 protocol within that autopsy suit, for turn-by-turn practise of those FP's willing to undertake BSL4 autopsies within it in case of 'live' BSL4 scenarios.

FMD, HSA has seats for two FP trainees or fellows at a time, who by tradition, qualify as FP's under the Royal Colleges of either UK or Australasia. The fellows/trainees, after acquiring their basic undergraduate degree (usually MBBS, if from local universities) do at least one clinical posting in medicine/surgery/ A&E, etc. and an attachment with FMD for at least 6 months (for both parties to assess each other), before applying for traineeship. They spend a couple of years in HSA, and then full time attachment in hospital anatomical path departments, then proceed to clear their part I exams of these colleges, do a short attachment overseas and give the part II exams there to qualify, and also get diverse experience which may be different from those they would deal with daily in Singapore, to widen their experience. On their return they are inducted as consultants, going on to senior consultants, etc. The minimum period of fellowship is about 5½ to 6 years; often it is 7 years or more. While many US specialty boards are also recognized, the requirement of first a few years of basic residency training and qualifying as foreign medical graduates, before the anatomical path followed by forensic path training and qualification, leads to too many years they would have to set aside for qualifying, which is currently a setback to training for their FP qualifications in the US.



Mock demonstration autopsy within BSL4 containerised morgue on a duck, demonstrating management within the restrictive environment in the positive pressure suit.



Front porch of mortuary building – CFM, HSA in 2006.

Death investigation – the format

All the reportable categories of deaths listed at the back of the Coroner's Act 2010[14] (as per the list or 2nd schedule) mandate that these deaths (ibid) be reported to the coroner through the nearest police station. Thus, GP's report to the local police when called upon to certify a death that they feel they can't, and which is a

[14] https://sso.agc.gov.sg/Act/HSAA2001

reportable death as per the 2nd schedule of the Coroner's Act. The police, on behalf of the State Coroner, who is a senior district judge with vast experience in criminal trials, take possession of the case and the corpus delicti (the body in question) and arrange for its transportation to the mortuary of FMD, HSA, for the coroner's preliminary inquiry, and need be – autopsy.



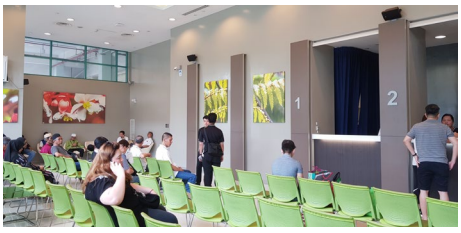
Mortuary counter in the morning dealing with NOK, Police & undertakers at the mortuary in CFM, HSA before 2010

Current estimates of Singapore's population stand at 5.813 million, of which nearly 70% are residents – both citizens (61%) and permanent residents (9%), with about 28% non-residents. The ethnic background of Singapore is 76.2% Chinese, 15% Malay and 7.4% Indians, the latter predominantly from Tamil ethnic background – formerly brought in to Malaya in the colonial days as plantation labour. Current categorization of Singaporeans runs as Chinese-Malay-Indian-others. Its population density ranks 3rd highest after Macau SAR and Monaco and is entirely urban population. Like many developed nations, it has a severe ageing population issue, especially with fertility rates the lowest in the world (0.83 according to CIA Fact Book), and in the past, managed with maintaining its population strength through immigration from other nations. Recent trends, in keeping with global trends of resentment against influx of other nationals, has affected this.



View of front of mortuary within and beside the porch of FMD, HSA currently

The total deaths recorded in Singapore for 2017 stood at 20,905. Of these, little more than 1/4th are reported to the coroner as coroner's cases. In the past, of these, about 50% ended up having autopsies conducted on them. With the advent of regular PMCT scans of all coroner's cases, the rate in recent years has dropped to about 1/3rd of all reported cases approximately, with the number of cases reported as coroner's cases slowly increasing close to 5,000 per annum. Of these, a larger majority are turning out to be unattended deaths among the elderly, even in the 90's and a couple 100 years old, with either no recent medical attention or reported by neighbors to the police because of foul smell from their apartments after having died and decomposed there, which also reflects to some degree the lonely existence of the very aged, often living alone, often abandoned by their kith and kin, some assisted by the govt. as destitute, for housing and living allowance/ expenses.



Current view of waiting area for the next-of-kin for dealing with police and FMD staff

Early every morning, all the deaths reported in the last 24 hours and which are registered with the Coroner, whose bodies are lodged in the morgue at HSA, are registered as coroner's cases for the day, RFID tagged, their property logged, photographed, CT-scanned, and their records, medications, case notes including national electronic health records and notes from GP's examined, along with a PMCT review, before discussion with the State Coroner, through a video link to the Coroner's Court's judge's chambers.

The consultant on-duty makes his recommendation, whether he could assign a natural cause of death, or if unnatural, unknown (with no evidence to suggest a natural cause even on PMCT), or where there are grounds to suggest therapy may have contributed – adverse reactions, surgical or medical procedural mishaps, etc., that the cause of death is not detectable or not entirely from natural causes; that an The State Coroner usually concurs. This happens by about 9:30 – 10 am. Immediately after this, all the bodies for autopsy are taken into the autopsy suite, while the consultant decides who is autopsy is preferred, who is going to do the autopsy, whether a fellow or he/she himself/herself, and those not to be autopsied have their external exams done also. They have till that day's noon/ afternoon to finish the autopsy and assign a cause of death and release all the cases (with the exception of homicides), unless the cause of death is to be kept pending for further tests/ investigations.



Body viewing across glass barrier, with next-of-kin, & now only investigating officer viewing the decedents across the glass, in view of the State Coroner

In homicide cases or suspicious deaths, usually being investigated by the Criminal Investigation Department (often the serious crime unit) of Singapore Police Force, the consultant FP on crime call, on standby 24/7 for a week, is requested to attend the scene of crime, to advice the police



Current body holding area with autoclave room, anthropology lab, body storage fridge, weighing bridge, and main autopsy suite in the distance.

on the direction the investigation should pursue in that case, assess the nature of the case and often, what weapon to search for.

Subsequently, on clearance from the Consultant FP and the coroner, the body is removed to mortuary HSA. The case, unless dire circumstances require immediate attention, is autopsied the next day, and this is one circumstance where the body will only be released to the family after the FP is satisfied that he/she has done all he/she can in this case, which may extend to re-examination in subsequent days.

Another circumstance is where the person is unknown or skeletal remains, that the body or skeletal remains are retained till identity can be confirmed. In the latter circumstance, NAME protocol for retention of DNA, etc. is followed. In all other cases (routine, etc.) all bodies – registered in the morning, are leaving the mortuary for burial or cremation the same noon or afternoon (this is Asia- they want the body yesterday!).

The State Coroner conducts open inquiries in his/her court, once all the preliminary investigations by the police officer (investigating officer) are complete, except where, at the request of family members in a case of suicide, they may request for a closed hearing, keeping the press and public out, and if the coroner concurs, unless issues of national importance dictate that an open hearing is appropriate in that case, for him/her to make recommendations.

The 3rd Schedule of the Act lists out those cases and circumstances where it is mandatory for an inquiry to be conducted.

Morning's triage of cases and externals – only, prior to proceeding with full autopsies within the sliding glass – BSL2 autopsy suite.

One half – side of main autopsy theatre with 5 dissection stations, and radiology room to the extreme left

RFID tag and body ID tag by police attached to cadaver's toe



Morning's triage of cases and externals – only, prior to proceeding with full autopsies within the sliding glass – BSL2 autopsy suite.

Where criminal charge is made out against person/s for causing or contributing to the death, the coroner defers his inquiry and verdict, till the criminal case or hearing is over, and where a charge was successfully made and prosecuted, adducts the findings into his verdict.

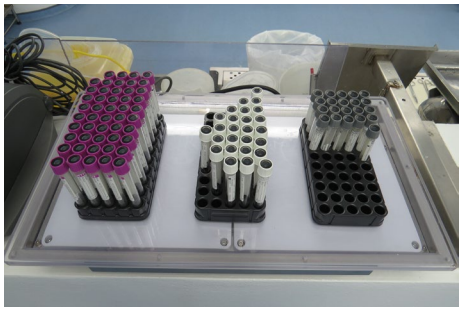


One half – side of main autopsy theatre with 5 dissection stations, and radiology room to the extreme left

With the advent of the Coroner's Act in 2010,[15] the coroner does not have any longer an inquisitorial role, where he/she finds parties responsible for the death and may name them. The inquiry is purely fact finding about who died, how, when and where without determining responsibility. His findings and verdict cannot be used in another court of law; for either a civil or criminal case. Fresh evidence has to be adduced in those courts for those trials. He/she submits his/her findings to the Public Prosecutor (DA), who can redirect a fresh inquiry, even an autopsy (which could technically even



RFID tag and body ID tag by police attached to cadaver's toe



Mortuary RFID tag labels – mass reader for en-mass specimen registration for dispatch to labs

[15] https://sso.agc.gov.sg/Act/HSAA2001

be a re-autopsy), if not satisfied with the inquiry or its outcome.

However, in the Coroner's court, the deputy public prosecutor (ADA) assists the court in leading the inquiry. There are some differences from a coroner's inquiry and those of a criminal trial, in that it is more informal in its manner of introducing or presenting evidence, with the relatives allowed, with the coroner's permission, to ask questions to clear their doubts. The coroner does not any longer determine the manner of death, leaving that in criminal cases to the trial courts.

History of Investigations into deaths in Singapore:



Health Sciences Authority building since 2001.

The Indian Act 1773 established the Supreme Court of Calcutta and its authority was extended in jurisdiction in 1800 to Penang and later, Singapore and Malacca. At that time, the law applicable was law of England, and the sections of Indian Act applicable to the colony. The 1793 Indian Act empowered the Governor General in Council at the British Settlements India to appoint British subjects as coroners, having the powers, authorities, duties and jurisdiction of coroners in England.

Till December 1923, there were no regular Police Force or proper courts in Singapore.



Entrance to Forensic Medicine Division office.

The Resident and Commandant maintained law and order with his troops and the cooperation of the Headmen of various native communities, with martial law in the cantonment. Raffles on his return in 1923, seeing the development of Singapore, passed Regulations on land registration, the port, gaming, slave trade police and administration of justice, and set up the Resident's Court and Magistrate's Court with rules, and the Assistant Resident as Registrar of Resident's Court. Dr John Crawfurd as resident in 1923 instructed the Assistant Registrar, who acted as Coroner to have a jury of 6 British born subjects and 6 'Asiatics' – residents of Singapore, as jury of 12 in the Coroner's court. The earliest record of such a coroner's inquiry findings relates to two deaths aboard a ship by suffocation and burns respectively, were the cause of death is described by a medical witness. Subsequently it was established that the Coroner need not be British subjects. The first important case recorded is that of an escapee Chinese prisoner, where a 'police peon' (constable) was charged for his death in trying to 'apprehend him' and acquitted. Subsequently, Indian Act 1848 came to regulate the Coroner's duties, and finally a

Coroner's Inquest Ordinance enacted in 1868 which authorized inquests even on Sundays. In 1884 the Coroner's Ordinance 1884 authorized inquests without juries.


Within the department office.

The State Coroner is a full time gazetted senior district judge – appointed as State Coroner, usually for about 3 to 4 years, on rotation, with prior experience in Criminal cases. He/ she undertakes coroner's inquiries, as well as, where deemed appropriate, scene of suspicious deaths – visits, and also other judicial duties from time to time, like committal hearings, bail, etc. Earlier, the State Coroner would physically be present every morning to confirm the identity of the decedents in the presence of the police investigating officer (IO) and the next–of–kin (NOK) present in the mortuary, HSA.

Enactment of the Criminal Procedure Code 1900 in 1902 devoted a whole chapter in it to Coroner's Inquiries. Subsequently, with the repealing of the Coroner's Ordinance 1884 by Laws of Colony of Singapore 1955, appointment of Coroners was done under various Court acts, finally consolidated in the Subordinate Courts Act.

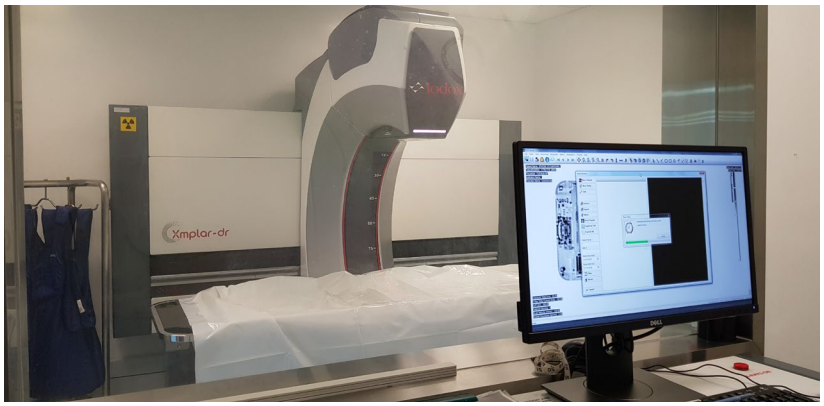
Enactment of the Coroner's Act 2010 coming into force in 2011 saw the sections of Inquiries into Deaths deleted from the Criminal Procedure Code and codified in the Coroner's Act.

A few years back, this function is now conducted via video link with the judge/ coroner in his/her chambers, with the mortuary, where they go through the process with the IO, and recently, without requiring the NOK (read family) to be present in the mortuary in the morning.

After this, the FP's review each case in sequence with the coroner, proposing whether an autopsy is not required, based on the case notes, medications recovered from the house, electronic medical records, circumstances, and radiological evidence such as PMCT, etc. to assign a 'natural' cause of death, or where therapeutic misadventure in suspected or alleged, whether an autopsy is warranted. Of course, sudden or unexpected deaths without a natural cause, and all unnatural deaths including suicides are listed for a full autopsy.

Duties of FP's in FMD, HSA

Forensic Pathologists at HSA usually conduct all their autopsies in the morning. They have been doing afternoon autopsies after the morning case load is cleared, in highly infectious cases such as SARS in 2003, wearing PAPR's, to minimize exposure of staff, by limiting staff present in the autopsy suite, even though done in a vacuum sealed room, after finishing off of routine cases. After the BSL4 dual containerised portable autopsy suite was built a decade ago (HSA has the world patent for it), FMD has also done a couple of so-called suspected MERS cases – deaths inflight or in transit from Saudi Arabia or even UAE recently, suspected to be MERS, in the BSL4 autopsy suite.



Radiological facilities available and currently used daily at the mortuary – FMD, HSA.



Often, FMD, HSA also demonstrates the morning autopsies to medical school students who do weekly attachments with them, as well as occasionally to CID and regular police force officers, Judicial college officers, Academy of Law, etc.



Dr David Fowler going through some of the SOP's as part of the NAME inspection visit in 2010

The afternoons are spent typing reports, going through histopathology slides of pending Cause-of-Death cases, conducting fellow's trainee workshops and lectures/ tutorials and CME's, undergraduate tutorials for medical school student batches on attachment to FMD, etc. FMD consultants also undertake undergraduate lectures and demonstrations and tutorials of medical students from two medical schools – the centennial Yong Loo Lin School of Medicine, NUS, and the Lee Kong Chian School of Medicine – NTU. It also entertains students from these medical


Staff of FMD involved in the NAME inspection by Dr David Fowler in 2010

schools on a week's compulsory attachment/ rotation with the department, and other medical schools overseas (UK, Australia, New Zealand, etc.) who do a few weeks' attachment or internships in their final year of medicine to pick up some exposure to Forensic Pathology. Autopsies and sometimes private consults on clinical cases, clarifications from tribunals such as Ministry of Manpower (work compensation after death during work, etc.), insurance and law firms generate a lot of correspondence and occasionally court appearances, besides clarifications from the coroner and investigating police officers, and these are also addressed in the afternoons. The division also schedules court attendance, etc. to the afternoons, unless some court urgently requires whole day's attendance for a serious crime case. FP are not routinely required to 'prove' their documents including the autopsy reports by giving evidence on them in court, as, as per the previous Criminal Procedure Code and now the Coroner's Act, their reports are 'admissible evidence'. Some of the FP's are part of various committees on post-graduate training, university councils, etc., and they try to squeeze all these into their afternoon time-slots.

The division has its own histology lab, but sends out slides for special (read IHC) stains, microbiological tests and cultures, biochemistry, genetic tests, etc. It works on a fee-for-service model, by charging the police (who pays on behalf of the coroner) for cases – both externals and complete autopsies and pays for these ancillary tests from these charges accrued.

Nature of cases

Nearly half of the cases deal with natural causes of death, either because they were not demonstrable, or that an autopsy needed to be done to rule out some therapeutic complication, or deaths of custodial nature – whether as incarceration in prisons, etc., or in nursing homes for court directed home care, especially if the latter were legally declared destitute. Of the traumatic deaths, the majority of deaths are from falls from height – mostly all suicidal, with a few arising from construction accidents. The next group are traffic accidents, though their numbers have fallen drastically. Death by hanging and other means such as burning charcoal (CO poisoning) or consumption of poisons or therapeutic substances are much lesser in number, with deaths from overdose very scant in number. Assaults and homicides come next, with very few firearm deaths – those occurring mainly among police and armed officers, who kill themselves.

The majority of the assaults are either blunt force or sharp cutting weapons, with asphyxial deaths and deaths during violent sexual assault very few and far between. All cases if fitting into the category of those requiring autopsies, undergo full autopsies including histology and toxicology; there is no concept of certification of death based on toxicology results without an autopsy in Singapore.



Forensic Anthropology week long workshop for department members and guests in HSA, conducted by Dr Steve A Symes, visiting Forensic Anthropology consultant from Mercyhurst, Erie, PA

There has been very few and far between requests for a re-autopsy of a body, autopsied or certified overseas, which has been ordered or requested on arrival to Singapore's shores. Majority of these cases are private requests, as the families are not satisfied with the certification overseas and are worried not only of foul-play or uncertain circumstances, but also of successful insurance claims.

Of the natural but unattended deaths, of late, a majority of these are elderly, either not following up with their medical attendants (assistance for hospital visits or costs could be an issue), or not reporting ill health till found dead. Quite a few of them can be assigned natural causes of death with external exams only, based on distinct PMCT findings and past medical records combined, but some do get autopsied, especially where there is a history of fall and suspicion of head injury, followed by death – technically suspected to be an 'unnatural death', or those who choke on food while being fed and die from this, immediately or with complications ensuing.



Department photograph in 2013 – senior staff of FMD, HSA in front row, starting from 3rd from left – Gilber Lau, George Paul, Cuthber Teo, Paul Chui, Marian Wang and Dr Wee Keng Poh (since retired).

Deaths of infants and toddlers suspected to be NAI are few and far between and trigger immediate direct handling by CID, SPF as a suspicious death. Somehow these latter cases seem to reflect, more often than not, a particular community, with the decedent having many siblings, as well as poor socio-economic status. There are occasional homicide-suicide deaths within families which seem to crop up once in a while.



Mock drill exercises between FMD and fire-&-rescue services of Singapore Defence Force (SCDF) in hazmat suits, after dis-assembly, mobilization and re-assembly of BSL4 containerized autopsy suite, of the 'man – down" scenario within the autopsy suite, while handling a supposedly suspect highly infectious disease case.

HSA does a very small number – little more than a handful, of private autopsy requests, for deaths outside Singapore's territorial waters, usually on ships (which are not Singapore registered vessels), where certification is required before the bodies can be dispatched by commercial carriers to their home countries from a port, in this case - Singapore.



Delayed 3rd day autopsy using PAPR's & Gieger counter checks after half-life of Y90 (61.1 hrs) using persiplex thick glass protection in sudden death following Yitrium 90 microspherules use in hepatic artery angio-embolization for HCC.

FMD, HSA has also been involved in some mass disasters in and around this region. Starting with the Quantas – BOAC Constellation plane crash in Kallang airport (1954), Spyros Greek Oil tanker fire (1978), cable car tragedy at Sentosa island in 1983, the Hotel New World collapse (1986) – all cases in Singapore, to active involvement overseas in autopsies for DVI in the Asian Tsunami in 2004, to Christchurch Earthquake in 2011, to the more recent Air Asia plane crash in the sea off the coast of Surabaya, Indonesia, 2015, its pathologists and forensic technicians have assisted in the DVI exercises, with their own DNA specialists in coordination with fingerprinting and scene-of-crime experts from the Singapore Police Force. It has also been involved in mock drills, both in Singapore and Kingdom of Brunei, in capability building for managing mass disasters, to check out whether the chalked-out program works.

Autopsies of suspected highly infectious or BSL4 organism cases do not come under the Coroner's Act, unless it is a sudden unexpected death. Often these are uncertain deaths despite treatment in hospital, where such causative organisms are suspected, or the full pathophysiology needs to be worked out. In these cases, the authorities invoke the Infectious Diseases Act 1976 (revised 2003)[16] to order a post-mortem examination to determine either the organism or the pathophysiology, and order the FP's to do autopsies as they believe the anatomical pathologists are 'out of touch' and liable to injure themselves and risk spreading the disease, and the FP's are deemed as 'safe and experienced hands' to do these autopsies. Besides, FMD has facilities in place such as the BSL4 dual-containerised autopsy suite and have been practising in it doing as 'live cases' – actual autopsies of medico-legal bodies, following the full highly infectious protocol for practise – purposes. In the last 16 years, the Infectious Disease act has been invoked in 2003 to conduct autopsies on SARS related deaths and recently in the last 2 years, suspected MERS deaths of inflight deaths returning from the Middle East a few times.

The FP's also occasionally give expert opinion on clinical referrals from courts of cases of assault, clinical age estimation, and even referrals from insurance firms of contested claims, the latter for opinions on soundness of opinions derived or expressed in the claims. The ministry of manpower regularly approaches the FP's in relation to contests of compensation for death-at-work by NOK which are being contested by the insurance, concerning cases autopsied by them.



DVI mortuary at Christchurch earthquake disaster in 2011 where FMD, HSA assisted.

Organ harvesting in Singapore:

Organ transplantation is governed by the Human Organ Transplantation Act or HOTA (last revised 2012)[17] and the Medical (Therapy, Education and Research) Act, or MTERA (last revised 2014).[18] HOTA is a compulsory organ transplant Act that, by default, automatically allows the medical authorities to remove any organ including the kidneys, heart, liver and corneas from a deceased Singaporean or permanent resident who has died in a hospital, for the purpose of transplanting the organ to the body of a living person – so long as the deceased's organs are suitable for transplant, and there are suitable recipients for the organs.

[16] https://sso.agc.gov.sg/Act/IDA1976
[17] https://sso.agc.gov.sg/Act/HOTA1987
[18] https://sso.agc.gov.sg/Act/MTERA1972

However, this Act does not apply to:

- Non-Singaporeans
- Anyone who is under the age of 21
- Mentally disordered (without prior permission from their parent or legal guardian).

There was an upper limit of 60 years which has now been removed. However, anyone can opt out of the Act, which prejudicially affects his/her chances when trying as a recipient, to get an organ transplant for themselves.

The Medical (Therapy, Education and Research) Act, or MTERA, is an opt-in scheme for organ donation. Unlike HOTA, MTERA is completely voluntary, and is open to all individuals living in Singapore, aged 18 and above, regardless of their nationality. Under MTERA, one may choose to give all or any part of your body to a hospital or educational institute for the purposes of research, medical or dental education; or to donate your organs to people who need a new replacement organ. After the harvesting for donation – if for transplant, or in the case of donation of a body for education or research – re: the whole body, the next-of-kin have the rights to the remains as they deem fit for burial or cremation, etc.

Additionally, the deceased were below the age of 18, or if he/she did not previously register an application to donate your body under MTERA, their family members or relatives may make the decision on their behalf to donate the body immediately before, or after death, so long as there was no indication that the person opposed the idea.

Since both HOTA and MTERA organ harvesting cases require sterility and clean & sterile chain of custody, all of these have so far been done in the hospital setting in sterile OT conditions. FMD, HSA has yet to receive a request for cadaveric harvesting of skin or bone, it deemed easier after death in hospital to harvest in a hospital setting. As such, there is no preparation for a sterile harvesting theatre within the mortuary.

Conclusion

The role of the forensic pathologist, dovetailing with a close working relationship with the State Coroner, who often seeks advice and defers to the forensic pathologist's summation, has led to a robust environment of Forensic Pathology practise in Singapore at FMD, HSA. Every effort has been made, in collaboration with sister departments such as Toxicology, DNA (Forensic Biology) and other allied departments- all ASCLD/LAB accredited laboratories, to deliver a good forensic service, to ensure timely detection and reporting of crime as well as determining accurately, for the medical fraternity, causes of death, and advice to the coroner of possible manner, assisting both in medical audit and health planning initiatives, as well as deriving accurate and comprehensive determination of cause and circumstances of death in the coroner's inquiries that follow. FMD, HSA has tried to keep abreast with appropriate technology and innovation, in the restrictive environment of cramped space, leased mortuary premises, etc. in delivering good service. It is hoped, with the new building projected to be built and occupied in about 5-6

years' time, that some of the deficiencies may be addressed in building planning, including on-site facilitation of mass disaster management.

South Africa

International Feature – Death Investigation System in South Africa



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July 2016

From NAME International Relations Newsletter, July 2016



The Dutch were the first Europeans to settle in substantial numbers in Southern Africa, following the landing of Jan van Riebeeck on the shores of Table Mountain in 1652. However, by the mid 1800's, the sprawling British empire had spread to include the Cape Colony and although Roman-Dutch law still

underpins many of the legal principles in of the South African legal system, the current death investigation process is largely a product of the British coronial system. Substantial changes have however been introduced in respect of inquests, not least of which is the fact that a magistrate presides over these inquisitorial proceedings (sometimes assisted by expert medical assessors) and that juries play no role.

South Africa has a population of approximately 50 million people, but it is important to appreciate that a very substantial (additional) component of transient and illegal immigrants are present in the country at any point in time. This component of the population – from a forensic medical and death investigation perspective - presents significant challenges, since such members of society often do not have or carry formal identification documents, are often not of fixed address, are more likely to be in conflict with the law and may in general, be at greater risk of non-natural death.

The nine provinces in South Africa all provide death investigation services in terms of clearly defined legislation, including primarily the provisions of the Inquests Act, the Registration of Births and Deaths Act, the National Health Act and the Health Professions Act. The Inquests Act of 1959 prescribes that all non-natural deaths must be reported to the police and that the police are obliged to investigate such deaths. For many decades, the police were the primary agency responsible for death investigation, with all medicolegal mortuaries residing under the jurisdiction of the South African Police (SAPS) - including full administrative control and management of mortuaries and with virtually all staff members (including dissection assistants) being comprised of police officers. Medical practitioners (who were appointed by the Department of Health) were however responsible for conducting the medico-legal autopsies and compiling autopsy reports.




Pretoria Medicolegal Mortuary and Laboratory




Pretoria Medicolegal Laboratory and “usual guests”

The alleged or possible involvement of police officers in the demise of persons involved in the political struggle for democracy in South Africa (such as the internationally notorious incident pertaining to Steve Biko) and the perceived or possible allegiance of some medical practitioners to the police authorities with whom they worked at mortuaries, was a catalyst in bringing about statutory and organisational changes whereby the jurisdiction of medico-legal mortuaries and the medico-legal investigation of death process, was largely transferred to the department of health. Today, all medicolegal mortuaries are funded from the health budget and are fully managed by administrators, forensic officers and pathologists/medical practitioners in the full time or part time employee of the (provincial) departments of health. It is nonetheless the expectation that every autopsy will be attended by the police detective responsible for investigating that case, although such attendance is unfortunately not uniform or always forthcoming (especially in relatively "low profile" cases, such as motor vehicle accidents, etc.).





Pretoria Medicolegal Laboratory: Annual tree planting ceremony
Right: Dr. Gert Saayman

In cases where a person may have died from other than natural causes or where the cause of death is not initially apparent, the police are first dispatched to the scene of death, from where they will activate the forensic pathology service, with forensic officers (in the employ of the department of health) then being responsible for collecting the bodies of deceased individuals from the scene. In the vast majority of cases, medicolegal autopsies are conducted within a day or two of admission of the body. In some cases where the cause of death is initially not apparent or probably due to natural causes, partial autopsies will be performed only to the extent required to establish the presence of underlying disease and which will adequately explain the cause of death. In a small minority of cases only a viewing will be performed and - based upon further input and information derived from the police and/or family members - forensic medical practitioners may issue certificates of natural cause of death, without conducting any dissection of the body. In 2007, the relatively bold step of legally defining the entity of non-natural death was taken, thus facilitating the categorisation of deaths by authorities and in particular, by medical and nursing personnel.

South Africa is geographically a relatively large country, with vast parts thereof being very sparsely populated. This complicates the roll-out of specialised services (such as medicolegal investigation of death), especially in rural areas. There are currently well over 50 specialist forensic pathologists registered with the Health Professions Council of South Africa, having undergone residency training (at an accredited medical school) in anatomical and forensic pathology for periods of four to five years, before taking their examinations. There is a very active postgraduate training program, with on average,

30 to 40 residents (in forensic pathology) being in training at mortuary facilities affiliated with medical schools across the country, thus producing five or six specialist forensic pathologists annually. Over the past few decades however, there has been a slow net growth in numbers of practicing forensic pathologists, as relatively large numbers of qualified specialists have left the country - probably due to political uncertainties in this country and because of substantially higher income potential in some other countries, whilst some are being lured into the private sector.


Pretoria Medicolegal Mortuary – Lodox


Bloemfontein Medicolegal Laboratory


Bloemfontein Medicolegal Laboratory


Bloemfontein Medicolegal Laboratory


Bloemfontein Medicolegal Laboratory

At most of the larger medico-legal mortuaries specialist forensic pathologists, trainee pathologists and medical practitioners who have successfully sat for the Diploma in Forensic pathology (offered by the Colleges of Medicine of South Africa) will conduct on average two to three autopsies on four days of any week (usually having one autopsy free day per week). Although there may be substantial variation between facilities in this regard, especially where tertiary academic activities may add to the service burden, most forensic medical practitioners here perform approximately 300-400 autopsies per year. It is worth noting that virtually all medical schools still have active undergraduate teaching programs in forensic medicine, with senior medical students attending medicolegal autopsies for periods of one to two weeks, usually in their fourth or fifth year of training. It is also important to note that there is virtually no restriction on pathologists in deciding the scope and nature of the autopsy procedure and on the required special investigations. Although infrastructure may be somewhat



lacking at smaller / rural facilities, every specialised service is essentially available across the country when needed. This includes photography support from the police, histology, toxicology, a full spectrum of forensic DNA analyses, ballistic examinations, microbiological/anthropological/entomological and other tests/services. Currently, at least four mortuaries in SA are equipped with Lodox digital radiology apparatus, whilst other larger facilities will have regular X-ray services or fluoroscopy apparatus (C-arms) available for radiological examinations. At some of the larger / academic centres, arrangements have been made for postmortem CT scanning where required. Overall, more than fifty thousand medico-legal autopsies are annually conducted in SA.





Dr. Gert Saayman, Forensic Pathologist Left: NAME President Dr. Dave Fowler, Baltimore, Maryland, US
Right: Dr. Gert Saayman, Pretoria, South Africa

At most mortuaries, there has been a very large increase in budget allocation over the past decade in respect of the rendering of forensic pathology services, and many new facilities have been built. In addition, substantial numbers of non-medical staff members have been appointed, better equipment levels have been achieved and significant progress has been made with development of guidelines, infrastructure and protocols for service delivery. Recently, the National Forensic Pathology Service Committee has been constituted, with members being appointed by the National Minister of Health. It is within the mandate of this committee to generally advise the Minister and health authorities on the rendering of medicolegal investigation of death services, on improvements and

alterations to relevant legislation and on matters relating to academic teaching and research in the field of forensic medicine/pathology. This committee is currently actively reviewing the legislative framework within which forensic pathology services are rendered, also with the aim of introducing accreditation guidelines, establishing universal operational protocols and introducing better service delivery directives (including implementation of service level agreements between different agencies such as health, police and justice). This is indeed a remarkable opportunity for forensic pathologists, in conjunction with police officials, state prosecutors and other role players, to define and refine the death investigation landscape within South Africa. Thus, we have achieved a remarkable improvement in organisation and in securing improved funding and resource allocation for this important social service in recent years. There are still many challenges that lie ahead, not least of which is the rather precarious state of our forensic toxicology services (primarily because of a large service backlog), but health authorities and law enforcement agencies have clearly indicated their commitment to resolving this problem.

Sri Lanka



Dr. Dilhani Amarasinghe

The Death Investigation System in Sri Lanka

From NAME International Relations Newsletter, April 2018

Located just off the tip of India (see map above), Sri Lanka is a beautiful tropical island surrounded by water. Sri Lanka is one of the best safari destinations outside of Africa and host a wide diversity of wildlife, geography, and unique ecosystems. The country covers an area 25,332 square miles (about the size of Ireland) and has a population of approximately 21.2 million. Sri Lankans are privileged by free healthcare delivery system impressive health indicators. The current death rate is 6.2/1000 people, infant mortality rate is 8.4 /1000 live births, and maternal mortality rate accounts for 30/100,000 live births.

Death Investigation in Ancient Sinhalese Kingdom

There are several historical accounts that are evident of the existence of a unique death investigating system in Sri Lanka before the Coroner system of England was introduced during the British era. In the ancient Sinhalese kingdom, among the organs which administered justice such as Gamsabhava, Ratasabhava and the courts of the Royal officials (vidanes, liyanaralas, mohottalas, korales, disaves and adigars) there had been a tribunal by the name of "Sakki Balanda"[Evidence based Inquiry], composed of the prominent men of the district, which inquired in to sudden deaths. It is stated that the duty of these officials of Sakki Balanda was to find out the cause of death and mode of death. No one had been allowed to touch a dead body until the process of Sakki Balanda was concluded. For example, the body of a person who had committed suicide by hanging was not supposed to be brought down until this process was completed. Although the functions of this tribunal has been compared to that of the coroner's court today, there is very little authority on the precise functions allocated to these courts. As Sri Lanka has inherited the present system from the British, it is interesting to note how the English Coroner system has emerged and evolved over the years. (from "A CRITICAL ANALYSIS OF THE PRESENT SYSTEM OF INVESTIGATION OF DEATH IN SRI LANKA" by Chandima Wijebandara) Sri Lanka continued with the British Colonial Death Investigation system, so called coroner system, even after the independence from the British Governance in 1976. This system had been evolved for centuries combined with the Roman-Dutch legal system in Sri Lanka to bring about the death investigation by the Magistrate and Inquirer Into Sudden Death, practicing at present. In Sri Lanka, clinical forensic medicine and forensic pathology have been combined and are taught and practiced as a single specialty under

forensic medicine. The practice of forensic medicine in Sri Lanka is unique in that judicial medical officers are vested with overall responsibility for medicolegal work, which is not restricted to homicides and suspicious deaths but also includes clinical examination of live patients with injuries, as well as victims of sexual and other forms of abuse. The forensic clinical aspect of the work absolves clinicians from becoming involved in medicolegal matters, particularly from court attendance.

Medicolegal work in Sri Lanka consists of (1) performance of medicolegal autopsies; (2) clinical examinations, which include injuries due to assaults or accidents, torture in custody, child abuse, sexual abuse and rape, and estimation of age in children; and (3) examination of intoxicated individuals, mainly drivers under the influence of alcohol.

The responsibility of forensic science investigations are mainly relied upon the Government Analyst's Department, with some involvement with hospital and private laboratories. The Code of Criminal Procedure Act, permits medicolegal work to be carried out by state medical practitioners who are registered with the Sri Lanka Medical Council and who are either government medical officers or members of the forensic medicine departments in the medical faculties of the universities recognized by the University Grants Commission. All forensic medicine service units except for the main unit in Colombo [Institute of Forensic Medicine and Toxicology] has been affiliated with State sector hospitals. In major hospital centers, the Board Certified Forensic Pathologists/ Clinical Forensic Physicians and their subordinating medical staff perform medicolegal examinations. In peripheral hospitals, medicolegal duties are carried out by Judicial Medical Officer (JMO) who are qualified with Diploma in Legal Medicine (DLM) or Medical Officers – Medico- Legal with special in-service training in forensic medicine. The forensic medicine departments of the national universities share portion of the medicolegal work [about 30%] in the major Teaching Hospital Centres.

Clinical Examination of Patients

Though not strictly stipulated, Sri Lankan legal system expects the hospital staff to inform the police about all patients who approach the hospital including private hospitals or individual medical practitioners for treatment of injuries sustained under suspicious circumstances such as accidents, assaults, domestic violence, battered children, sexual abuse, and rape. The police then inquires into the matter and issues a medicolegal examination form requesting a medicolegal report from the judicial medical officer. Sometimes, victims of such circumstances may initially approach the police and then referred for medicolegal examination to a designated forensic practitioner. There have been certain cases when the Court of Law may directly refer the victim of alleged abuse or assault to the forensic medicine unit for clinical examination, especially those individuals with mental subnormalities and drug abuse.

The final medicolegal reports contain a detailed description of the injuries, an opinion as to cause and the type of weapon, and a category of hurt based on the classification given in the penal code of Sri Lanka. This classification categorizes the severity of the injuries in to "nongrievous hurt," "grievous hurt," "endangering life," and "injuries that are fatal in the ordinary course of nature," It covers the range of injuries from an abrasion caused by a blunt weapon to a gunshot wound caused by a firearm, thereby endangering the life of the victim. According to the penal code, an injury caused by dangerous weapons or means carry a higher punishment. Examination of Intoxicated Individuals Although Sri Lankan laws allow breathalyzer testing on drivers suspected of driving under the influence of alcohol [with over 80mg%] and/or drugs, the police usually take these individuals to a medical doctor for clinical assessment. The main objectives of an additional clinical examination of such detainees are to obtain

collaborative clinical evidence with the blood alcohol levels and to eliminate other medical or traumatic conditions such as head injuries, that may mimic intoxication with ethanol. However, clinical examination is a subjective matter that often results in non-collaborative and contradicting findings. These examinations of intoxicated persons, as well as the examinations of victims and assailants of sexual abuse, are considered medicolegal emergencies and are carried out on a 24-hour basis. Blood alcohol levels are not routinely assessed on these individuals due to resource constrains. Toxicology access is very limited because the facility is available only with the Government Analyst.

Medicolegal Death Investigation

The present medicolegal death investigation system in Sri Lanka is a continuation of the British coroner system, which was in existence when the British left the island in 1948. In Sri Lanka, magistrates investigate suspicious deaths, homicides, deaths in custody, deaths in prisons and leprosy asylums, and deaths due to criminal negligence. All other sudden and unexpected deaths are investigated by coroners or "inquirers into sudden deaths" who are are appointed by the Ministry of Justice. These death investigators rely heavily on the evidence given by attending relatives and hospital records to provide a cause of death in natural and sudden, unexpected circumstances. In the absence of a cause of death provided by the attending doctor during the hospital stay, and in cases of accidents, suicides, and homicides, the death investigators have the legal authority to order medicolegal autopsies. The prevailing system does not have provisions for the clinician who attended the diseased to request a medicolegal post mortem but to request an inquest from the police which will be carried out by the Inquirer in to Sudden Deaths or a Magistrate if required (e.g. Death of a prisoner in hospital).

What is an inquest?

Certain deaths, in-hospital and out-of-hospital, are reported to an Inquirer who may decide to hold an inquest. The inquest is a fact-finding inquiry about a death. It is not held to accuse anyone responsible for a death. There is no prosecution or defense. The main objectives of an inquest are to establish the identity of the deceased person and establish the cause, manner and circumstances of the death. The findings of the inquest may be used for further judicial investigation.

Who conducts an inquest?

In the legal system of Sri Lanka, an inquest is conducted either by an Inquirer into Sudden Deaths (ISD) or by a Magistrate. The ISD is appointed by the Ministry of Justice. Most instances, the ISD are a lay person. They are not either Medical or Legal experts. The minimal educational requirement to be appointed as an ISD is passing the GCE Ordinary Level examination. He should be a resident in the area to which he is appointed. The ISD has powers to summon any witness to give evidence and produce any documents relevant to the inquiry of the death. If somebody fails to do so, the ISD may issue a warrant for the apprehension and produce this of such a person before him. The ISD has powers to fine or to order imprisonment of a person who fails to appear before him when summoned.

When does an inquest become necessary?

It is the medicolegal duty of the attending doctor to issue the "medical certificate of cause of death" if known, when a patient dies of a natural cause. If the doctor is unable to give the cause of death, an inquest is required.

Subsection 370 of the CCP of Sri Lanka states that every inquirer on receiving information about a person who has been:

(A) Committed suicide,
(B) Killed by an animal or by machinery or by an accident, or
(C) Died suddenly or from a cause which is not known,

shall immediately proceed to the place where the body of such person is and shall make an inquiry and draw up a report.

Also, deaths while in the custody of police, in prison, or in a mental or leprosy hospital should be reported to the magistrate for an inquiry.

In a hospital setting, the doctor in charge of the patient is expected to request an inquest if a patient under his care dies under the following circumstances:

(a) The cause of death has not been ascertained.
(b) Death due to road traffic accidents and other transport accidents.
(c) All other accidental deaths.
(d) Death due to suicidal acts.
(e) Death due to violence.
(f) Death of an inmate of prison, mental or leprosy hospital and while in police custody.
(g) Death due to medical, surgical or anesthetic procedures or immediately afterwards.
(h) Death following administration of blood, blood products or a drug.
(i) Death due to animal bites, rabies or tetanus.
(j) Death due to suspicious circumstances.
(k) All maternal and neonatal deaths according to instructions of the Health and Justice Ministries

Who should be present at the inquest?

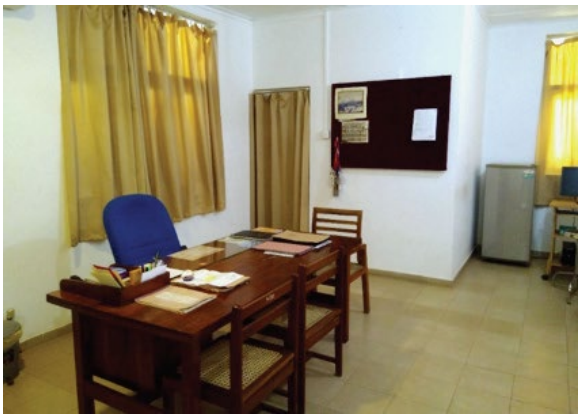
An officer from the police station in the area where the deceased was living or where the incident which resulted the death took place should be present at the inquiry. The police officer's duty is to present the witnesses and lead the evidence before the ISD/Magistrate. The inquirer need not totally depend on the witnesses produced by the police officer.

There should be two close relatives of the deceased to identify the body.

The inquirer has the authority to summon any other witnesses to an inquest if he thinks that such a person can provide information regarding the incident or the death. Doctors who treated the deceased can be asked to be present at the inquest to give evidence and produce hospital documents relating to the treatment.

What is the outcome of an inquest?

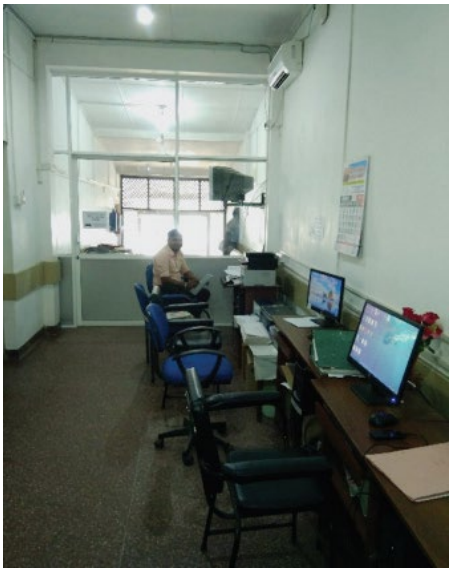
The inquirer has the authority to decide what action should be taken once the proceeding of an inquest is over. If the inquirer is satisfied about the evidence presented before him about the death and the cause of death, he has the discretion to release the body to the relatives after issuing the death certification form. If the presented evidence is not adequate to ascertain the cause of death, the inquirer is empowered to call upon a government medical officer to conduct a postmortem examination and to report to him about the cause of death (section 373 of the CCP of Sri Lanka). Once the postmortem examination report is available, the inquirer can release the body to the relatives of the deceased. The inquirer has to decide the manner of death as well. If the manner of death is suspicious, the Magistrate should be informed. Upon completion of every inquest, the inquirer should forward a report to the Magistrate. The ISD [Coroner] based death investigation system is cost effective, simple, efficient and accessible to general public though there are many arguments about scientific essence of determination of cause of death by common sense of a layman.



Consultant Judicial Medical Officer's Office



Clinical forensic examination area



Computer area



Body Coolers



Coroner's Room Where Inquests Are Held



Autopsy room



Histopathology laboratory

United Kingdom

International Feature – Death Investigation System in the United Kingdom



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Introduction

England developed as a unified nation in the first millennium of the Common Era, after the Romans left in 410 AD and following the Anglo-Saxon invasions. Alfred the Great (reigned 871-899) began to unify the Anglo-Saxons and was the dominant ruler of England by his death. Athelstan I was King of the Anglo-Saxons from 924-927 and is considered the first King of England, reigning as such from 927 till his death in 939. In 1066 the Normans invaded England and replaced Anglo-Saxon rule. Wales was conquered by Edward I (reigned 1272 to 1307) and resulted in its incorporation into the Kingdom of England in 1284. Lordship of Ireland was granted to the English monarchy in the reign of Henry II by Pope Adrian IV in 1155 and became the Kingdom of Ireland in 1542 during the reign of Henry VIII. Scotland amalgamated with England and Wales in 1707 to form the Kingdom of Great Britain, though the monarchies of England and Wales and Scotland had been joined since James VI of Scotland became James I of England in 1603. James I also became King of Ireland at the same time. The Kingdom of Great Britain existed until the formation of the United Kingdom of Great Britain and Ireland in 1801. It was composed of four countries, England, Wales, Scotland and Ireland. Following the Irish War of Independence in 1922, Ireland was partitioned into Ireland and Northern Ireland, the latter remaining as part of the United Kingdom and Ireland ultimately becoming a republic.

With these changes in monarchical and political union, the United Kingdom became a unitary state, as opposed, for example to a federal country like the USA, but retained different legal

and medico-legal systems in its constituent countries because of the history of the timings of the amalgamations. Thus, in the 21st century, The United Kingdom has separate legal and medico-legal systems in England and Wales, Scotland and Northern Ireland. Ireland also retains a Coroner's system.

The Legal system of England and Wales

England was, like many other parts of Europe, conquered by the Roman Empire. But with the decline and fall of the Western Roman Empire, Roman (Civil) law was lost to the West. Like other countries England developed vernacular law, that is customary law written in Anglo-Saxon and not latin. When there was a rediscovery and resurgence in Roman law at the start of the second millennium of the Common Era, England was a unified but separate country that was establishing its own legal system, which was to become Common Law and it developed separately to continental European legal systems.

The start of Common Law is by tradition dated to 1189 at the end of the reign of Henry II (reigned 1154-1189). The Common Law was introduced into Wales with its amalgamation with England in the 13th century and England and Wales have been a single legal jurisdiction since that time. Scotland retained a separate legal system because of its much later amalgamation with England and Wales. Common Law was subsequently exported by the English to Ireland and to its colonies, including USA and Commonwealth countries. Some countries developed mixed systems of law, typically receiving Common Law as its criminal law and public law, but retaining its original non-criminal (civil) systems. Examples of mixed legal systems today include South Africa, Scotland, Quebec and Louisiana. Malaysia has a mixed system that includes criminal law based upon the Common Law and other legal systems including Sharia law. Common Law has been characterised by a lack of codification of law and judge made law using the doctrine of precedent (*stare decisis*), modified by legislation from Parliament. The United Kingdom lacks a single codified constitution.

The Medico-Legal system in England

The origins of the coroner

As well as the development of the Common Law, England developed its own unique medico-legal system based upon the coroner, a title that continues to this day in many countries, though the role of the coroner has changed over the centuries and varies between different jurisdictions.

The first mention of the term coroner may be from the reign of Alfred the Great when a judge was put to death because he had refused the right of a prisoner to traverse (traverse is a formal denial of a fact alleged) and was sentenced to death on the coroner's record. In 925 AD Athelstan granted "The Charter of Privileges" to St. John of Beverley Minster which contains eighty lines of rhyme including the following written in Old English (Anglo-Saxon):

"If a man be founden slain I drunkend,

Sterved on Saint John rike, his aghen men
Withouten swike his aghen bailiffs make ye fight,
Nan oyer coroner have ye might
Swa mikel freedom gave ye,
Swa hert may think or eghe fee"

In the reign of Henry II the Coroner was known as *Serviens Regis* and *Coronarius*. The modern English coroner is held to start with the Articles of Eyre in September 1194 AD, in the reign of Richard I (1189-1199) when the position was termed *Custodes Placitorum Coronae* – keeper of the pleas of the Crown. After this he (and for many centuries after was always a male role) was referred to as the coroner, although in legislation 3 Hen VII c 2 (1487 AD) and in 34 Hen VIII c 26 (1542-43 AD) the term Crowner was used, though this has generally been regarded as a vulgarism.

The functions of the coroner had been performed before the position was created. The county jutsiciar held them and was a more powerful position, as he could not only record pleas, but could determine them. However, when that office was abolished early in the reign of Henry II, sergeants of the hundreds and wapentakes, the local areas, held inquests upon dead bodies and heard appeals.

The first coroners were county coroners ordered in the Articles of Eyre of AD 1194. These were followed by borough coroners in 1200, and subsequently by franchisal coroners, granted by royal charters. Some early coroners were hereditary. Coroners were elected or appointed. All knights and freeholders of the shire elected the county coroners. Borough coroners were elected in the same way as county coroners. Coroners were to live within the county and their power was limited to their county, though the medieval boundaries were not well defined. Some coroner positions were combined with other administrative posts, such as mayor or bailiff.

Other coroners included coroners associated with royal forests and mines, coroners of the Admiralty, though whether these truly existed is unclear, and the coroner of the verge. This latter title belonged to the coroner for the Royal Household. The verge was the area 12 miles around the King's court. As such it was peripatetic as the court went on circuit. There was a coroner of the King's Bench who was mainly employed as the king's attorney in court cases, but heard occasional inquests as well. He could hear appeals of prisoners who turned approver, that is King/Queen's evidence or State evidence. Justices of the Kings bench were 'sovereign coroners of the realm' and were thus able to hear appeals.

Qualifications of the Coroner

The original appointment in the Articles of Eyre was for each county to have three Knights and one clerk, the latter to carry the rolls and conduct the General Eyre. Many of these medieval rolls are still preserved in the Public Records Office. These Eyres were the forerunner of the Assizes, the courts that remained in existent until 1972 when they were replaced by the Crown

Court, the court that tries serious crimes with a jury in England and Wales. The Coroner had to be a Knight, who was a man of property and had to have an income of 20 pounds, a large sum in those days. The coroner was not paid, and as they were men of means, it was expected they would be less corrupt than sheriffs had been. The qualifications for a coroner were gradually changed and the number of knights was reduced. In 1340 and 1354, Statues did not mention being a knight as a qualification for coroners. However, they were still substantial landowners and the position remained unpaid. Payments for coroners were first enacted in 1487 when a fee was payable for an inquest when a person had been slain, but indicated that the investigation of sudden deaths was no longer of importance unless there was manifest evidence of felonious violence. An Act in 1751 provided that a fee for every "duly held" inquest, but specified that payment was to be approved by the justices in quarter sessions, which meant they could limit inquests through the interpretation that "duly held" meant "body slain" which meant fees were not paid in sudden deaths unless there was a reasonable suspicion of violent or non-natural death.

Appeals were another way to bring a case to court without indictment. An Eyre was the Royal Court of Law that moved on circuit and might visit a county every 7 years, so good record keeping became essential to maintain the finances of the Crown. The whole community, as well as individuals, could be fined – called amercements - for failing to follow legal procedures. The early coroner can be viewed as a kind of royal accountant. The Medieval Coroner of Richard I (Richard the Lionheart) had multiple duties in his office of keeping the Kings Pleas. Richard I is often portrayed as a great King, but spent little time in England and has been considered a bad poor monarch by some historians. He used England as a source of revenue. Broadly the coroner protected the Kings financial rights and aided in the investigation of serious crime. He had to supervise sanctuary and abjuration of felons from the Realm. This role continued until 1623, when James 1 abolished sanctuary. Felons could seek sanctuary in churches and then agree to leave the Realm (abjure) and never return. They became an outlaw and thus outside the protection of the law and anyone could legally kill them. The coroner was also responsible for directing accusations (appeals) – private criminal accusations that had to go to the county court through him. He also was present at Trials of Proof, such as trial by fire and water, until abolished in 1215 following the 4th Lateran Council.

The coroner also determined whether something was treasure trove. Treasure trove is money, gold, silver and other precious metal that was hidden and rediscovered. Property that was simply abandoned was not treasure trove. The difference was that Treasure Trove belonged to the Crown, but abandoned property belonged to the finder or landowner. The role of determining Treasure Trove is one of the functions that the coroner retained into the modern era. The law was changed in 1996 with the Treasure Act and Treasure Trove is now named Treasure. Coroners still determine whether it is Treasure or not following an inquest. Finds must be reported to the local coroner in 14 days.

The medieval coroner recorded all their work in a separate roll of the pleas of the crown – coronae – hence the term coroner. One of the reasons for the development of the coroner was

distrust of the sheriff. The sheriff was a pre-Norman office. It derived from each shire having reeves, Anglo-Saxon officials. By contraction of the name of the office became sheriff. The reeve was an administrative position, below ealdorman, who was the magistrate. The reeve's functions included managing the manor and overseeing the peasants. The Norman sheriff would conduct a tourn (a circuit) of courts every three weeks, but by 1170 they were so corrupt that Henry II dismissed the sheriffs in post and many of their roles were replaced by coroners in 1194. Sheriffs continued to have important duties related to coroners. They held the elections and shared duties with the coroner, including keeping rolls and hearing appeals, exactions and outlawries with coroners in the county court. They could jointly hold inquests. The sheriffs powers rapidly declined after 1300. Their positions became annually elected. The rise of justices of the peace and escheators reduced the roles of sheriffs and coroners. Escheators were concerned with escheats, that is lands and goods forfeited or taken into the Crown's hands. Although their functions remained, they exercised many of them less often. Modern sheriffs in England and Wales have essentially only a ceremonial role.

Death investigation and the Medieval Coroner

The main function that was retained into the modern era was death investigation and it is the function that is the most well-known role for the coroner. The medieval Kings had a financial interest in sudden and suspicious deaths. The coroner examined bodies with a jury. He had to determine a number of facts, including who the deceased was, where they had died and how they had died. The local population had to prove the victim was English (Anglo-Saxon) and not Norman, so there had to be a proof that the victim was local – known as presentment of Englishry, or Welshry in Wales and Irishry in Ireland, until 1340. The local community, the Hundred, would be fined if they could not prove the victim was not Norman and this was the *Murdrum* fine. This fine was levied regardless of the method of death. However, in 1257-1258 there was a major famine with the deaths of 15,000-20,000 people in London alone. While dispensation was granted not to call the coroner, the murdrum fine was still levied, and as many people travelled and were unidentifiable, the fines were onerous. There was a revolt against the murdrum fine, and it was relaxed after the famine to only be levied in cases of felonious killing. It was abolished in 1340, but apparently was occasionally still levied. In 1362 it was levied in a case in the county of Suffolk.

The first person to find a body had a duty to raise "the hue and cry" and inform the 4 nearest households. Failure to do so would involve the local community, the Hundred, in a heavy fine. The Hundred could not bury a body without the coroners warrant and would be fined if they did not have his permission.

Another role of the coroner was to determine *deodand*. This concept predated the coroner. The theory of deodand was that an object that caused death should be forfeited. It could be expurgated by the church hence *Deo damdum*" or "giving to God". But the money went to the Crown, not the church. Any object that resulted in the death of a person could deodand such as a workman's axe, trees from which someone had fallen and mill stones. The practice continued

into the 19th century, when steam trains were declared deodand and even a steamship. Deodand was abolished in 1846.

The modern coroner

In 1664 Greenwood published a work on the duties of sheriffs and coroners. The work was principally about sheriffs, but one chapter was devoted to the judicial and ministerial office of coroners. Greenwood stated the office was founded by Alfred the Great. He records there were two types of coroner, general and special. He states that the duties of general coroners were to receive Appeals of the whole county, of felonies committed within the year; to award Exigents of contempts and to pronounce the Judgements of Outlawries on County days. Special coroners were described as coroners of liberties, with special mention of the coroner of the Verge and discussing the lack of jurisdiction of county coroners on the Verge.

Greenwood quoted Sir Edward Cook's (1552-1634) Institutes of the Lawes of England that a coroner should have five properties –
He should be *Probus homo*
Legalis homo
Of sufficient understanding and knowledge
Of good ability, and power to execute his office according to his knowledge
Diligent in execution of his office.

Coroners were elected by the freeholders of the county. The number of coroners per county was not laid down by law; some had 4, others two and some just one coroner.

The judicial duties were essentially those of the medieval coroner, including examining violent deaths, taking acknowledgment of felonies, abjurations, ship wreaks and treasure trove. Having taken appeals and indictments, the coroner would hand them over to the justices.
With respect to violent deaths, the coroner had to view the body with jurors. A failure to view the body would make his inquiry invalid. Jurors were selected from the four adjacent villages to where the body was. The coroner with his jury had to determine the manner of death and if by blows whether by staff, stone or other weapon.

Greenwood lists forms of warrant, administration of the oath for jurors and witnesses, charge to the jury including a description of deodands,

The ministerial duties of the coroner were his ability to act as sheriff when the sheriff could not. Greenwood discusses fees. Coroners could not receive fees for the office but could receive a penny for appearing in front of the Justices of the Assize and goods to the value of 13 shillings and 4 pence from a murderer. The final parts of the chapter are devoted to Appeals.

In 1761 the first textbook devoted to the English coroner was written by Edward Umfreville. Its title is *Lex Coronatoria: or, The Office and Duty of Coroners. In three parts,* published in 1761. It came about because Umfreville was standing for election for the Middlesex Coroner (the

historic county that was the north part of London) and he prepared notes on the Office. He was elected to the Office in 1754.

He divided the book into three parts, the first being the Theory or Knowledge of the criminal branch, the second being the Theory or Knowledge of the practical branch, and the third being a Full Mode and Method of practice.

Umfreville starts by giving a history of the Office, discussing the famous texts of Granville (c.1112-1190) and Bracton (c. 1210 – c. 1268) and the role and duties of the medieval coroner. In part I he describes the laws relating to unlawful deaths including *felona de se* (suicide), murder, murder by concealment of the death of a bastard (an offence defined by a statute passed in 1623), manslaughter, of manslaughter on the Statute of Stabbing (a law also passed in the reign of James I) and duels. There are other legal chapters including a chapter on deodands. Umfreville states the practice of deodands is based upon the scripture and quoting passages from *Genesis* and *Exodus.* This chapter is followed by a chapter on flight and forfeiture, which the coroner had to inquire into. If flight (from justice) was determined, a forfeiture followed. The text deals with how coroners are elected, their office and duty. Details of inquisitions and proceedings are given.

In 1829 John Jervis (1802-1856) published the first edition of his textbook on Coroners. This textbook has gone through multiple editions and is still the leading textbook on English coronial law and the current edition was published in 2014. Jervis went on to become a Member of Parliament, Attorney General and Chief Justice of the Common Pleas.

Thomas Wakley, who had founded *The Lancet* in 1823, campaigned for coroners to be medically qualified. He stood for the election of the position of Coroner for East Middlesex but was unsuccessful. However, he stood for Parliament and was elected the Member of Parliament for Finsbury in 1835. He was successful in getting the Medical Witnesses Act 1836 passed that allowed for payment for medical witnesses at inquests. In 1839 he was elected to the coronership for West Middlesex. He campaigned for the abolition of the practice of giving convicted murderers over for anatomy dissection. This was enacted as the Anatomy Act of 1833 and unclaimed bodies from the poor were used instead. He also was successful in getting the Medical Act 1858 passed through Parliament, which required those who practiced medicine to be registered.

The 21st century coroner

In 1888 by the Local Government Act election for coroners was abolished and replaced by appointment by the County Council. From 1926 until 2013 coroners had to be lawyers or medical practitioners. Having seen an attempt at the medicalization of the system following the efforts of the Thomas Walkley in the 19th century, now all newly appointed coroners must now be lawyers. Current legislation is governed by the Coroners and Justice Act of 2009. This Act provides for a Chief Coroner who oversees the system, a Coroner for Treasure, senior coroners,

area coroners and assistant coroners and assistant coroners for treasure. The first Chief Coroner appointed was a Judge.

The English system remains heavily inquest dependent with public inquests being held in all unnatural deaths, held in a coroner's court, which is an inferior court of record. A court of record is one of which the acts and judicial proceedings are enrolled in its archives and are conclusive evidence of what is recorded. Inquests are typically held without juries, but certain types of death do call for a jury, such as deaths in custody. It is an inquisitorial court and its findings are not binding on subsequent civil or criminal proceedings.

The coroner may take possession of the body for investigative purposes. Current legislation requires that an examination of the body be conducted by a suitable person, which is either a medical practitioner or a practitioner designated by the Chief Coroner as suitable to make examinations of the kind required. The legislation does not require a qualified pathologist, though in practice it is pathologists who carry out the examinations. When a death is suspicious the coroner is required to discuss with the Chief of Police the most suitable person to conduct the examination. In practice this means a Forensic Pathologist, but the coroner is not obliged in law to use an accredited Forensic Pathologist, or even a pathologist.

At the end of an inquest the coroner or jury if there is one makes the determination, which records who the deceased was, by what means they died, and when and where the deceased died. Inquests delivered verdicts rather than manner as in North America. They are now referred to as conclusions. There is an official list to try and get uniformity. Examples include lawful and unlawful killing (homicide in North America), accident/misadventure, industrial disease, suicide, natural causes and open (undetermined in North America). A new conclusion added in the 2013 list is road traffic collision. These conclusions are not compulsory, and any can be expressed in any "concise and ordinary language". The decisions of the coroner are subject to judicial review and coroner legislation is developed by case law.

Northern Ireland has a similar coroner's system to England. Legislation required the Northern Ireland coroner to be a lawyer before England and Wales.

The legal system in Scotland

Scotland does not have Coroners. It has a different criminal justice system and the role of the Coroner, along with other duties, is performed by the Procurator Fiscal, who is akin to an examining magistrate in continental civil law systems. It is the Sherriff, a judge in Scotland, who authorizes the autopsy on the request of the Procurator Fiscal. An unusual feature of Scottish Law is the need for corroboration. Therefore, where a death is criminally suspicious two pathologists are needed to conduct the autopsy. In Scotland the autopsies have principally been conducted by forensic pathologists based in University Departments. In Scotland a Fatal Accident Inquiry (FAI) is the equivalent of the inquest, though the requirements to hold a fatal accident inquiry are more restrictive than inquests and thus less common.

Forensic Pathology in the UK

England has been said to be slow to receive legal-medicine in comparison with continental legal systems. Use of the autopsy developed in the 18th century and by the 19th century was more often conducted. Many of the people conducting them were surgeons or general practitioners. A lack of payment for physicians and surgeons giving evidence was corrected with the Medical Witnesses Act of 1836, that provided a payment of one guinea for a medical witness to attend an inquest and two guineas if a post-mortem examination had been ordered. In the 19th century forensic medicine developed in an ad hoc way. The Royal College of Physicians was established in the early part of the 16th century and Royal College of Surgeons in the 19th century. The Royal College of Pathologists was not founded until 1964. Various medical practitioners conducted autopsies. Specialists developed in the 19th century based in Universities. Scotland was more advanced in developing forensic medicine and the first Professor in Forensic Medicine was established in Edinburgh in 1807, when Andrew Duncan Jr. was appointed. It was known as the Professorship of Medical Jurisprudence and Medical Police. However, lectures were not compulsory. Medical Jurisprudence was how forensic medicine was referred to in the English world in the 19th century. In London lectures were established at Guy's Hospital and Alfred Swaine Taylor was appointed lecturer in medical jurisprudence in 1831. He was to become the principal writer of textbooks on forensic medicine and toxicology in mid-Victorian England. The first true comprehensive English textbook had been written by Male in 1816.

By the end of the 19th century concerns about undetected homicide led to the English Home Office, the Government Department with responsibility for policing in England and Wales, appointing a "Home Office Pathologist" to conduct these examinations. The first person appointed was Thomas Stevenson, who was then at Guy's Hospital. Subsequently in the early 20th century Sir Bernard Spilsbury was appointed and dealt with many of the famous murders that occurred in England in the first half of the 20th century, but never trained anyone or wrote a textbook. The use of "Home Office Pathologists" became standard for deaths that were treated as suspicious in the 20th century in England and Wales. These practitioners were pathologists based in University Departments or National Health Service Hospitals who were prepared to undertake examination of criminal cases. At the establishment of the National Health Service in 1948 coroner's autopsies did not come under the work of the NHS and coroner's fees continued to be paid for medico-legal autopsies separate to the salary of pathologists.

In 1961 the Worshipful Society of Apothecaries in London established an examination in forensic pathology, the Diploma in Medical Jurisprudence (DMJ). It also established a DMJ for clinical forensic medicine for physicians who worked with the police (police surgeons) on non-fatal cases. Following the establishment of the Royal College of Pathologists in 1964 examinations in histopathology (anatomical pathology) and forensic pathology were established. Training systems developed in university departments and a small cadre of forensic pathologists developed. A number of Government inquiries have looked at the structure of the Coroner's system in England and Wales including how forensic pathology is integrated into

these systems. This resulted in the police becoming the payers where a suspicious death autopsy is requires. This change started in the early 1990's. It has resulted in a separation of suspicious from non-suspicious autopsies and who performs them, because of the very low fees for non-suspicious cases. Typically, non-suspicious deaths are dealt with by hospital pathologists. With universities becoming more research oriented there was a reduction in forensic pathology departments in England. This also coincided with many academic histopathology posts being removed. As a consequence, forensic pathology has become privatized and has a much more limited presence in universities and teaching hospitals. The Home Office continues to run a register of accredited pathologists and the Royal College of Pathologists continues to oversee training programs. Forensic Science, which was a predominantly Government run organization through the Forensic Science Service similarly underwent privatization, but ironically this occurred with an explosion in departments of forensic science in universities, while forensic medicine left the universities.

In Scotland forensic pathology continues to be delivered from the ancient university departments that have medical schools. In Northern Ireland a State Pathologist's Office was established in the 1950's and continues today. It is associated with Queens' University Belfast. Training in Scotland and Northern Ireland is overseen by the Royal College of Pathologists, as in England and Wales. Governmentally, Forensic Pathology is overseen by the Crown Office in Scotland and the Northern Ireland Office in Northern Ireland.

Conclusions

Because of its long history, the English coroner system developed organically with periodic modification by Government legislation. The system has emerged in the 21st century as a legalistic system run by qualified lawyers. The medicalization pushed by Thomas Wakley and others in the 19th century did produce more medical input into the system, but the use of trained pathologists did not really develop until after World War II when training programmes under the supervision of the Royal College of Pathologists in pathology specialities including forensic pathology were introduced with formal examinations. The 21st century system appears fragmented with use of forensic pathology not utilized in non-suspicious deaths the way it is in North America. The teaching and research in forensic pathology has been affected by the closure of university departments and the privitization of forensic pathology and forensic science. The Government still regulates who is on the Home Office register, which requires the practitioner to be properly trained and certified. Scotland and Northern Ireland have different systems of regulation, though both also are part of the Royal College of Pathologists training and examination structure.

Further Reading

Hunnisett R. F. The Medieval Coroner. Cambridge University Press 1961 xii, 217 p. (Cambridge Studies in English Legal History.)

Knight B. Crowner: Origins of the Office of Coroner Bernard Knight
http://www.britannia.com/history/coroner1.html

Lex coronatoria: or, the office and duty of coroners. In three parts. Wherein the theory of the office is distinctly laid down; and the practice illustrated, By Edward Umfreville, In two volumes. 1761

Matthews P. Jervis on Coroners. Sweet and Maxwell. 13th Edition 2014.

Royal College of Pathologists at https://www.rcpath.org

Medico-legal investigation system in the Russian Federation.

Prepared by
Anastasia Vorotova, MD, Medical Examiner
The Forensic Medical Examination Bureau of the Voronezh

Zhanna Georgievskaya, MD, OCME New York

The medico-legal investigation system in Russian Federation is a highly centralized Federal Medical Examiners System functioning under the Federal Ministry of Health and Social Development (except for cases that fall under the jurisdiction of the Ministry of Defense). In 1716, Russian Tsar Peter the First signed the first order permitting autopsies in cases of violent deaths. Thirty years later, autopsies were required in all the cases of sudden and unexpected deaths. Autopsies were performed by general practitioners without training in forensic medicine and under the jurisdiction of a police office. This system existed until the Socialist Revolution in 1917. In the beginning of the last century, a modern medico-legal investigation system began to form.

The main federal institute of the medico-legal investigation system is called Russian Center for Forensic Medicine. It was established in 1931 by merging previously existing the Central Forensic Laboratory and the Departments of Forensic Medicine of the Moscow Medical Institutes. The Center is the principal state forensic institution of the Ministry of Health and Social Development of Russia and provides scientific and legal support of the medico-legal examination system. The Center issues guidelines for all the regional offices and oversees training and professional development of all the forensic medical examiners in the country.



Pic 1 Postgraduate education, Russian Center for Forensic Medicine.

The Center is located in Moscow and includes 18 structural divisions (forensic research, forensic medicine and forensic laboratories). The medical staff consist of 67 researchers, 87 medical examiners, 10 PhDs, 22 PhD candidates, and 6 Merited Doctors of Russian Federation.

The local medical examiners offices in the republics, regions or large cities of Russia are called the Forensic Medical Examination Bureaus. The bureaus are united geographically in eight large federal districts: Central, North-Western, North-Caucasian, Southern, Volga, Ural, Siberian and Far Eastern.



Pic 2: Federal regions of Russia (Source: Quora)

The Forensic Medical Examination Bureau of the Voronezh Region serves territory of 52.4 thousand km^2 with population 2.3 million and located in the Central Federal district of the Russian Federation.



Pic 3: Voronezh region (Source: USRBC)

The Voronezh region incorporates 15 large towns and 32 districts with capital in Voronezh city (population 1 million). The Bureau is a non-profit organization that operates and finances by the Department of Health of Voronezh Region. Currently, the Bureau oversees eight small medical examines offices located in the towns of the region. The everyday work of the medical examiners, their training and the overall organization of a forensic service is different from a typical medical-examiner office in the United States.



Pic 4. Administrative building of The Forensic Medical Examination Bureau of the Voronezh region



Pic 5. Central morgue and garage of The Forensic Medical Examination Bureau of the Voronezh region

The Forensic Medical Examination Bureau of the Voronezh region has the following Departments:

1. Department of Forensic Medicine of Deceased: medical examiners working in this department are responsible for medico-legal scene investigations, postmortem examinations of corpses, death certifications and court testimonies. Thirty medical examiners work in this department (the main office and the small regional offices) performing approximately seven thousand full autopsies a year.

2. Department of Forensic Medical Examination of Victims, Accused and Others: medical examiners working in this department are responsible for medico-legal examinations of survived victims of crime, classification and certification of injuries, collection of the sexual assault kits and other procedures required for documentation of injuries for the medico-legal or health insurances purpose.

3. Department of Forensic Histology: medical examiners in Russia are not routinely trained to performed microscopic examinations of postmortem tissue. Scientists trained in clinical

pathology, histology and biology perform histopathologic examination of tissues submitted during autopsies and issue a separate report.

4. Department of forensic examination of material evidence: Scientists in this department responsible for evidence storage and collection of DNA and other trace evidences.

5. Department of Forensic Chemistry: Performs chemical, basic toxicological and biochemical analyses of the postmortem fluids and tissues. It also functions as a central police laboratory.

6. Department of "comprehensive examinations". Medical examiners of this department perform evaluation of the hospital medical records and autopsy reports in cases of suspected therapeutic or surgical complications, accidental deaths in hospitals, or suspected cases of medical neglect.

7. Department of Education: This department functions as a liaison between the regional and the federal governments, medical universities and the Bureau.

Chief of the Bureau is a physician trained in forensic medicine and appointed by the regional Department of Health. The chief appoints the first deputy and the heads of the departments. The Bureau employs sixty-seven medical examiners and scientists in chemistry and biology.

Graduate medical education in the State Medical Universities in Russia takes 6 year. Rotations in departments of Forensic medicine are required for all the medical students. In general, medical examiners in Russia do not receive postgraduate training in Anatomical or Clinical Pathology. Training in subspecialty consists of a 2-year program in forensic medicine at the regional Forensic Medical Examination Bureau.

Current challenges of the medico-legal investigation system in Russia include adequate state financing and a countrywide shortage of well-trained medical examiners.

Memoirs

Suggested Outline for NAME Memoirs

For this project, we would ask persons to complete a memoir if they have:
Practiced forensic pathology for 25 years or more
Served as a Chief Medical Examiner in at least one office

Outline

Why did I select forensic pathology as a career?
Places and times I served as Chief Medical Examiner
Major accomplishments as Chief Medical Examiner
Efforts on behalf of forensic pathology and the forensic sciences
Recollections of places I have trained and worked
Comments about people who trained me and from whom I have learned
Recollections about people I have trained
Major controversies and frustrations in completing my responsibilities
Academic involvement through research, education, and training
Legislative change in which I was involved
My contributions to the field of forensic pathology
Perspectives I gained as a medical examiner
Difficult cases I have managed
How I dealt with job-related stresses, anxiety, and personal performance issues
Other recollections
Advice for forensic pathologists entering the field
How my work experience changed me, changed my life, and what I learned from my work
How has forensic pathology changed during my career, for the better and for the worse?
Knowing what I do now, would I "do it again" under the same circumstances as when I began, or under today's circumstances?
Personal information such as family, hobbies and interests (optional)

Howard Adelman, MD

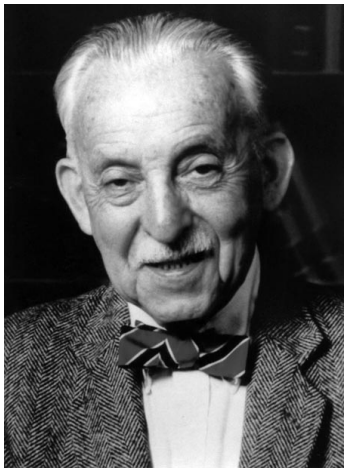
January 2011

I was the Deputy Chief Medical Examiner under Sidney Weinberg in Suffolk County New York from 1971-1979. Sidney was my mentor although I studied Forensic Pathology at the University of Basel, Switzerland for one year under Professor Jurg ImObersteg (1962-1963). I also worked at the New York City Medical Examiner's Office under Milton Helpern (1968) and I would also count John Devlin as one of my mentors. At the Suffolk County Medical Examiner's Office there were two cases that stand out: The murders of the DeFeo Family (which later became involved in the "Amityville Horror") and the case of Karen Pomroy which was a landmark case in the legal definition of the term "death" (led to the acceptance of the term "brain death").

Not officially working as a Medical Examiner, I was a consultant to the Coroner's Office in Warren Ohio (1979-1989) and one of my cases was so brutal (and was the first case in that jurisdiction that involved bite mark evidence) that I was awarded a plaque from the police department and a mayoral proclamation naming one day after me.

Lester Adelson, MD

1914-2006



Memories of Ross Zumwalt, MD
1983 Dinner Honoring Dr. Adelson

At the annual interim meeting of NAME in February 1983 in Cincinnati, Ohio, a reunion dinner for all forensic pathologists who either worked or trained at the Cuyahoga County (Cleveland) Coroner's Office was held with Dr. Lester Adelson as the guest of honor. The dinner was a huge success and was attended by among others: Charles Hirsch, James Luke, Stan Harris, Rudy Breitnecker, Mary Gilliland, Stuart Dawson, Ross Zumwalt, John Eisle, Neil Hoffman, Bonifacio Floro and Larry Lewman.

The following day Dr. Adelson was a visiting professor at the University of Cincinnati and gave a lecture entitled "The Coroner of Elsinor, Medicolegal Reflections on Hamlet." That evening he addressed the Cincinnati Society of Pathologists. His topic that evening was "Spontaneous Human Combustion and Preternatural Combustibility or How Much Personal Fire Insurance Should You Carry."

Dr. Adelson had previously published papers on both of those topics. Dr. Adelson retired from forensic pathology in 1987 at the age of 73. He is particularly remembered for his exceedingly well written textbook The Pathology of Homicide.

Adelson, Lester, *The Coroner of Elsinor; Some Medicolegal Reflections on Hamlet*, New England Journal of Medicine Vol 262 pp. 229-34, 1960
Adelson, Lester, *Spontaneous Human Combustion and Preternatural Combustibility*, Journal of Criminal Law, Criminology and Police Science, Vol 42; pp. 793-809, 1952

To follow are pictures of the reunion dinner of 1983.



Lester Adelson and Ross Zumwalt



Lester Adelson



Charles Hirsch



Lawrence “Stan” Harris



Rudy Breitenecker



James “Jim” Luke, Stuart Dawson, Rudy Breiteneker



Lester Adelson and Lawrence “Stan” Harris



11-02-1966 Press Photo Dr. Lester Adelson And Chief Of Police Fred Drenkhan Testify in Sam Sheppard trial

OBITUARIES

Coroner, forensic expert Dr. Lester Adelson was 91


Adelson

Dr. Lester "Laib" Adelson, one of the nation's top authorities on forensic pathology, died on March 10 at age 91. During the 37 years he was deputy coroner of Cuyahoga County; Dr. Adelson was best known for petfonning the autopsy on Mal[1]l y, 1 Sheppard, victim of one of the most publicized local murder cases.

A frequent witness in Common Pleas Court, he was the first pathologist to show color slides of an injury to a jury. Dr. Adelson's slides were an instmmental contributing factor in Dr. Sam Shep, pard's acquittal for murdering his wife Marilyn. Over the com·se of his career, he investigated more than 8,000 homicides and numerous natural deaths.

A professor at Case Western Reserve Universit}; Dt. Adelson wrote many articles about sudden infant death syndrome and cllild abuse. He authored more than 130 professional papers and the award-wimling book *The Pathology Of Homicide,* a te.xtbook and leading reference for physicians and lawyers for more than 30 years.

Di: Adelson was an Army Ail· Force surgeon in the South Pacific during World War II, and earned a Pm–ple Heart and commendation for bravery when rescuing fellow soldiers dltrilig an ail' raid. After the war, he had a fellowship at Haivard Medical School's department of legal medicine before accepting a position with the Cuyahoga Colmty Coroner. He ser,·ed as medical chief of the Los Angeles County coroner's office beginning in 1955, and wrote a television script about ilifant death for an episode of "Medic." In 1960, the New England Jottrnal of Medicine published Dt: Adelson's "autopsy" of Hamlet's father, in whicll he concluded that the Shakespearean character died of poisoning instead of from a snake bite, as reported by characters in the play. He was a strong advocate of gun control and helmets for motorcyclists.

Born in Boston to Lithuanian-Jewish parents, Dt: Adelson was a magna cwn laude graduate of Harvard University and a cum laude graduate of Tufts University School of Medicine.

Dr. Adelson was predeceased by his wife of 45 years, Louisa (nee Menci). He is survived by son Marc; daughter Nadine Bendycki; one granddaughter; and a brother. Contributions may be made to Lester Adelson M.D. Book Fund, Forensic Medicine/Forensic Pathology, Cleveland Health Services Library; Case Western Resetve University Scllool of Medicilie, 10900 Euclid Ave Cle,·eland, 4410923, Attn: Evelyn Neufeld, Ph.D.

In Memoriam: Lester Adelson, MD (1914–2006)

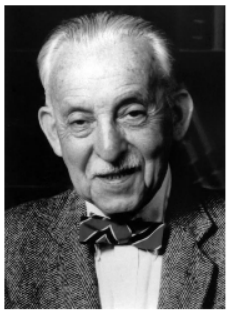
David Dolinak, MD, and Elizabeth K. Balraj, MD

On March 10, 2006, surrounded by loved ones, Dr Lester Adelson died. On that day, family members lost a loved one. On that day, Cleveland, the United States, and the world lost a most preeminent, renowned forensic pathologist who was instrumental in the development and refinement of forensic pathology. Although his professional career spanned the 1950s, 1960s, 1970s, and into the 1980s, his influence, teachings, and writings remain very much active today.

A native of Boston, Lester Adelson earned his bachelor's degree from Harvard in 1935 and his medical degree from Tufts in 1939. He served as an Army Air Force physician during the Second World War and earned a commendation for bravery. He then completed his residency in pathology at Hartford Hospital in Connecticut and a fellowship in legal medicine at Harvard Medical School before joining the Cuyahoga County Coroner's Office in Cleveland, OH, in 1950.

Dr Adelson provided excellent and distinguished service to the Cuyahoga County Coroner's Office until his retirement in 1987 at the age of 73. Throughout this time, he maintained academic appointments at Case Western Reserve University, attaining the rank of full professor in 1969. His scholarship is evident by his many publications and is reflective of his intellectual curiosity, hard work, determination, and commitment. His 117 articles and his renowned textbook *The Pathology of Homicide* cover the gamut of forensic topics. His profound and respected literary legacy is but a small fraction of the influence he has had and will continue to have on the field of forensic pathology.

Anyone who is a student of forensic pathology, from trainee to experienced practitioner, has knowingly or unknowingly been influenced and educated by Dr Adelson's superb teachings, handed down by his protégés, by their protégés, and by his writings. His thoughts and words of wisdom have guided, inspired, educated, and shaped the minds of many experts and will continue to do so through the ensuing generations of professionals. His work has benefited society in many ways and no doubt has left a permanent and profound imprint on forensic pathology.



Lester Adelson, MD (1914–2006).

From the Cuyahoga County Coroner's Office, Cleveland, Ohio.

1. This tribute was written by Dr David Dolinak, deputy coroner, and Dr Elizabeth K. Balraj, coroner of Cuyahoga County, Cleveland, OH. Dr Dolinak never had the good fortune of meeting Dr Adelson, whereas Dr Balraj had the pleasure of working with Dr Adelson for 15 years as a deputy coroner. Both of the authors share the same respect for Dr Adelson, evidence of his far-reaching and cross-generational influence.
2. The authors wish to thank Nadine A. Bendycki, beloved daughter of Dr Adelson, for providing the photograph of him.
3. Dr Adelson's family has established the Lester Adelson M. D. Book Fund for Forensic Medicine/Forensic Pathology, at the Cleveland Health Sciences Library, Case Western Reserve University School of Medicine, 10900 Euclid Ave, Cleveland, OH, 44106-4923. Memorial contributions may be sent in care of this address.

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Dr Adelson served in many professional medical societies and was honored with numerous awards for teaching, leadership, and outstanding service. Dr Adelson's many professional and personal attributes and accomplishments are evidence of his legendary status. Dr Adelson serves as an accomplished and respected professional role model to many forensic pathologists and others, either directly or indirectly, via his publications, lectures, and his strong power of example.

Dr Adelson helped inspire an interest in forensic pathology that has influenced generations of practitioners. Many of his students have since become leaders in the field, and his adopted teachings are sure to be passed down to future generations of forensic pathologists. His legacy will not and cannot be forgotten. Perhaps the best tribute to Dr Adelson was written by Dr Charles Hirsch.[1] In his tribute, Dr Hirsch superbly highlights the many accomplishments of Dr Adelson's professional career while humbly revealing personal insights into his character and what has made him an inspiration to so many people.

Dr Adelson was a humble man, able to make others feel comfortable and special, almost in defiance of his esteemed reputation. He was a man of many talents and abilities. He was humorous and had a gift of conversation, sparking interest and dialogue (sometimes prolonged) on a variety of topics. He was master of the English language, as is evident in his many superb writings. He was a man of many aphorisms, many of which were a combination of prophecy, humor, and insight. Some of his better-known aphorisms include:

- *A question is halfway to wisdom.*
- *Nature never lies.*
- *That very uncommon commodity, common sense, is soluble in alcohol.*
- *Presumption is not proof, conjecture is not evidence, and analogy is not always a correct way of reasoning.*
- *No one is born a congenitally good witness.*
- *In the autopsy room, we see people with their naked bodies; when families see us, we see their guilt, grief, and greed; we see families with their naked souls.*
- *Regardless of color, race, sex, or the shape of the nose, everyone has the same red blood at autopsy, and tears that are shed for a lost loved one are equally salty.*

We all owe much to Dr Adelson, whether we worked with him, were friends or acquaintances of his, have read his publications, or merely have heard of him. Many of his accomplishments are tangible and in the form of the written word. However, perhaps the greatest beauty of Dr Adelson is intangible, reflected by his unique, caring, and gentle personality, by his passionate and compassionate character, and his great respect for humanity. Dr Adelson has said, "*You don't become hardened to death; you become more sensitive to it.*" These personal traits, unfortunately, are likely to have been appreciated by only a smaller number of people, those who have had the good fortune to know him, work with him, or otherwise come into contact with him.

Dr Adelson was a hard, seemingly tireless worker, slowed only by the inevitable, progressive, and irrepressible effects of aging. The loss of Dr Adelson is profound and far-reaching. His death brings great sorrow to those who personally knew him and to many who merely knew of him. His family and the "family" of forensic pathology have sustained a great loss.

Lester Adelson, MD, is survived by family and by his legacy, which shall never be forgotten.

REFERENCES

1. Hirsch CS. Lester Adelson, M.D. *Am J Forensic Med Pathol.* 1989;10:261–263.

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Michael Bell, MD



NAME President 2003
July 2011

Why did I select forensic pathology as a career?

I think it was an inevitable outcome. I have always sensed that my curiosity about death went beyond most people's interest. I was determined to be a physician since I was a child for no other reason than to be one. In college, Dr. Wimsat, whose research involved bats, introduced me to histology and organology. I loved it. Now if only I could get a paying job where I could do this all day. In medical school, I decided to be a pathologist and after listening to a medical examiner (actually he was a coroner) for 2 hours, I knew that is what I wanted to do every day.

Places and times I served as Chief Medical Examiner

I have been the chief medical examiner of Palm Beach County in Florida for 6 years, since 2005. This is the longest I have ever held a single job in one place. I have never been a chief anywhere else, although I did apply for the Chief position in Massachusetts in 2004. I am so glad I didn't get that job.

Major accomplishments as Chief Medical Examiner

Remain employed. Let's face it. When sh!t happens, you're the target. But seriously, I am proud of the people who work in my office. They make all the difference and are the reason why I will stay. I am also proud that our office is NAME accredited.

Efforts on behalf of forensic pathology and the forensic sciences

I have written journal articles and book chapters pertaining to forensic pathology. I have been a reviewer for the major forensic pathology journals. I am also active in AAFS, NAME, and FAME.

Recollections of places I have trained and worked

I trained at the Broward Medical Examiner office in Fort Lauderdale, Florida at the infancy of its forensic program. The office was an exciting place to work and autopsies were varied and plentiful. I gained much valuable experience from that office.

Comments about people who trained me and from whom I have learned

Dr. Larry G. Tate of the Broward Medical Examiner office personally spent a large amount of time with me during my training. Dr. Ron Wright was the chief who I admired and tried to emulate, including his often cavalier demeanor. Dr. Jim Benz taught me the importance of a thorough report.

Major controversies and frustrations in completing my responsibilities

One of the more frustrating problems in Florida is the "Earnhardt Law," which narrowly restricts the use of autopsy photographs. Teaching and publishing scientific articles in forensic pathology has suffered because of this stupid law.

Perspectives I gained as a medical examiner

Don't show trials on television.

Difficult cases I have managed and how I dealt with job-related stresses, anxiety, and personal performance issues

Child abuse cases are difficult because the examinations are extraordinarily detailed and will be scrutinized beyond that which occurs in most other cases. The scrutiny is not what bothers me. It is often the bizarre and deliberately contrary opinions proffered by whores who would have come to the same opinion as me if it had been their case. High profile cases will also turn your hair gray. I find talking to others helps reduce my anxiety and put things in perspective.

Advice for forensic pathologists entering the field

I gotta love autopsies. Don't take sh*t personally. Avoid taking sides in a trial.

How has forensic pathology changed during my career, for the better and for the worse?

Definitely for the better.

Knowing what I do now, would I "do it again" under the same circumstances as when I began, or under today's circumstances?

Hell yes. Imagine working from sunrise into the evening like a surgeon or treating colds all day, seeing patients for 10-15 minutes and worrying about reimbursement. How about spending your days looking down a patient's gullet or up their @ss? No thank you.

Joye M. Carter, MD

June 2011

First I would say that forensics chose me and not the other way around. I was a high school student interested in medicine when I saw a dead body and became intrigued by the way the body was dealt with. I was mentored by Dr. Joe Davis through letters of encouragement for several years which kept my interests up.

I first served as deputy Chief medical examiner in the Armed Forced Medical Examiner system. I became the first African American to become board certified in forensic pathology and the first female to become Chief Medical Examiner of Washington, DC. I was also the first female to be appointed Chief Medical Examiner of Houston, TX. I formed my own group in 2002 and returned to where I attended high school to become the first female and minority Chief Forensic Pathologist in Indianapolis, IN.

I have always believed in the neutrality of forensic pathology. I hope that wherever I have worked my honesty and openness demonstrated my desire to be neutral and thorough in my investigations. I have had the utmost respect for the pioneers of forensics. I am proud to consider Joe Davis as my friend and mentor.

I have spent 25 years researching violence.

I have been involved with the US Senate on date rape drugs and changing misdemeanors to felony charges.

I do not let others or situations stress me out. I have always had a love of antiques, historic homes, gardening and my dogs which rescue me from the worries of the day.

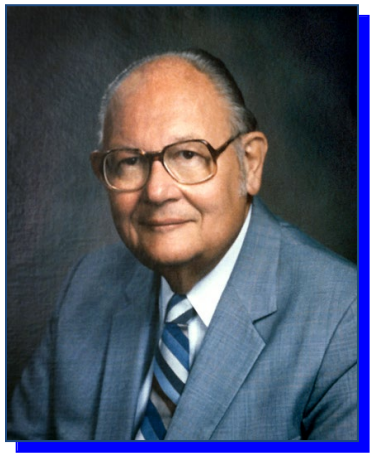
I am not sure if the new generation of forensic pathologists love what they do or the money they get paid. I suppose that will take care of itself somehow.

I will always love forensics and would do it again in a heart beat!

Anything else is contained in my first autobiography.

John I. Coe, M.D.

1919-2011



Medical Examiner, Hennepin County (Minneapolis) Minnesota (1966-1984)
NAME President (1979-80)

By Jeffrey Jentzen, MD
July 2011

Why did I select forensic pathology as a career?

Coe's father died at a very early age and he was raised by his mother, who was a professional nurse and educator. He attended Carleton College in Northfield, Minnesota and began his graduate studies in biochemistry at the University of Minnesota. With the outbreak of WWII, health planners anticipated a critical shortage of physicians which encouraged Coe to switch his studies to medicine. He received his medical degree with honors from the University of Minnesota in 1944 through the Army Student Training Program (ASTP). After one year of internship and one year of pathology, he served in the Army Medical Corps from 1946 to 1948. Coe practiced as a pathologist at the VA Hospital in Minneapolis for two years. In 1950 he became Chief of Pathology at the Minneapolis General Hospital, which evolved into the Hennepin County Medical Center, a position he held until his retirement in 1984.

Places and times I served as Chief Medical Examiner

"During the 1950s, with no other local pathologist willing to perform coroner's duties, the coroner called on the services of the Minnesota Bureau of Criminal Apprehension. It followed that personnel in the Bureau became aware of my interest and availability on a statewide basis." Coe was the principal pathologist for the Minneapolis Coroner's Office during the 1950s and early 1960s. When Hennepin County switched to a medical examiner office in 1964, Coe became the first Chief Medical Examiner, a position he held until his retirement in 1984.

Major accomplishments of forensic pathology and forensic medicine

Coe was board certified in forensic pathology in 1960, the first to receive the certification in the Midwest. He was internationally known for his research in the area of postmortem chemistry and firearm injuries and was a pioneer in the study of Sudden Infant Death Syndrome and one of the first to identify the role of defective cribs in sudden death. In 1977 Coe was asked to serve on the Congressional Select Committee on Assassinations investigating the death of President Kennedy and Martin Luther King.

Comments about people who trained me and from whom I have learned.

"In my personal pantheon, there are a number of people who have significantly influenced my life. I am at a loss to decide who among the group was the most important in either my personal or professional development, but certainly Dr. E.T. Bell, head of the Pathology department in the University of Minnesota Medical School, has to be given strong consideration. He taught basic pathology to sophomores using his own textbook. His course was demanding, the material to be learned voluminous, the tests difficult, and the grading fair. When I applied for a residency in Pathology toward the end of WWII, he had forgotten my face as a former student and asked where I obtained my medical education. When I replied that it was Minnesota, the questions were brief and direct. "

"What I you get in the first quarter of pathology?'
"I got an A.'
"What did you get in the second quarter of pathology/"
"I got an A."
"When can you start?"
"Tomorrow."

"Suffice it to say that he taught me much of what I needed to know professionally and showed me by example how to teach and how to lead by example when opportunities developed."

Recollections about people I have trained.

Coe was a teacher and mentor for several generations of pathologists. He trainees in forensic pathology included: Gary Peterson MD, John Plunkett MD, Michael McGee MD, Janis Ophoven MD, Janis Amatuzio MD, Robert Akerson MD, Ned Austin MD, John Teggatz MD, Jeff Jentzen MD (I may have missed someone).

Major controversies and frustration in completing my responsibilities

"November 23, 1966, is burned in my memory. It was on that date that a practice of the Medical Examiner's Office came under scrutiny resulting in three weeks of pure hell. It nearly cost me my job and reputation but ultimately became a learning experience. Soon after the formation of the medical examiner's office in 1964, a new resident suggested we collect pituitary glands for the National Pituitary Agency. The agency paid a two dollar handling and mailing fee each gland. Many pathologists throughout the entire country participated in their

collection. We decided to utilize the collection fee for photographic supplies to be used in the M.E. Office.

While not done surreptitiously, the collection of such organs had not been discussed with the county commissioners and the monies were handled through a private fund. The organs were collected without the consent and knowledge of relatives. In November 1966, a reporter for the local newspaper, Mr. Friendly (what an oxymoron!) became apprised of the practice.

The news story was picked up by the local commentators on all radio and television stations where it received very critical comment over a period of several weeks. The County Commissioners demanded a complete review of the Medical Examiner's Office by the Public Examiner and a Grand Jury investigation. . . . The Public Examiner had completed a very comprehensive review of the office, establishing that all money derived from collection of pituitary glands could be accounted for, that none had been paid to pathologists or other personnel, and that these funds had been used exclusively for professional expenses.

This experience taught me how to operate in a public office, to let government control any monies spent for or by the office and to develop public relations constantly."

Academic involvement through research, education and training

Coe was a professor of pathology at the University of Minnesota and affiliated with that University for over fifty years.

How I dealt with job-related stresses, anxiety, personal performance issues.

"Finally, the support of personal friends both in an out of church was critical to keeping me going through the ordeal."

My contributions to the field of forensic pathology

"One of the most interesting developments in my forensic career was the opportunity to review in detail the deaths of John F. Kennedy and Martin Luther King. Among the experts were nine forensic pathologists, all of whom participated in the review of Kennedy's death. Three of these pathologists were then selected to review King's assassination. To my delight I was asked to serve in both investigations.

There were understandable reasons for questioning the conclusions of the Warren Commission: the body should have been autopsied in Dallas; the pathologist selected was not trained in forensic medicine; the original rough notes of the examination were destroyed because they were stained with Kennedy's blood; the brain disappeared before microscopic examination; the regular autopsy photographer was replaced; the pathologists in Washington D.C. did not contact the emergency room physicians in Dallas who had initially examined Kennedy; etc.

Suffice it to say that eight of the nine members in our panel concluded that only three shots were fired. All this supported the findings and conclusions of the Warren Commission. It is both interesting and enlightening to realize that the only pathologist quoted, the only one appearing in television documentaries, the only pathologist consultant utilized in the docudrama J.F.K directed by Oliver Stone, is the single pathologist of the nine who disagrees with all the rest of us. This would be acceptable if we had not carefully considered every objection that he raised in our conclusions. We shot down every single one without exception.

From the nine pathologists investigating Kennedy's death, Mike Baden, Joe Davis, and I were chosen to investigate King's murder. It was a less complex endeavor compared to the Kennedy assassination. We had an enjoyable time together when we met in Nashville to view the scene, interview the pathologist who performed the postmortem examination, and confer with some witnesses. In actuality, a good investigation had been performed, establishing beyond a *reasonable doubt* (doubters are not always reasonable) that Ray had purchased the gun and fired the fatal shot.

The time spent with such knowledgeable colleagues in both the Kennedy and King panels was one of the highlights of my professional career."

Difficult cases I have managed

"Doc, can you identify food eaten two hours before death? Thus began the most fascinating case of my early forensic career—the Hinter case. The material submitted consisted of charred , distorted bed springs covered with burned debris all of which had been put into a disaster bag and shipped to the coroner's office. X-rays were followed by a meticulous examination of the charred remains with complete autopsy and basic toxicology. At the end of eight hours, I was able to tell authorities that we were dealing with the torso of an elderly white male of average height who had white hair. He died from a shotgun blast to the head while intoxicated and the body burned after death. However, at the time of autopsy a large amount of debris was taken off of the bed springs and turned over to the Minnesota Bureau of Criminal Apprehension for further study. With the help of a handwriting expert it was possible to identify this [charred fragments of paper] as the signature of a man from St. Paul who had been missing an appropriate length of time, known to be white haired, the right age, and willing to go with anyone who would buy him a drink. This made the final link in the evidence convicting the owner [of the building] with murder. This case is particularly illustrative of the many specialists who commonly become involved in forensic problems."

"With over 1000 homicide autopsies performed personally or under my supervision, there were relatively few that were more than locally newsworthy. I was relatively inexperienced in the field of forensic pathology when the Axilrod case came to trial in 1955. Dr. Axilrod was a dentist whose office was in downtown Minneapolis and he frequently practiced his dentistry at night alone with a patient. There had been one formal complaint about some sexual advances made while the patient was under anesthesia. In April a pregnant young woman was found dead in an alley and autopsy revealed she died of manual strangulation. It developed that the

women had been a patient of Dr. Axilrod and had seen him the previous night. She had told her sister that the dentist was responsible for her pregnancy. Dr. Axilrod hired the very best local defense attorney, Sydney Goff, and he was a formidable opponent. There seemed little cause for concern until things started falling apart. First, the neck organs, saved from the autopsy to verify the manual strangulation disappeared. Next, the victim's sister died of some mysterious condition that was ultimately classified as a natural death. Finally, just as the trial was to begin, I came down with infectious hepatitis. My personal physician finally agreed, under pressure, to permit me to go to court in a wheelchair. My entry into the courtroom was dramatic. I was concerned about cross-examination from such an expert [Goff] and remember being extremely apprehensive with a rapid, pounding pulse when I began—probably a panic reaction. The testimony completed, the jury deliberated and brought a verdict of manslaughter. That pleased neither side."

How has forensic pathology changed through my career?

"He is old, dirty with ill-cropped white hair and scraggily beard. Spread-eagle on his back each extremity is bound by twine to a bedpost. Wrists and ankles are rubbed raw from attempting to get free, but there is no evidence of injury. His hermit hovel of a home has been ransacked, evidence that someone was looking for hidden treasure. What killed him? Was it simple starvation and dehydration? How to prove it?"

"A decade later when I became interested, a constellation of factors favored my involvement. At that time, practical clinical chemistry was exploding. Machines using ever-smaller samples were being developed to rapidly determine a constantly expanding number of clinically significant substances i.e. practical clinical micro chemistry on a mass scale was being born. This was all occurring at a time when forensic scientists recognized a new fluid medium to test—the viscid fluid (vitreous humor) in the eyeball. Another factor was my totally unique position in the United States: a chief medical examiner who was also head of a large teaching hospital laboratory. When it became desirable, within two years, I was able to obtain postmortem blood samples on 1000 sequential cases. Within a decade, over 6000 vitreous specimens had been analyzed for a variety of elements and compounds. These series provide a large database for statistical analysis that existed anywhere else in the world and made it possible to determine diabetes, electrolyte imbalance, prerenal uremia, regular uremia as well as many other conditions not previously diagnosable from postmortem material. Further, vitreous humor analyses helped in determining the postmortem interval, i.e., the time between death and obtaining the specimens. Finally vitreous analysis proved useful in may toxicological evaluations."

"The answers to the questions posed in the beginning [case] of this memoir are now available and the use of postmortem chemistry has become a staple of the forensic pathologist. My research in this field established my reputation in forensic medicine more than anything else."

Other recollections

"My love of guns began as a freshman in high school. Mother was opposed but recognized my true interest and wisely arranged for me to received instruction from an ex-Army many who was a hunter. . . .Stub Hobart, a neighbor, also loved shooting. Soon the two of us began walking to farms near town to kill gophers. When we tired of gophers, Stub and I began more serious target practice and became, at least in our own minds, accomplished marksman. About this time I was given a muzzle-loading, percussion cap, smooth bore Civil War rifle. But Stub saw more than just a valuable antique. He had obtained a cache of black powder and had the equipment to make a bullet for the musket. . . . We decided to shoot into a large wooden post in my backyard so we could retrieve the bullet. The kickback form the shot bruised my shoulder and, combined with the detonation, caused me to fall backward into a sitting position. The gun was never fired again in the 60 years I continued to own it."

"Upon becoming chief of Pathology at the Old Minneapolis General Hospital several developments revitalized my interest [in guns]. First, Charles Petty, at the that time the most knowledgeable forensic pathologist on gunshot wounds, began holding some workshops on firearms to which I was invited. The submachine guns fascinated me and I was always shooting one of those when possible. Poor Charles watched hundreds of dollars' worth of ammunition go off in a prolonged clatter every time I could get my hands on the Thompson submachine gun or the Uzzi assault weapon. I began to collect and collate the material from our office when I became medical examiner in 1964, integrating it with the pictures, graphs and charts from Petty's gunshot workshops and unusual and instructive cases obtained from speakers at nation meetings. Utilizing two projectors it was possible to show two slides side by side. This enabled the speaker to cover much more visual material and demonstrate similarities or differences between the wounds. My exposure because of these lectures brought me many consultations and certainly was a factor in my being selected by the Congressional Committee on Assassinations as one of nine pathologist to review the death of John F. Kennedy and one of the three chosen to review the death of Martin Luther King."

Personal Credo

"Life itself is positive."

Personal information such as family, hobbies, and interests

Dr. Coe was an active member of the Hennepin Avenue Methodist Church and an enthusiastic supporter of the Minnesota Orchestra and the arts community of the Twin Cities. During his life he was involved at any one time in a number of hobbies including: watercolor painting, photography, lapidary, art and coin collecting.

"In the seventies, I became caught up in gold fever and began to collect bullion gold coins . . . but it rapidly became apparent that building a collection of numismatically valuable gold was going to cost big bucks. . . . The fun began by purchasing dirty bronze Roman coins obtained from buried hoards in Great Britain. . . . It was only a matter of time before you wish to

concentrate on some specific subject. In my case, that became coins of the Bible. . . . I always get a thrill when I hold any of these coins in my hands. One or all of them conceivably could have been handled by Peter, Paul, John, or even Jesus himself. Study of my collection revealed two readily apparent abnormalities of the skin, the first being the rhinophyma of Mithridates' nose. . . . None of the other Parthian kings had this ailment, but many of them had nodules appearing on their foreheads. The location of the bumps and their repeated appearance is almost diagnostic of Epithelioma adenoides cysticum or trichoepithelioma. This is a benign hereditary tumor arising from a hair follicle."

This posthumous memoir was created from the written material contained in John Coe's recent obituary and his autobiographical publication Some Personal Recollections (2000). Material has been edited to allow for space considerations.



Three Past-Presidents of NAME who have a Minneapolis connection. Jeff Jentzen (left) and Garry Peterson (right), both of whom trained under John Coe (center) in Minneapolis. Photographs taken in June 2004.



Sandra Conradi M.D.



NAME President 1992
Medical Examiner, City of Charlestown, South Carolina (1982-1998)

July 2011

I was attracted to pathology because as a young teenager, I babysat for a 5-year-old from South Africa whose father was the new pathologist for the local hospital in Hudson, New York. I would peruse his medical textbooks looking at all the pictures of horrible diseases. It was fascinating. Later, I applied for a pathology training program during my third year of undergraduate study and was turned down, since I had no previous medical school training. As a result, I attended medical school after being accepted at the University of Cincinnati in Ohio. I was one of only three females in the class but only two of us graduated out of a class of 100 students. After a lot of uncertainty as to which internship to choose, I ended up at the Cincinnati Memorial Hospital as a rotating intern from 1962-63. I then applied to and was accepted in a pathology residency and chose to remain in Anatomic Pathology. After residency and a military tour with my husband in Nurnberg Germany, a job opening became available in the Coroner's office in Cincinnati (Hamilton County) where I worked for one and a half years. In 1973, my husband's pharmacology department relocated to the Medical University of South Carolina in Charleston, South Carolina. I was appointed Deputy Chief Medical Examiner and eventually Chief Medical Examiner in 1982. I remained in Charlestown as Chief Medical Examiner until 1998. After leaving the medical examiner practice, I practiced autopsy pathology for a couple of years and finally retired totally in 2001. I continue to practice as a consultant mainly to defense attorneys regarding mostly criminal cases.

I have always promoted a Medical Examiner system for South Carolina, together with the department chairman Drs. Gordon Hennigar, Joel Sexton, retired, and Robert Brissie, the latter now in Birmingham, AL. However, despite years of trying, the ME system only remains in Greenville, SC the office in Charleston, decaying and dying in 2000 when it reverted back to a coroner system. Our system had dual coroner/medical examiners, and conflicts arose between the two offices. The political office survived, but the M. E. system did not.

Dr. Frank Cleveland was the coroner and my mentor in Cincinnati, however he had a full time job at another hospital as their pathologist. So after performing the autopsies during the day, I discussed puzzling findings when Dr. C came in late in the afternoon. I knew nothing about forensic pathology, so didn't know about artefactual epidural hemorrhages in fires, an example of my ignorance. Dr. Hennigar and Dr. Sexton were my mentors when I first started working at the Medical University of South Carolina. Dr. Hennigar was a large man, some 300 lbs. and six feet plus in height or so. His heart was a large as his size, as was his bellowing voice when he was angry about or at someone. He was a tireless fighter for a medical examiner system for our State, but not even his cajoling could sway the legislators to change the age old coroner system. South Carolina was not able to follow in North Carolina's footsteps implementing a state medical examiner system. Dr. Sexton's demeanor was just the opposite of Dr. Hennigar in terms of boisterousness. Dr. Sexton was soft spoken, patient to a fault and a super teacher. Dr. Hennigar claimed Joel should have been a preacher.

Our facility trained dozens of residents, some of whom went on to work in medical examiner offices. To name a few: Jamie Downs, Steve Cogswell, Steve Cina, Kim Collins, Eric Eason, David Wren, Clay Nichols, Mike Ward, and on and on.

At the University of South Carolina, we offered month long rotations for police detectives, and others, and the waiting list was long. Our semester fall course consisted of 13 weeks of lecture presentations with quizzes at the end and covered dental forensics, toxicology, anthropology and the usual forensic path subjects. This course was a sophomore medical student elective and was always well attended. Eventually this course was videotaped and sold to other institutions including the FBI. The most popular of the lectures was Dr. Clay Nichols pumpkin bashing with a hammer to illustrate blunt trauma.

My work has mainly been in South Carolina, but my husband's military service did send me to Nurnberg Germany for three years where I performed autopsies on individuals dying in the huge Nurnberg Hospital. The OberArzt, our director, chose interesting cases that medical students at the nearby Erlangen Hospital might profit from seeing. No family permission was needed. We saw widespread TB with granulomatous disease on tubes and ovaries, endocarditis in a young girl with a brain abscess, Myasthenia gravis with a thymoma (I predicted the thymoma and was the star of the department). On the weekends I would surreptitiously peruse the autopsies done on concentration camp prisoners during the war, with the reports signed "Heil Hitler." Most of these deaths were due to typhus.

Stress on me and my young family weighed heavily at times during my tenure as medical examiner in Charleston. I can remember one time, the three girls and my husband decided to throw a surprise birthday party for me just as I was called to a stabbing case in a bad area of town. We <u>always</u> went to scenes of violent or suspicious deaths together with the coroner. I was told there would be a divorce if I didn't attend this home party. I attended, and by the time I got to the scene of death, the body had been removed, and just about everyone has left. I thought I'd be fired, but it didn't happen. Another incident involved my pager, which my

husband, then an internist, got tired of hearing beeping. He threw the $200 instrument against the brick fireplace. I claimed it got run over by a car, but no one thought to do forensic testing on it, thank goodness.

My most noteworthy, newsworthy case was the one involving Susan Smith, She had deliberately drowned her two youngsters in a car she drove down a boat ramp into a lake, accusing a black man of stealing the car and abducting the children. A colleague declined the autopsies on the little boys. The autopsy area was cordoned off and the bodies arrived about midnight, and by three in the morning we finished without the news media scouting us out. The next day we could tell the throngs of press everything was over, and the coroner in the upstate county had all the information.

Another case involved a "drowning" in shallow water on the fourth of July of a young man pulling a raft from the deeper water to shore and deflating. We found out much later, the raft had been inflated with Freon from a friend's air conditioning business. Sure enough, testing revealed Freon toxicity, in blood and brain tissue.

I am glad I did my training before all the "rules and regulations" came about. I am glad I did not have to deal with budget cuts that would prevent me from performing the complete autopsy which I always have done. I am afraid the personal protective devices required now while performing an autopsy would cramp my style. I wish I could have cooperated more successfully with the coroners in our county to preserve our ME system.

Although I absolutely hated my job when I started in this field (it was the only good paying path job in town at the time) about 6 months into it, I finally began reading and learning what forensic medicine is all about. Now, I still find it challenging but rewarding. Hopefully other young residents will feel as I do as they enter this amazing medical practice. The tenets of my forensic work are to be totally honest in your work, and always do a complete autopsy, with microscopic examination.

Dimitri L. Contostavlos, MBBS, M.D.



First Chief Medical Examiner, Delaware County, PA (1980-2000)
May 2012

Accomplishments as Chief Medical Examiner

I was appointed the first chief M.E. of Delaware County, PA, in 1980. This followed a long history of dissatisfaction by county residents with the prior coroner system, in which until the last few years, autopsies were performed by non-pathologist physicians with the expected substandard results.

During the last few years in which an elected coroner presided, forensic pathologists were prudently called in for homicides and questionable cases. I was one of those moonlighting pathologists from nearby Philadelphia, serving the county for about 5 years, and when the time came for the new medical examiner appointment, I won the position. For almost twenty years (the length of my term), the office had the title of Medical Examiner/Coroner, until legislation was completed to change the title officially. The office was run for this entire period as a de facto medical examiner office.

The practice of using forensic pathologists for selected cases was adopted by the three other coroner-headed counties surrounding the big city. This resulted in a slowdown of the horrifically bungled cases which occur in the absence of a forensic pathologist, thus frustrating my attempt to proselytize the medical examiner concept to the neighboring counties, an effort which is matched only by my attempts to do the same at a national level. The result has been that Delaware County remains, together with Philadelphia and another small rural county, one of the only three medical examiner systems in Pennsylvania.

I found myself in a suburban county of just over half a million inhabitants, with a functioning morgue, morgue technician, secretary and two investigators. It had been a surprisingly well equipped coroner's office. The County administrators were enthusiastic about developing a state of the art office, and complied with my staff and budgetary requests.

The office which I developed was what I considered to be the ideal arrangement to serve such a small demographic area (both in population and area). The system comprised a single full-time pathologist, with back-up support for vacation and time-off by moonlighting qualified forensic pathologists from Philadelphia. My intention was to provide 24/7 call stat availability for investigators and pathologist to attend the scene when indicated (homicides or conundrum cases). The investigator used an all-weather vehicle equipped for use in body transport. The objective was to provide maximal investigative service and prompt autopsy by experienced forensic pathologists,

Investigators were trained at the St Louis death investigator course and were able to substitute as morgue technicians and vice versa. Investigators were on call for overtime in the event of heavy workloads. The pathologists had to accept the philosophy that, rather than the 8 to 4 "office worker" approach of present day physicians, they were like physicians of yore, always on call and available at short notice to respond to the needs of their profession.

We performed STAT autopsies on homicides and hit-and-run vehicular deaths, which required immediate investigation. Scene investigations would always include an electronic liver probe temperature study, with as many serial readings to monitor rate of fall as possible. Unlike many of my skeptical colleagues, I put great weight on properly measured postmortem temperatures and their prudent interpretation. This electronic thermometer was also useful for measuring ambient air temperature, soil temperature and water temperatures, if indicated.

Another use for the thermometer probe is that of determining down time for an internal combustion engine (using the same principle as body core temperature methodology). Since vehicles are so often used in criminal situations, the timing of their last use may be crucial. It is easily determined by serial engine block temperature measurement, since every vehicle is designed to run at a very precise operating temperature, and the decline in temperature after shutoff is linear. The engine block can be touched from underneath with a probe, without need to enter the vehicle which requires a search warrant.

After I commenced researching the variability of engine temperature drop, my attempts to interest several local detective agencies met with no interest whatsoever. They were content to use the time honored approach of putting a hand onto the surface of the hood! One case I can think in which this approach would have yielded fantastic investigative data is the "O.J." case. Unfortunately, the former account seems to support the worldwide stereotype of the typical policeman's mentality!

I instituted computerized records and was able to recover instantly all cases of a specific genre for retrospective study. I had always regarded the standard autopsy protocol as deficient with regard to estimation of blood volume. I began routinely recording the signs of normal versus diminished blood volume, namely the appearance of fully developed livor mortis, whether absent, diminished or normal, and the presence of blood filled cardiac chambers and great vessels. Thus, for instance, a suicide with cut wrists and medicinal overdose could be assessed as to whether exsanguinations had been causative in his death. Although I discussed this many times with colleagues, this technique has never caught on.

I did however get to describe it in a publication. Using records retrospectively, I collected twelve consecutive cases of lethal isolated head injury, which died quickly enough to avoid any medical therapy involving blood volume restoration in which exsanguination occurred, and twelve cases with the same reservations in which exsanguination did not occur. This study revealed that all exsanguinated cases had displaced basilar skull fractures, whereas all the others had less severe head injury. I performed this study (1) to disprove Hirsch and Zumwalt's 1986 assertion (2) that an "empty heart" at autopsy tends to occur with lethal head injury in the absence of exsanguination. My findings suggested the reason empty hearts are seen in head injury a case is that exsanguination commonly occurs when large vessels are disrupted by the compound fractures which occur at the base of the skull.

The office was running smoothly and well, until I decided that it would be better served by reducing myself to a slowed work pace, cut my salary, and hire a colleague of my age willing to work full time as my partner. I persuaded a reluctant county government that it would not cost them anything, and they then hired an old colleague of mine, foolishly giving him full benefits (which he did not demand). It was then that I learned that one should hire professionals on the basis of proven competence, not on back-slapping friendship and "nice guy" credentials.

After a year of dissatisfaction (mainly on my part, although we found we had differing philosophies), he handled a case while I was abroad in which five teenage girls were killed in a high-speed collision with a tree. I arrived back in the office, while he went abroad, and I subsequently learned that the girls had been huffing keyboard cleaner and he had attempted to cover it up, reflecting his philosophy that driver intoxication was a private matter. I immediately exposed it to the press, was attacked by ten angry parents, and the county government that sympathized with parents, but not the public, alleging "insensitivity" on my part. My contract was not renewed. Additional disgruntlement against me by the county was the hiring against their wishes of the assistant and my failure to support their Republican overlords.

I ensured that all hospitals reported therapy-related deaths which were thoroughly investigated, as I had learned in Philadelphia. Community issues in which I attempted to use my influence included the intoxicated vehicle operator, and also senility, medical and youth impairment of driving. My attempts to remonstrate about the bad effects of over-easy availability of firearms received the stony reception customary in our nation. I drew attention to fire safety and carbon monoxide hazards. It is interesting that during my term, thanks to

catalytic converters, the internal combustion engine lost most of its potential to cause accidents and to facilitate suicides. I regularly attended the conferences of the local trauma hospital, attempting to draw their attention to the discipline of clinical forensic medicine. I believe that the medical examiner, rather than be a silent recorder of grim facts, should be an activist in warning the congregation about the lethal hazards which he encounters in his work.

Recollections about persons with whom I have worked

Westchester County, New York Grasslands Hospital 1964

Victoria Bradess and Caroline Lydecker were medical examiners of Westchester County when I spent a year as surgical pathology resident at Grasslands Hospital, Valhalla (now known as Westchester County Medical Center). They were instrumental in grounding me in the basics, as I attended all the forensic cases there. I specially recall a young surgeon who attended an autopsy there one morning, and that same evening was brought to the morgue after his Volvo struck a school bus.

Baltimore Medical Examiner's Office, Fellowship 1967

In 1967 I became a fellow at the Baltimore Medical Examiner's Office. Fellow residents were Josh Perper, Millard Bass, Simeon Palomino, and Edward Wilson. The Deputy Medical Examiner was Werner Spitz, and assistants Charles Springate and Ronald Kornblum. Chief Medical Examiner Russell Fisher was an inspirational teacher, and worked regularly in the morgue although he also ran a private clinical lab. I particularly remember him showing us all the evidence of the JFK assassination in which he was consulted. Dr. Richard Lindenberg, in-residence neuropathology consultant, was a great boon for our enlightenment. Dr. Spitz was also a great teacher. Drs. Henry Freimuth and Paul Schweda provided good toxicology service.

At that time we were sending the infant neck viscera to Molly Valdes-Dapena in Philadelphia since the larynx was in vogue as a possible cause of SIDS. That office did not have investigators, and although I recall visiting a couple of scenes, investigation was not emphasized at that time. Simeon Palomino, from Peru, who on my last contact was a hospital pathologist, had a case of coronary artery dissection in a postpartum woman which he wrote up in the *Journal of Forensic Science (JFS)*. I have subsequently seen at least a half dozen. That is the lesion notoriously missed at autopsy in the Atlantic County New Jersey case, where the policeman husband was accused of strangling his wife before the sectioned lesion was eventually found two years later.

Dade County Medical Examiner's Office, Assistant Medical Examiner 1968-70

The next two years were spent with Joe Davis in Miami, together with Brian Blackbourne and Pete Lardezabel , the former destined to go to Washington D.C., Massachusetts and then San Diego, the latter to Tampa, Florida. There is no need to describe the teaching experience that was. Joe likes to autopsy practically everything, so the work load was quite formidable. At that time, Joe was thinking of giving technicians more responsibility, and Brian and I were resistant to that. I believe Joe has retreated from that philosophy currently. This office did not have outgoing investigators, although the pathologists went to scenes fairly regularly. Art Fisk provided good toxicology back-up.

I encountered three cases of direct blunt trauma to vertebral artery with massive subarachnoid hemorrhage during those two years. With great support from Joe Davis, and cooperation from a radiology technician, I wrote up these cases for the JFS (3). There has been some controversy about this lesion, with confusion with medial dissection and thrombosis from neck orthopedic injuries, or other etiology supposedly separate from the neck impact, but I still think the classical side-of-neck blow with direct arterial injury is valid (4). My departure from Miami resulted from discomfort in S. Florida climate, and better pay prospects in Philadelphia.

Philadelphia Medical Examiner's Office, Assistant Medical Examiner 1970-1980

Chief Joseph Spelman died of pancreatic cancer one year after I arrived (July 1971). He was in his forties, had moved from Vermont, and created an M.E. office from the wreckage of a coroner system in which the two lawyers who had preceded him would sell the requested cause of death to the family from a variable price menu. His valuable deputy, Joseph (Ed) Campbell had also died prematurely a year before I arrived. The next senior assistant, Jim Weston, left for Salt Lake City, subsequently New Mexico, shortly before I arrived. That left Robert Catherman, Halbert Fillinger, Marvin Aronson and Robert Segal as my colleagues. Aronson was appointed Chief M.E., over Spelman's posthumous objections, since he had actively campaigned for Catherman on his deathbed.

Subsequent and prior events revealed the reason for the appointment. A year before my arrival, a policeman was shot accidentally by a handgun dropped by a motorist who had been stopped. The circumstances were clearly those of a dropped revolver without hammer safety stop whose hammer hit the ground and the trajectory was vertically upward through the officer's body. Catherman handled the case and was backed up by Spelman in the accidental ruling. Police Chief Rizzo, later to become mayor, was upset they could not charge first degree homicide, and decided to ensure a more pliable future medical examiner.

This pliability was later suggested in an incident involving Gregg Walter, an alcoholic newspaper reporter who wrote the article alleging favoritism from the D.A. (Richard Sprague) in failing to prosecute a State Police chief's son who punched a middle aged homosexual attempting to seduce him and killed him with a basal subarachnoid from lacerated vertebral artery. The resulting lawsuit against the Philadelphia Inquirer brought the highest libel award in U.S. history for Sprague. The assailant later became an anesthesiologist and has subsequently had his license revoked for substance abuse.

A number of copies of medical reports related to Walter were circulated in Philadelphia, and they were found to be derived from records subpoenaed from the hospital by the medical examiner. The reason given was that an anonymous phone call was received by the medical examiner claiming that an unknown in the morgue was Walter and the records ostensibly confirmed the identification. The reputation of the office, and particularly of Dr. Aronson, thereafter were impaired.

The result of this declining reputation came later, when the MOVE organization, a rabid militant black movement occupying a small section of the city, so inflamed the community that the police rashly dropped a bomb igniting their houses, and killing a number of innocent people. The Health Department, which oversees the Medical Examiner's Office had so little faith in Aronson at this time and were afraid that his involvement would smack of collusion with the police that they forbad him from having anything to do with the medical examiner's part in the investigation, and he was essentially removed from his official post.

Drs. Spelman and Campbell had organized an office with great promise. They initiated an excellent monitoring system for hospital deaths which slowly degenerated after they were gone. The supreme irony was that a therapeutic misadventure, the very phrase created by Ed Campbell, took his life, after the diagnosis of his lung cancer was delayed by V.A. yearly chest radiology malfunction, by exsanguination from breakdown of his lobectomy stump. The untimely deaths of these two fine pathologists prevented the advance of an office which had shown great promise.

Dr. Marie Valdes-Dapena had a close association with the Office of the Medical Examiner, until she moved to Miami. The era of Marie Noe's offspring deaths was over when I arrived in Philadelphia, but it was still well remembered. I never agreed with Dapena's fervent belief in a single entity causing unexplained infant deaths, nor with her refusal to believe that adults could harm infants. It was during my term in Philadelphia that Margaret Boykin brought three infants whom she had babysat into a local emergency room in fairly close succession. All were labeled SIDS by the medical examiner, but an emergency room nurse was suspicious and called the police. Boykin quickly confessed to suffocating all of them. At the trial, Dapena testified for the defense that a pathologist could use only physical evidence at autopsy to opine on a cause of death, to the exclusion of ancillary evidence. The judge, to his credit, was not convinced.

It is ironic that the next fashionable COD for infants, the apnea hypothesis of Steinschneider, turned out to be based on two siblings who had been homicidally smothered by their mother, and that Marie Noe was destined to confess to smothering her brood and also to be convicted.

My time in Philadelphia was marked by plentiful case experience, interaction with excellent colleagues, and laying the groundwork for my next job in an outlying county. The worst part of that job was the long commute from another outlying county (despite official residency requirements).

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Joseph H. Davis, M.D.

1924-2013



April, 2011

Why did I select forensic pathology as a career?

In June, 1954 my U S Public Health Service career was ending in New Orleans. I joined the Louisiana State University Department of Pathology faculty. Some pay was derived from autopsies performed for the Coroner of Orleans Parish.

Extremely interesting was anatomic pathology of fatal untreated natural diseases, trauma and intoxications. The role of alcohol in traffic fatalities was striking. None of these had been my experience in prior pathology practice.

Stanley H. Durlacher, M.D. was the LSU faculty director of the Laboratory of the Coroner's Office. In late 1955 he was chosen to become the first Chief Medical Examiner of a new Dade County Medical Examiner Office (Miami). He appointed me as an Assistant Medical Examiner. The office initially opened at Noon of March 15, 1956 in a former funeral home ambulance garage until an existing former laboratory animal building could be altered. This was adjacent to county operated Jackson Memorial Hospital which received clinical services from the University of Miami School of Medicine. Both Dr. Durlacher and I were granted faculty appointments.

Dr. Durlacher was thirteen years my senior, had formerly been with Dr. Russell Fisher in Baltimore and held a faculty appointment at the University of Maryland.

The former laboratory animal facility was a primitive tiny two room building used by us until the first real medical examiner facility was being planned and constructed.

In February, 1957 Dr. Durlacher attended the American Academy of Forensic Sciences at the Drake Hotel in Chicago, its annual meeting place. While discussing a paper he collapsed from spontaneous rupture of an aneurysm of the Circle of Willis and died in March. The County

Commission appointed me as Acting Chief Medical Examiner and made it permanent in June, 1958.

As with any medical practice, routine Forensic Pathology practice is not difficult to grasp. However a minority of cases involve cognitive thinking and careful ongoing correlation with developing circumstantial information. It was up to me to learn how to cope with complex cases, to operate an office, to integrate my services into the needs of police, prosecutor, courts, families, funeral homes, fellow physicians in clinical practice and the public at large.

Without a mentor it was up to me to develop systems best suited to the community. I constantly experimented with different approaches to documentation of findings, ways of presenting conclusions and defusing potential conflicts. I was open to suggestions from all whom I served. My home telephone was listed. I was available 24/7.

It became apparent that no single approach works for the infinite number of variables that permeate all sudden unexpected death investigations. Rote performance based on prior training elsewhere is not applicable.

Time constraints did not permit me to study how other contemporary forensic pathology agencies administered and developed case investigations and conclusions. If a problem in another office became publicized I sought the details to avoid making the same mistakes.

I had some limited forensic pathology exposure prior to becoming a pathologist. While serving as a medical corpsman in the U.S. Army during WW-II I assisted in the first autopsy I ever witnessed. A soldier, William Raspberry, vomited frankfurter fragments during an appendectomy and aspirated.

Later during my second year at the Long Island College of Medicine, now SUNY Downstate, I observed numerous New York City Medical Examiner autopsies conducted at Kings County Hospital, Brooklyn.

Nearly a decade later, while detached by the U.S. Public Health Service to the Bureau of Indian Affairs, I served as the only physician at the small hospital on the Ft. Belknap Indian Reservation, Montana. About 85 miles away was the Rocky Boy Indian Reservation at which I conducted a weekly clinic. At Rocky Boy two men lived in a tiny cabin which caught fire while they were known to be intoxicated from illegal smuggled liquor. Rumors spread that they might have been murdered and the fire set. I was requested to determine if they died before the fire. I borrowed a pocket knife from an onlooker, opened the tracheas of the charred bodies and demonstrated to the witnesses the inhaled smoke soot and highly pink mucosa. That seemed reasonable to me although I had never received any pathology residency training.

Places and times I served as Chief Medical Examiner

Dade County, now designated Miami-Dade County, was my only home base for 40 years.

Major accomplishments as Chief Medical Examiner

A. As a medical student I learned the value of integration of history, physical examination and laboratory testing. The diagnostic approach was from the general to the specific.

As a pathologist in residency training the opposite seemed to be the case, diagnosis based upon gross and microscopic patterns and/or laboratory results.

When faced with medical examiner responsibilities to determine the cause of death, I learned that the general to specific approach was superior to a simple viewing of an autopsy based pattern. Circumstances as derived from police and other sources constituted the first aspect of history. Social and past medical histories made up the second. The environment involved was the third component. Together they created investigative hypotheses which shaped the autopsy and laboratory investigations. The final result is evidentiary opinion being based upon the total data base and suitable in court.

I also learned that initial circumstance history is usually incomplete. The telephone was the most vital instrument to use in diagnosis. Case example: Sudden death of a baseball player. Initial history: "Two players collided while each sought to catch a foul ball. One collapsed and was pronounced dead at the hospital." Autopsy disclosed no anatomic evidence of disease or injury. By use of the telephone I contacted the other player. I learned that the right elbow of the surviving player had struck the precordium of the victim followed by a walk of few steps before collapse. From rescue paramedics I learned that ventricular fibrillation had been determined on arrival. Cause of death listed on certificate: Ventricular fibrillation due to blow to precordium. In the descriptive part of the certificate I summarized the impact.

My analysis: Impact occurred at the critical part of the cardiac cycle and induced ventricular fibrillation. The brain contained sufficient oxygen to permit the final steps before collapse. I do not use words that are meaningless to the reader of the certificate or autopsy such as "commotio cordis."

B. Teaching others that the autopsy must never be rote or consist of a pre-existing printed form. The narrative must be flexible with great detail about the cardiovascular system and appropriate microscopic slides when an abnormal cardiac rhythm occurred. In a firearm death the emphasis is upon the wound surface and pathway if the victim is youthful without evidence of heart disease. In that event the observations should clearly indicate which abnormality caused the death.

When a puzzling case arises, my advice to my associates is "Pretend you do not have a dead body. Analyze the circumstances and ask yourself what injuries or findings would you expect to observe at autopsy." This is a useful method to apply in selected cases.

C. Self-learning that each medical examiner case is not the same as other similarly categorized cases. I heard a forensic pathologist describe atherosclerotic coronary artery diseases as "all the same." To me, each case has unique aspects that create a better comprehension of why some die earlier with less obvious anatomic disease than others who survive with more severe disease.

D. During my tenure we performed over 81,000 autopsies, 12% by me. My policy was to bring into our office for direct viewing and/or autopsy every medical examiner case referred to us except those that involved only a cremation review.

The reason for bringing in the cases was to assure that the physical evidence - the body - was consistent with the circumstances preceding hospitalization. I automatically sent a copy of the autopsy report to the medical records librarian of the hospital.

I considered those 81,000 case files as the textbook of forensic pathology and medical examiner service. Each file contains police circumstances, additional history, appropriate medical records, newspaper clippings, messages, the gross and microscopic autopsy, laboratory results and photographs. Elsewhere paraffin blocks, microscopic slides and the hard copy case files are permanently retained. Why? Our files contain unique information suitable for retrospective social and medical research. Example: We possess detailed information about poisons that are no longer available but may be encountered under unusual circumstances. Another reason is that textbooks and published references are incomplete and ill-suited for problem solving. If I am to testify in court, it is best if I rely upon real experiences rather than books.

In summary, the County has changed over the decades. The poisons, the types of death, patterns of automobile injury, drowning circumstances, violence and so forth are permanently documented for review and study.

Education has been a core function of the office. One year we kept a record of how many live audience people that members of our staff addressed: Twenty-two thousand people.

Efforts on behalf of forensic pathology and the forensic sciences

Two Broad Categories – General and Specific

General: Throughout my tenure as Director of the Medical Examiner Department whenever possible the choice of response to problems and requests was in terms of "Preaching the Gospel of Forensic Pathology service to all." I never said "No" to a request. People individually and those representing agencies formerly ignorant of the value of medical examiner service became aware and appreciative.

Specific: Throughout my career I received requests to participate in programs conducted by service organizations. I never declined even though not conversant with the details of operation. Ignorance was not a cause for denial but a reason to accept and learn. I also joined

the Miami Rotary Club exposing my office to myriads of "movers and shakers" of the community. I rose through the ranks of organized medicine, served as president of the sixth largest medical society in the U.S. creating appreciation of the medical examiner as a valuable branch of medicine. As a committee chairman of county and state medical societies I learned the rudiments of by-laws preparation, organizational ethics, and legislative processes. Demonstration of the benefit of medical examiner service to others was also of benefit to me from the knowledge gained.

The list of interactions over the 40 years is too long to list and much detail has faded from memory. NAME and the AAFS are a given.

Recollections of places I have trained and worked

Not applicable as most of my training and working is centered about Miami-Dade County and the University of Miami.

Comments about people who trained me and from whom I have learned

Had he lived, Dr. Durlacher, thirteen years my senior, would have been my mentor. Because of his early death I was self-taught. I did make it a practice to pay attention to others, how they performed, cases they discussed and acquire as much benefit from them as possible. I have sat through many a lecture presented by one of my peers, a lecture that I could have presented. However, I always learned something of benefit about case investigations and methods of presenting concepts to an audience.

Recollections about people I have trained

First and foremost – I never trained anybody. I only gave them an opportunity to learn. Each trainee, medical students locally and from abroad, Forensic Pathology residents seeking American Board of Pathology certification in the subspecialty of Forensic Pathology, pathologists or those in a variations of legal medicine from abroad, and others involved in visiting with us to further their careers, and those attending specialized classes, each brought with them some specialized knowledge or experience that would expand the horizon of knowledge available to all.

I always sought to find out what hobbies or special interests that a visitor had. That information could be shared with others.

Most attendees were motivated. Some were less so inclined. The numbers are vast and beyond my memory. I am unable to recollect all that should be mentioned. Faded memory permits me to recall a few.

Jack Temple was a member of the Premed Honor Society at the University of Miami. From an address I gave to his group, he and Rick Bossardt spent the summer. Before they entered the University of Miami School of Medicine, they had already had a paper accepted for publication

in the July, 1975 Journal of Forensic Sciences. It concerned corrosion of steel tanks used for Scuba diving. After achieving his doctorate degree, Dr. Temple became an Internist and has been with the U/M faculty to this date. He has achieved the highest of teaching honors in his outstanding career.

Prior to the creation of the Forensic Pathology subspecialty board, pathologists were already forensic pathologists, many of whom I was privileged to meet during my early years. The first pathologist who joined our office in a full time capacity was Dr. Raymond Justi, whose clear thinking mind and ability to choose correct and meaningful English during stress was superb and a wonder to me. Ray could always observe the core of problems and their solutions. He came from humble Italian roots. I recall how his father could never understand how he could still be a doctor and do what he did as a medical examiner. After he left our office to join an active local pathology group, he was an active member of the Aesculapian Society, a small group of local physicians representing different medical specialties from private practice and the University. Ray always presented erudite discussions at our meetings.

When our formal Forensic Pathology residency program began, my first official resident was Joseph Rupp, Ph.D., M.D. who before retirement was the Chief Medical Examiner in Corpus Christi, Texas. I shall never forget his unfettered enthusiasm over escaping from the Ph.D. land of experimental mice and joining the stimulating field of Forensic Pathology. His slogan was: "The Scene's the Thing!" When he discussed a scene, the first photograph was the building in which the death occurred. His pet introductory phrase was "This is a house" followed by a well edited and presented case.

Our former residents are scattered widely over North America including Puerto Rico. Most hold or have held positions of leadership. Space plus a fading memory prevent me from giving them richly deserved credit.

One former resident, Dr. Jay Barnhart, now retired and living in Rockledge, Florida, stands out in my memory for several reasons, one being that I see him now and then. The first outstanding memory is that Dr. Barnhart and his brother conducted a family practice on the Eastern Shore of Maryland for 17 years. When the practice of medicine became subservient to third parties, his brother joined the U.S. Air Force and Jay obtained his boards in Pathology and then came to us for his Forensic Pathology. In his former days, he often encountered medical examiner deaths in his portion of the State remote from the central office in Baltimore.

What he brought with him was diagnostic skills well beyond the ken of pathologists plus the management skills to operate an agency. After he was with me for a week, I would opine that when he arrived, I could have given him the keys to the office and he could have run it as well, if not better, than I. I called him "Our real doctor" in view of his clinical skills.

He had many other attributes, an undergraduate degree in botany which resulted in him becoming a docent in Fairchild Tropical Garden, one of the great arboretums of the world.

Another attribute was music. He is an accomplished pianist and organist. Close by lives Lt. Marshall Frank, whom I knew when he was a key member of the Homicide Bureau of the Miami-Dade Police Department. After retiring from a distinguished law enforcement career, he went on with further governmental careers until he became fully retired. Marshall surprised me once when I had purchased a violin. He asked to try it and produced the most intricate and perfect Paganini violin music one could hear. Surprised, I inquired about his skill. "Before becoming a cop I was a concert violinist." He has written a number of excellent books that are worth reading by any forensic pathologist.

Today he and Dr. Barnhart perform a service to patients confined to nursing homes and elder facilities. They jointly present gratis musical programs to these patients.

Other attendees to our office are represented in legal medicine offices in Europe and Asia. Their interactions with our department have been mutually beneficial.

Major controversies and frustrations in completing my responsibilities

When our office commenced operation at Noon on March 15, 1956, no such service from a central office existed in Dade County. Surgeons became used to certifying trauma deaths and continued to do despite repeated educational programs and informational letters to hospitals of the community. Time was devoted to tracking down the details of deaths that should have been reported but had not. Getting upset was not an option because causing change in people long used to a certain system or lack thereof usually equates with a ten year period when the solution is their retirement. This medical examiner always used persuasion and his time and resources to solve those dilemmas.

In 1885 Florida's Constitutional revision abolished coroners and gave the Justices of the Peace in each county the authority to hold inquests. Our enabling legislation, Chapter 30228, Laws of Florida, 1955 skirted the issue and let us exist as a parallel agency. For the most part there was little problem but occasionally one Peace Justice would want to rule opposite to what we had already certified. My response to controversy was never become combative. We were already operating at maximum and confrontations were non-productive. My advice privately to my compatriots was to go around any obstruction. "Sooner or later the problem will be solved by change in status, retirement, death or indictment." Another maxim was what Thumper, the rabbit in the cartoon, was told by his mother, "If you can't say anything nice, don't say anything at all." I would never blame others even in private because private ceases to be private if mentioned to even one person.

Another means to avoid controversies is to remain aware of the problems of other medical examiners that may be publicized. Gather staff and inquire "What are they being criticized about that we are also doing? How can we modify what we are doing to avoid the same problem?" A 5 inch thick three ring binder of news clippings and background data about other medical examiners being publicly criticized exists in the Miami office.

Another example: The Investigations Bureau chief and the Director of Operations enter my office, "We have a problem. We have lost a body." My reply, "First - obtain for me a second by second inch by inch complete reconstruction of the events associated with the loss. Second – prepare for me a list of recommendations of changes in our procedures to minimize this from occurring again. Third – do not tell me whose fault it is. I know that already. It is mine. The buck stops on my desk."

Almost always those involved in the error are excellent loyal employees. Placing blame is no way to correct a problem that has occurred.

Academic involvement through research, education and training

Dr. Durlacher would not accept a position in Dade County unless granted faculty status at the University of Miami. He and I were faculty members of LSU when he was being considered. He brought coronary artery research projects from the University of Maryland to LSU and carried them to the University of Miami. We were granted faculty status. In 1967 I was appointed Professor and granted tenure although my major income was as a County employee.

During the early days I had 12 teaching hours for the 4th year medical students. I presented forensic pathology and arranged for others to cover aspects of legal medicine.

Over time the medical schools of the United States underwent intensive changes in their curriculum. I lost the hours in the senior class and none were forthcoming for other years.

My policy was to expand each case with as much background information as possible. If a medical examiner death occurred in a hospital, pertinent copies of the medical record accompanied the body and were incorporated into our records. My idea was to create a means for retrospective research.

This policy paid off in my relationship with faculty members involved in other departments in the medical school. I made the records available to faculty members when their research concerned matters within our records. I would not consider being an author of papers unless I had personally contributed. My bibliography reflects a number of jointly authored papers covering a myriad of subjects.

The University of Miami in recent years developed a program to honor faculty members who, in the opinion of faculty throughout the University, had made outstanding contributions to the University. Over the years three faculty members I had worked with received this honor. They invited me to the ceremony marking the award. Much to my surprise they publicly thanked me for helping them initiate their research.

One of the most outstanding University of Miami achievements, by virtue of its worldwide implementation, was the mid-1960's creation of the concept of rescue paramedic responders being trained to perform advanced cardiac life support (ACLS). I had welcomed the City of

Miami Fire Department rescue personnel to observe autopsies upon cases that they had been involved with. In those days, it was only the Red Cross first aid measures that were available.

Dr. Eugene Nagel, recent addition to the Department of Anesthesiology from Johns Hopkins Hospital teamed up with Dr. Jim Hirschman, private practice of cardiology and also amateur radio operator. Dr. Hirschman had created an ECG telemeter device which allowed him to receive an ECG from five thousand miles away, interpret it and radio back the results, all from his home in Miami. Dr. Nagel, an electrical engineer prior to medical school, expanded his Johns Hopkins resuscitation knowledge into the concept of fire rescue paramedics operating ECG machines and defibrillators. Captain Manuel Padron, head of the Rescue team of the Miami Fire Department had the staff ready and willing to learn. I was involved with them as my office had the space for training and I could assist the firemen in the anatomy and physiology of the intubation and resuscitation process. It was a success. I well remember the first person in world history who collapsed upon the sidewalk in ventricular fibrillation and was successfully resuscitated to be discharged from the hospital back to his former activity. He used to visit the Fire Rescue Crew who saved him to express his appreciation. A few years ago the Miami Fire Department arranged for a celebration in memory of those pioneer days. Attending were those still alive who were part of the original crews. Drs. Nagel, Hirschman and I participated. I have retained the plaque which designated each of us as a "Pioneer in Resuscitation".

I participated in the genesis of other University programs. One was to establish the School of Engineering as a Center for Crash Injury Research. Out of this came many innovations plus a close working relationship with Dr. William Haddon, the first director of the National Highway Traffic Safety Administration.

The genesis of the Department of Epidemiology and Public Health of the University involved me. Its first emphasis was a Pesticide Research Center. At that time Dade County had the highest death rate from organophosphate poisoning in the United States.

The Ryder Trauma Center of the University of Miami did not exist. Evidence to support the concept lay within my files where we demonstrated the loss of life from lack of proper trauma care. I participated in the monthly fatality review meetings…a great learning process for me.

The University of Miami Bone and Tissue Bank was established in the University by Dr. Theodore Malinin. Our cases were sources for sterile specimens for preparation and transplantation. When we built our three building complex at the north-east corner of the medical center complex, we included a five room sterile autopsy suite. The value of sterile techniques is that large bones, including a hemi-pelvis, can be transplanted. This is not possible with non-sterile post autopsy recovery followed by sterilization.

Many other relationships have occurred and are maintained to this day.

Legislative change in which I was involved

A. Initial legislation concerned barbiturates in Florida in early 1960's.

B. (1) Chapter 406, Medical Examiner Act, Florida Statutes enacted in 1970. I played a central role in developing concepts that would apply to a state where an automobile driver traveling from Key West to Chicago found the half way point to be Pensacola, Florida in another time zone, a state with widespread demographic, fiscal, political differences.

(2) After enactment of Chapter 406, F.S. residual portions of prior local medical examiner or pathology service within various Judicial Circuits remained on the books and were a source of irritation to those needing access to records. I arranged for a quiet behind the scenes introduction of a "housekeeping bill" to repeal those bothersome laws.

C. Health providers mandatory reporting of gunshot wounds legislation: When we commenced in 1956 I found reporting was already custom and was thought by all to be law. However, there was no Florida law. I contacted Attorney Generals throughout the U.S. and received copies of what already existed, then arranged with police lobbyists to introduce corrective legislation.

D. Implied Consent and Chemical Test Law for Florida: My plan was a 20 year period, 5 years to collect data, 5 years to educate Dade County, 5 years of State-wide education and 5 years to obtain Legislative and Governor approval. It only took 11 years because the Dade County Citizens Safety Council was revitalized…and I was on its Board and eventual President.

E. Fleeing drivers became a crime: No law forbid a driver to flee when ordered to stop by a law enforcement officer. I was asked by police how many deaths had been caused by "police pursuit?" Within a few days I had compiled the list, wrote a summary and created a proper title "Deaths Caused by Fleeing Drivers" thereby putting the onus upon the driver, not the police. When it came to the final vote of the Legislature each member had a copy of my document on his desk.

F. Participated in changing Pesticide Regulations of the State of Florida: In 1965 Dade County had the highest death rate from organophosphate (mostly parathion) pesticides in the United States. That year we utilized on our agricultural fields enough parathion to kill every man, woman and child in the entire world. Anyone could purchase a 3 pound sack of 15% wettable parathion powder sufficient to kill 3000 people. Glass gallon jugs of 80% parathion concentrate could be purchased by anyone. Accidental deaths were common, suicides less so, and homicides least...but all occurred and many required my personal scene visitation and reconstruction of events.

G. At the Federal level, I testified pertaining to the white phosphorous edible paste used to kill roaches and sold to the general public. We had eleven deaths, one child having "smoke issuing from rectum" noted in the hospital record prior to death. The result was decertification of this pesticide for use by the general public.

H. When the southern leg of Interstate 95 was completed in Dade County, I was appalled to note an absence of proper median separation of traffic lanes. I contacted the Chairman of the State Road Board with data back up with the result that I-95 safety omission was corrected.

I. At the Federal level I participated in the setting of priorities for post-crash rescue efforts of the 16 Standards set by the National Highway Traffic Safety Administration and later for the removal of lethal automobile hood ornaments.

My contributions to the field of forensic pathology

When we commenced in 1956, the United States lacked forensic pathology services in many large areas. Governmental programs which we take for granted today did not exist.

Often I was called upon by citizens or police or prosecutors for assistance when these gaps occurred. My rule was never to say "No" but to step in and help to what extent capable. The Williams Act of 1970 established OSHA. Before that time government did little to promote safer industrial methods. I recall one case where a cable under 18,000 pounds tension “broke” (as notified by police) and a worker was killed. I determined it was not caused by a break but by use of an improper sized cable splicer. My documented facts and photographs were sent by me to the manufacturer with a recommendation that a splicer be color coded as to size as well as numbered.

Every request that had nothing to do with my duties under the law was honored pro bono to demonstrate the value of medical examiner service.

Perspectives I gained as a medical examiner

When I started I had never been trained to appreciate trauma, cause and effect of social problems, the role of toxicology and engineering sciences in forensics as well as forensic psychiatry or other specialties that exist within or without the American Academy of Forensic Sciences.

With 40 years of learning experience I have gained a much wider sense of the world and its peoples and their variations.

A forensic pathologist medical examiner must be a generalist with some familiarity of a multitude of things having little to do with traditional practice of medicine.

The medical examiner should not consider himself as an expert in all these fields but should be aware of what the jobs of others require and how they may be utilized in problem solving.

I am still learning from what I encounter on the Internet and Cable Television via such channels as Travel, History, Discovery and Health.

Difficult cases I have managed

A. When it comes to homicide by violence, experienced homicide detectives usually have figured out what happened before I arrived. Non-homicide cases tend to be most difficult because police focus upon crime.

Medical examiner cases for the most part are rather simple to evaluate in a satisfactory manner if one does a good job and continues to be aware of the potential for error in any case.

B. A minority of medical examiner cases are more difficult in terms of "Negative" autopsy findings where which many consider as no evidence as to cause. To me "negative" does not exist. We merely have not yet developed the means for detection of all abnormalities by existing laboratory methods. Only recently discovered is the role of genetics which determine those hearts prone to dysrhythmia, anatomic findings notwithstanding.

Circumstantial reconstruction requires personal attention to detail omitted in the initial report. The telephone is the most important tool to solve such cases. The prior example of the two baseball players who collided and one died from ventricular fibrillation from a blow to the precordium demonstrates the value of follow up telephone inquiries.

C. Environmental causes are often subtle and require personal attention to circumstantial reconstruction.

(1) Defective electric tools may lead to death by ventricular fibrillation without electro-thermal burns of skin. Example: On a wet day a man was trimming his lawn with an electric edger. His wife called to him that lunch was ready. When he did not come in she found him dead alongside the operating trimmer. Electrical death must be ruled out by a careful evaluation of the tool.

It was equipped with a properly polarized plug. The switch on the handle had failed. The owner bypassed the defective switch using an external in-line metal cased switch with no adequate grounding mechanism. The energized wire was loose enough to touch the metal case intermittently depending upon position. It was a perfect trap. When the wife called to him to come in for lunch, he reached down to push the poorly installed switch with its metal case. Wet feet plus 110 volt 60 HZ was perfect to induce ventricular fibrillation.

Because no adequate system exists to analyze defective tools, I assumed that function. An autopsy upon the tool, wiring or device is the most important part of a medical examiner investigation of an electrical death. A long shelf in our conference room displayed a large amount of electrical tools that have caused deaths, one manufactured in the 1930's.

(2) Much South Florida coast is mangrove swamp with deep anaerobic rotted vegetation soil, perfect for generation of Hydrogen Sulfide gas. Many think of Hydrogen Sulfide as merely rotten egg smell but few realize that it is as toxic as Hydrogen Cyanide gas. At lethal

concentration olfactory senses fail to detect its presence. A ditch digger collapses. Another goes to the rescue and dies. Too late is recognition of the danger.

(3) Carbon Monoxide from many sources has always been a danger, poorly understood by initial responders. In our New Orleans toxicology laboratory the wife of an employee stayed behind while others went to lunch. Upon their return she was found almost unconscious. All she could recall was feeling ill and inability to depart from the premises. A gas operated wall mounted water still was in operation. We called the gas company to investigate. The company technician walked in and, with a heavy New Orleans accent, spoke these words, "I don't smell no monoxide" and departed. We purchased a Mine Safety Appliance carbon monoxide detector and became the unofficial testers of suspected carbon monoxide hazards. I recall being dispatched to a scene where a police officer had "killed his pregnant wife, her mother and then himself." I found the defective space heater in operation that cool evening. Another case was a call for me to respond to the scene of a baby death due to the neglect of drug intoxicated parents. I detected the Servel gas refrigerator responsible for the death, tested its gaseous effluent and prevented a wrongful arrest.

Some personal carbon monoxide death investigations have resulted in retrospective tracing from one scene to another and finally to a defective automobile exhaust system. All such cases are complex and may easily be overlooked by medical examiner or police investigators.

How I dealt with job-related stresses, anxiety and personal performance issues

I am a private person not apt to tell others how I feel in terms of stress, anxiety, personal discomfort or problems. I do not care to share them with others because others carry their own burdens. I do not believe in medications or alcohol to alleviate problems because my investigations teach me otherwise.

I can recall being at the shopping center with my wife and feeling tense….so I went to the magazine rack and obtained a magazine dealing with mechanical matters, automobile, firearms or whatever was inexpensive mind calming information.

In the initial years of medical school three of us shared an apartment. Our slogan was a joking "Push, Grind, Shove, Study." In actual practice we did not substitute partying when study came first.

My father was a self-made man who left home at age 17 without a high school degree. His first job was driving a horse drawn delivery wagon serving German speaking bakers. He went to night school, learned German and when sufficiently fluent spoke it on the route. Sales rose dramatically. A key corporate executive noticed and appreciated the work ethic. As that executive rose to head up a major company, my father also made out well in the corporate world. I mention this because all too frequently the tendency is to equate work and devotion to duty with paper degrees. Actually I prefer stress to stay active. All organisms require a degree

of stress in order not to fail. The innovators of the late 19th Century in the United States were successful by their own work, not formal education.

As for me, I always worked to full capacity and ability while taking on tasks outside my responsibilities because I learned and others required my assistance. Often I would work 24 hours round the clock due to autopsies, scenes, meetings and court. Twice I recall 48 hours without sleep in order to keep abreast.

My goal was to do the best job possible and act as an example to others in terms of work ethic.

Of course none of this would have been possible without the consideration and care from Rose Marie, my wife at my side for 49 ½ years. Even today my adult children reliving their childhood comment on how she kept family problems on her side of the relationship.

Perhaps the reader may note the time I have devoted to these NAME memoirs at 86 years of age. Why? It is the continuation of a perpetual desire to stimulate those who may be receptive to self-improvement.

Aside: On February 2, 2011 a luncheon was held in my honor at the Florida State University Club sponsored by former police investigators some who were present when our office opened in 1956. They all appreciated what I taught them. In response I pointed out that I also learned from them.

Am I prideful? No, I am humbled and somewhat embarrassed by such attention.

Not all medical examiners can enjoy the freedom to perform as did I. They are locked into legal, political and administrative systems unbending in operation. I was fortunate to have the opportunity to enter into a medical examiner system that was new and not bound by precedent. Shortly thereafter the County embarked upon a new concept for Florida, the Home Rule Charter with a Manager-Commission governing system eager to demonstrate success.

The County Manager has important functions that are lightning rods – police, property assessment, taxes, County Commissioners. The Medical Examiner Department is one of the smallest. I felt it was my job never to bother the Manager and to perform in a manner that would reflect well upon him and the County Commissioners.

Other recollections

Innumerable recollections come to mind which involve governmental and administrative systems, records management, death investigation systems, history, etc. Time and space are limited. Previously cited are some. Space and limitations of memory preclude expansion of this category.

Advice for forensic pathologists entering the field

A. Each case requires PRE-AUTOPSY ANALYSIS of three generic components:
-CIRCUMSTANCES based upon witness and physical evidence at sites of onset, transport, and determination of death
-HISTORY
(a) Medical
(b) Social.
-ENVIRONMENT which provides causative factors and alterations of evidence or artifacts.

These generate preliminary "INVESTIGATIVE HYPOTHESES" which shape the autopsy plan suitable for final CORRELATION of all information plus ANTICIPATION of future needs or questions concerning criminal, civil or humanitarian factors.

B. AUTOPSY requires investigative data based sequence of dissection plus sites of emphasis and detail of documentation including photographs. Text must create in the mind of the reader a correct visualization of what was observed.

At the end of the gross autopsy report gross autopsy findings should be listed in logical sequence based upon material facts of the case.

C. LABORATORY Tests for evidence of toxins, alteration of body chemistry, infectious agents and genetic markers.
(a) Require proper specimens and containers for subsequent determination of test materials and procedures.
(b) Require microscopic slides with emphasis upon those tissues affected by disease or injury.
(c) Require logical listing of these additional findings.

D. PHOTOGRAPHS require proper composition and include orientation views of all close-up photographs.

The final report contains
(a) Facts and data constituting the WORK PRODUCT of the Medical Examiner investigation. Do not comingle work product of police, other physicians or agencies. Keep that information in the file separate from the Medical Examiner work product component.
(b) Cause of death for the death certificate and final EVIDENTIATRY opinion constitutes the statutory duty of the Medical Examiner in a manner acceptable to rules of court admissibility.

Maintain awareness that the officers of a criminal court require the medical examiner to participate in the determination of the CORPUS DELICTI, the "*body of the crime*" which must be placed into evidence BEFORE proceeding with the accusatory phase leading to conviction. The Corpus delicti has three components:

A. IDENTITY meaning that the dead body being discussed in court is the same as that examined by police and witnesses including the Medical Examiner. The Medical Examiner must assure that correct procedures are carried out before the body leaves his jurisdiction.
B. DEATH NOT FROM NATURAL CAUSES requires a critical role by the Medical Examiner with input from police who have access to witnesses.
C. DEATH DUE TO CRIMINAL ACT of another is mainly a police matter but does require input from the Medical Examiner.

The Medical Examiner is expected to respond to ordinary witness questions plus expert witness questions often in the form of hypothetical questions. The most sage advice is remain ever humble, neutral, help each questioner whether prosecutor or defense while maintaining an aura of fairness and lack of advocacy.

No death is ever identical in all respects to any other. Variables are infinite. Text books and peers are never familiar with all variables. Accordingly do not deny what seems new to the Medical Examiner but seek to investigate fully. Be curious about everything. The Medical Examiner must be a generalist because death circumstances have an infinite number of variables. As far back as I can remember, I have always been curious and willing to learn more about any topic.

Finally my most important advice: Never use the term "It is not my job" when someone seeks help. It is the job of the Medical Examiner to assist that person into finding a solution to the problem, often by simple referral to the proper person or agency. Being curious about anything and everything expands the ability to assist others in need.

How my work experience changed me, changed my life, and what I learned from my work.

In the beginning of my career as a forensic pathologist I was influenced by the classical teaching of pathology to extrapolate from the smallest piece of evidence and render a "diagnosis." A few cases into active forensic pathology practice taught me that an autopsy centered investigation with little or poor circumstantial information has a potential for error. Later it became apparent that the needs of others for my work product went far afield from a statutory duty to "determine the cause of death." I also found that Webster's Unabridged Dictionary has a long list of meanings for "cause."

I also found that others expected far more than minimal statutory requirements.

The Medical Examiner is a creation of the Legislature and is subject to the whims of that agency. The only political influence the Medical Examiner enjoys is the respect of others from all walks of life and whose opinions influence legislators and others in government.

Youth creates impatience from which flows intolerance. Knowledge is restricted by a limited life experience. Work experience and time create tolerance of the customs of others. That does

not mean that I adopt all religious and political ideologies. I have become more politically conservative but I will listen to those with different views.

Humans do not change from one generation to another. When in the U.S. Army during WW-II the Army placed me into the Army Specialized Training Corps. It was a college program to create more specialized personnel for the continuation of the total war. Part of this entailed being detached to Princeton University for an accelerated pre-medicine non-degree course. Obligatory reading was a recently published book by biologist and Professor of Natural History Edwin Grant Conklin, entitled *Man, Real and Ideal*. One major theme is that the human race will remain the same as long as Homo sapiens maintains its genetic status as Homo sapiens.

When framers of our Constitution met in convention in 1787, many were superbly educated in the classic civilizations of antiquity, their rise and their fall. That knowledge of learning from history enabled the creation of a model republic. Few of each successive generations appreciate what those at the Constitutional Convention discussed. We owe James Madison an everlasting appreciation for his shorthand documentation of the proceedings. I urge all readers of these memoirs to review that document.

Of all the minds of that time, Thomas Jefferson stands out in being a brilliant superbly educated generalist who possessed great cognitive skills. John F. Kennedy held a dinner in the White House for a group of the brightest minds in the nation at that time. He made this statement: "This is perhaps the assembly of the most intelligence ever to gather at one time in the White House with the exception of when Thomas Jefferson dined alone."

The Internet has provided a means for distribution of excerpts from writings and speeches of such great people. Unfortunately, most Internet excerpts are taken out of context and lack proper attribution. It is well to read the total document instead of blind acceptance of an excerpt.

How has forensic pathology changed during my career, for the better and for the worse?

A. BETTER: Training programs are greater in number as are Board Certified Forensic Pathologists. Standards for the programs are more rigorous than before.
B. WORSE: The poor economy and fixed political structures in many areas of the U.S. has decreased the pool of applicants. In addition the removal of autopsy percentages required for hospital deaths has created a pool of potential forensic pathologists who lack basic skills and tenets for autopsy performance.
C. LACK OF EDUCATION IN APPLICATION OF LOGIC to performance and interpretation of autopsies and investigations. I am aware of only one Pathology training program which includes teaching and application of logic necessary for proper interpretation of autopsies. .

I make a point of asking a Ph.D. degreed individual the subject of the Doctorate Dissertation. Much to my delight, Jon Nordby, Ph.D. of the General Section of the AAFS answered "logic." I told him I possessed the 60 volume set Great Books of the Western World. When I studied

logic as presented by the great minds of the past, nothing seemed applicable to the practice of Forensic Pathology.

In the past Dr. Nordby had been a scene investigator for the newly created Pierce County (Tacoma) Medical Examiner Office. I suggested he write a book that presents logic in a form suitable for forensic investigators. At the next annual AAFS meeting he informed me it was now in print, Nordby JJ *Dead Reckoning: The Art of Forensic Detection*, 1999.

Knowing what I know now, would I "do it again" under the same circumstances as when I began, or under today's circumstances?

A. Under the same circumstances when I began has only one answer: Yes. My career has been most satisfying from its beginning to the present. The reasons are clear when one reads all the above.

During the initial decade in Miami, Dade County local government was undergoing change to a Home Rule Charter, totally new to Florida and subject to numerous tests in court and at the ballot box. I retained my California medical license and was prepared to return to the practice of medicine in California if circumstances became intolerable. Most would not have dedicated the working time around the clock but the fascination with learning and doing kept me in Miami despite employment opportunities elsewhere.

B. Under today's circumstances: Probably yes although the pioneer aspects of 1956 no longer exist. New tools, expectations and fiscal challenges of today add spice to a career in Forensic Pathology. Looking back to March 15, 1956 and the intervening decades to the present, fiscal challenges have always existed and could always be tolerated with the solace that it can only get better.

I am enthralled by the scientific changes in medicine and the understanding of mechanism of life. Example: Old texts of toxicology classified poisons into categories according to what overt damage they exerted. One classification, protoplasmic poison, no longer appears in the light of current knowledge of cellular metabolism.

Forensic Scientists, including pathologists, are faced with new challenges to justify opinions in terms of science, an interesting concept in view of our heritage of the "art" of medicine. Even today, I spend telephone time discussing these challenges with learned legal academicians. I do not feel that I have "solved" any problems but I can still play a part in a discussion.

Personal information such as family, hobbies and interests which play a significant role in the genesis and maturation of my career

A. My personal drive to devote all time to the tasks of medical study and practice kept me single until age 28. At this time I felt the need for family attachments, met Rose Marie, a nurse at the same hospital where I was stationed, proposed and had a simple inexpensive Justice of

the Peace wedding, bargain price $10.00 actually paid by my colleague and best man, Dr. Jack Gregg, a pediatrician. Rose Marie, with three children age 4 and younger, had been recently divorced. My career has been most satisfying from its beginning to the present. From single status to married with a full family in one step was most fortunate. We had four more of our own totaling 6 girls and, following a lapse of seven years, a boy. To all, I am their "Dad."

Today I recommend girls to be a major part of the mix as they are blessed with a caring capability. When Rose Marie was in the terminal stages of Parkinson's disease the girls took turns staying with us and caring for her until the end.

Rose Marie was the main stabilizing factor in furtherance of my career. She tolerated my devotion to work and did everything possible to keep my career on course. In 1959 I left the check book to her because I needed more time for service. Until two weeks before she passed away, she maintained the home expenses. I had to visit the credit union to learn how to assume the task. I owe my career to my wife and companion for 49 ½ years.

B. Hobbies imply discretionary time, of which I had none. Early in life my hobbies focused on sciences, biology and chemistry. I studied the high school chemistry textbook the previous year to the class and created a large home chemistry laboratory. The hobby was balanced with ample friends with whom I explored the swamp and woods, explored abandoned mines, engaged in winter sports and spent summers in Maine and Vermont. Always with me were books to read.

C. Interests in the form of curiosity have always been a part of my life. Curiosity is the catalyst that led me into the multitudes of activities that arose from the core vocation of Forensic Pathology.

In closing, I would reiterate a driving underlying concern during my career in Forensic Pathology. My greatest fear that stimulated extra investigative procedures is to assure that my personal work product or opinions never result in wrongful arrest or conviction of a factually innocent person. I see evidence that some Forensic Pathologists do not possess the same concern. I doubt that they would intentionally engage in a wrongful conviction. I suspect that their personality structure make them unaware of what they do to create a miscarriage of justice.

Mary H. Dudley, MD



June 2012

Why did I select forensic pathology as a career?

Combining my interests in all aspects of pathology of natural disease and injury as it relates to legal issues, community agency involvement, prevention, research and teaching.

Places and times I served as Chief Medical Examiner:

Chief Medical Examiner and Director of Forensic Laboratories for Sedgwick County Regional Forensic Science Center in Wichita, Kansas; March 2000- December 2006.
Chief Medical Examiner for Jackson, Clay, Cass and Platte Counties in Missouri; Jackson County Medical Examiner's Office in Kansas City, Missouri; January 2007 – present.

Major accomplishments as Chief Medical Examiner:

2009 and 2010 – Outstanding Achievement in Tissue Donation Midwest Transplant Network Collaborative
2008, 2009 – Paul Coverdell Forensic Science Improvement Grant Funding awarded to the Jackson County Medical Examiner's Office, Kansas City, Missouri
2009 – National Association of Medical Examiners (NAME) Re-Accreditation of the Jackson County Medical Examiner's Office with no deficiencies.
2008 – Vision Award – Metropolitan Community College - Penn Valley, Allied Health & Nursing Department
2006 – Chief of Police Award – BTK task force, Wichita, Kansas
2001- 2006 – Initial NAME accreditation and re-accreditation with no deficiencies for Sedgwick County Regional Forensic Science Center.

Efforts on behalf of forensic pathology and the forensic sciences:

Presented platform presentations or posters at most NAME and AAFS annual meetings since 1992.

Published over 15 forensic manuscripts and 7 forensic text books.
2002 National Association of Counties Achievement Award for development of tissue referral program.
Developed the first forensic nursing program in 1994 and 4 day forensic medical investigation training course in 1996.
Recent presentations include the following:
Leptospirosis Presenting as Presumptive Pandemic Influenza "A" (H1N1) Infection" ASCP Check Sample Microbiology No. MB12-3 (MB-384) Vol.55 No.3 April 2012 Pg.29-38
Death of a 6-Year-Old Boy with Mental Retardation: Accident Versus Child Abuse; Journal of Forensic Sciences first published online: 23 MAR 2012
2011 NAME Conference poster presentations:
A Review of Coroner and Medical Examiner Opinions
Regarding Tissue Donation Issues in the United States
Infant Death and Sleep Environment
Marcaine poster Presentation; February 2011; American Academy of Forensic Science Conference Chicago, IL.
Musculoskeletal Transplant Foundation Forensic Pathology Workshop; Nov. 11, 2010 Chicago, IL.
Anaphylaxis: Fatal Hypersensitivity Reaction to Carboplatin; National Association of Medical Examiners, Cleveland, OH Oct 2010
Frazee, Dudley, MD, Fleming, Garg, Lingamfelter and Sabharwal; Huffing: Two Deaths Involving 1,1-Difluoroethane Poster, SOFT Annual Meeting Richmond, VA. Oct 2010

Recollections of places I have trained and worked:

January 2007 – present Chief Medical Examiner, Jackson County Medical Examiner's Office, Kansas City, Missouri for Jackson, Cass, Clay, and Platte counties.
March 2000 – December 2006 Chief Medical Examiner, Forensic Pathologist, District Coroner Sedgwick County Regional Forensic Science Center 1109 N. Minneapolis Wichita, Kansas 67214
December 2005 – March 07 District Coroner Reno County, Hutchinson, Kansas
July 2001 – December 2004 Contract – Part-time Deputy Medical Examiner Jackson County Medical Examiner's Office 660 East 24th Street, Kansas City, Missouri 64108 Chief Medical Examiner
May 1995 - February 2000 Forensic Pathologist, Medical Examiner Maricopa County Office of the Medical Examiner 120 South 6th Avenue, Phoenix, Arizona 85003
October 1993 - May 1995 Forensic Pathologist, District Coroner – Contract-Part time Deputy Medical Examiner Sedgwick County, Wichita, Kansas and Shawnee County, Topeka, Kansas
July 1991 – Oct 1993 Fellow in Forensic Pathology, Office of the Medical Investigator, University of New Mexico, Albuquerque, New Mexico. Chief Medical Examiner: Ross Zumwalt, M.D.

Comments about people who trained me and from whom I have learned:

Excellent mentors include:

Dr. Morgan Berthrong, Penrose Hospital, Colorado Springs, Colorado.
Dr. Larry Tate, Broward County Medical Examiner's Office, Ft. Lauderdale, Florida
Dr. Ross Zumwalt, OMI – UNM, Albuquerque, New Mexico
Dr. Kurt Nolte, OMI – UNM, Albuquerque, New Mexico
Dr. Patty McFeelly, OMI – UNM, Albuquerque, New Mexico

Recollections about people I have trained:

All of the following persons I have worked with early in their career developed an interest in forensic pathology.
Larry Czarnecki, DO. – Resident 1995, now Chief Medical Examiner Flagstaff, AZ.
Lindsey Haldiman, DO – Medical Student 2009, now 2nd pathology resident at Truman Medical Center Pathology Department Kansas City, MO.
Susan Comfort, MD – Medical Student 1991, now Chief Medical Examiner Reading, CA.

Major controversies and frustrations in completing my responsibilities:

Budget cuts
Employee turnover
Media interest in cases
Personnel issues
Recruitment of forensic fellows taking other jobs after accepting position following fellowship.
Testifying on old cases of other doctors that are not willing to return to area to testify.

Academic involvement through research, education, and training:

Monthly clinical forensic pathology rotations for 7 schools/pathology residency programs
Extensive research projects
Training director for Forensic Pathology Fellowship program
Associate Professor of Clinical Pathology of 3 universities. University of Missouri-Kansas City, School of Medicine; Kansas City University of Medicine and Biosciences; University of Kansas

Legislative change in which I was involved:

Organ and tissue donation legislation

My contributions to the field of forensic pathology:

Death investigation training
Organ and tissue donation
Mass Fatality management; member of NDMS-DMORT team – 15 years. Deployed to Kirksville plane crash - 2004, Hurricane Katrina - 2005, Hurricane Ike - 2008 and Joplin Tornado - 2011.
NAME Board of Directors – 6 years

Perspectives I gained as a medical examiner:

Interaction with outside agencies

Good communication with executive office and using county resources.
Importance of work in a NAME accredited office
Importance of having ABP Forensic Board certification and having all pathologists and death investigators board certified.
Administration organization of office with clear definitions of duties and chain of command.

Difficult cases I have managed:

In custody deaths
20 year old cold case, serial murder case – testified on 7 of 13 deaths.
Quadruple homicide
Mall shooting
Prescription drug death of 68 individuals by over prescribing physician – federal trial.

How I dealt with job-related stresses, anxiety, personal performance issues:

Balance work and play
Family
Hobbies; exercise and baking
Cooking

Other recollections:

Enjoyment from teaching, research, and prevention.
Developing forensic specialty areas and training programs in forensic medical investigation, forensic nursing, forensic toxicology, forensic radiology, mass fatality, child fatalities and organ & tissue donation to share my knowledge and skills with the next generation of Forensic Pathologists and Death Investigators.

Advice for forensic pathologists entering the field:

Importance of ABP board certification
Work in NAME accredited offices
Train in ACGME accredited forensic pathology fellowship

How my work experience changed me, changed my life, and what I learned from my work:

More responsibility as a voice for the dead; importance of networking, communication and good relationships with internal staff, county and outside agencies.

How has forensic pathology changed during my career, for the better and for the worse?

More standardized systems
Work environment improved
CSI effect on general public and juries

Knowing what I do now, would I "do it again" under the same circumstances as when I began, or under today's circumstances?

Yes, I wouldn't change a thing, I've learned from past experiences to create improved circumstances today.

Personal information such as family, hobbies and interests (optional):

One son and daughter-in-law and 3 grandsons live in New Mexico. Enjoy baking, exercising, arts and crafts.

Marcella F. Fierro, M.D.



NAME President 1989-90

June 2011

Good grief – who wants to read all this?

Why did I select forensic pathology as a career?

I always liked figuring out puzzles and I liked actually doing things. I liked all branches of medicine, especially surgery, rheumatology and nephrology, but surgery was out for women in the 60's. After internship I decided to do a year of pathology while my husband finished up medical school. I liked it so well I decided to stay in it. While in pathology residency at the Cleveland Clinic I would go to the Cuyahoga Co. (Cleveland) Coroner's office with the lady forensic fellow sponsored by the Clinic. I thought this is interesting and the pathologists very willing to talk with me, Dr. Lester Adelson and others. So, while in Virginia (after my husband's 2 year Viet Nam era service at Fort Riley KS), I took an elective in FP. My husband said my disposition really improved and I ought to do this. I asked Dr. Wiecking if women could do this job. I had had it as a pioneer and was not interested in more gender grief. . He said "why not?" and accepted me into the Virginia program. The rest is history.

Places and times I served as Chief Medical Examiner

I served as Chief Medical Examiner for the Commonwealth of Virginia from March 1994 until December 2007. I retired Jan 1 2008.

Major Accomplishments

Development of a lay medical investigator system to assist the pathologists and local county medical examiners.
Expanded full time pathologists from 9 to 13
Increased fellowship slots from 2 to 3.

Obtained several million dollars in federal grants, the first time the office received any grants
Established Review Teams for Child Abuse, Family violence, Maternal Mortality, Adult Fatality and Federal NVDRS reviews and working to establish the enabling statutes
Establishing a full time epidemiology position in the OCME
Built 3 regional buildings
Survived major budget stringencies
Enabled several statutes and statutory changes.

Efforts on behalf of forensic pathology and the forensic sciences

Established rotations through the forensic laboratories for the fellows
Continued rotations for medical students
Participated at the national level as an officer of NAME, Forensic Pathology Council of ASCP, Chaired the CAP forensic path committee, FBI unidentified and missing persons files, and National Academy of Science Committee on Forensic Science: A Path Forward.
Taught forensic pathology to all who needed it.

Recollections of places I have trained and worked

Internship – slave labor.
Residency – Cleveland Clinic – best place to train in the world. While a fellow (resident) on surg path I found a note on the lab fridge. It said Fierro there's a heart for you in the fridge – it turned out to be the Clinic's first heart transplant - more than 40 years ago.
VCU (Medical College of Virginia in those days – final year of residency – good clinical labs for CP. Dr. Seymour Bakerman made it possible for me to pass CP boards.
East Carolina University as Professor of Forensic Pathology – after 17 ½ years as a Deputy Chief for Central Virginia - I thought I died and went to heaven. Worked with former fellow Mary Gilliland, Stan Harris and Page Hudson.
Back to Virginia as Chief – first battle to keep the OCME out of Public Safety and in Health.
As Chief in Virginia, it was a good run. I was ready to retire and did. No regrets, not one.

Recollections about people who trained me and from whom I have learned

Dr. Lester Adelson, wise and kind a philosopher physician.
Dr. David K. Wiecking, Intelligent, incisive, no nonsense, legal thinker – taught me forensic pathology and I think some wisdom.
Richard Froede, MD a born mentor and much appreciated in the CAP.
Grover Hutchins, MD – a cardiac pathologist who knew what FP was about.
My fellows who asked innumerable questions and made me think.
Fellow OCME pathologists who labored in the fields with me and solved innumerable problems wisely.
My Chief Administrator Rochelle Altholz – my wise, efficient, can-do administrator.

Recollections about people I have trained

I am proud of all of them.

Beverly Leffers and Bill Massello – my first fellows as a deputy – well done in their careers.

Major Controversies and frustrations

Battle to stay out of Public Safety and remain in Health.
The budget – Virginia is very frugal – budgets were a major legislative effort within Health and the General Assembly.
Reduction of building size in Richmond office by half due to budget stringencies. We filled it the day we moved in.
Virginia Tech Shootings. Governor, Cabinet and Secretaries of Public Safety and Health did not understand the process. My boss, the Commissioner took a lot of heat and I was sorry for that. The investigative panel did not find any wrong doing.
Staffing. Most of our staff picks were excellent. A few were a problem. Letting people go was difficult.

Academic involvement through research, education and training

Was Professor and Chair of Dept. of Legal Medicine – mostly teaching effort. I liked academic committees and assigned academic tasks.
Cooperated with forensic scientists to do some studies on firearms, DNA.
See above.
Established a second fellowship program in the Norfolk office.

Legislative changes

Educated legislators and spoke to General Assembly Committees yearly on bills assigned to OCME to track.
Promoted some good changes to the OCME code: establish investigator positions, protection for third party records, establishing review teams. Tried to make lemonade out of the lemons. This year I found a legislator to sponsor a baby DNA bill wherein all hospitals providing obstetrical care are required to collect and give to mother a dried blood spot card as proof of her child's identity. I lobbied it before the committees and it was passed uncontested in the face of opposition by the hospital association.

My contributions

See above.
Mentored fellows.
Served as President of NAME.
Serve on panels and task forces.

Perspectives I gained as a medical examiner

Savor each day. There may be no tomorrow.
If in doubt – post.
Nobody ever misidentified someone on purpose – Do the drill and do it right.

No case is routine - be alert.
Assumption is the mother of all screw-ups.
Good enough for government work is not good enough for Virginia.
Educate up.
Toot your Office's horn where it counts with the legislators.
To staff and fellows: Make up your medical examiner mind – nobody knows more about this case than you! If you don't know enough, you find out.
Accommodate all as much as you can. If you can't explain why and make sure they get connected with the right person, agency etc. who can help.
Be patient…..
Listen…..
No dark humor in the morgue….ever….
Professionalism or find another job.
Help the staff through their personal crises.

Difficult cases I have managed

Spencer cases – first cases to link an unknown assailant in rape murders in two cities by DNA.
High profile cases that never go away.
Virginia Tech.

How did I deal with stress?

Busy family life so I had to let the office go quiet even if I was on 24 hour call for the system.
"Got out of Dodge" overseas for vacation – had good staff and could do this.
Subscribed to cultural events, opera, and theatre.
Movies.

Other recollections

Scene work- they were adventures.
Figuring out the perfect case – usually was so perfect it never went to court and the suspect pled out.
Met all kinds of professionals not remotely related to medicine – detectives, fire, social services, etc.

Advice for forensic pathologists entering the field

Forensic pathology is important work, helps many people and is often fun.
Stay broad based in your reading.
Join the local and state medical society and volunteer. Participate in the specialty and FP societies. They need to know who you are and that what you do is medicine. Call clinicians yourself if there is a question– don't staff it out. It is a professional courtesy that will be remembered when you need that community behind you.
Make friends with the political people and bureaucracy but no favoritism ever. They need to know always that you are a straight arrow. Word will spread.

You are not a prosecutor's witness. You are witness to the medicine and the decedent. Prosecutors become defense attorneys when they get tired of being poor. All attorneys need to know you are straight with all. Never let either think you did them a favor on a case.
Beware of assuming cases are routine.
Being compulsive pays off.
Be timely.
Watch your mouth – say nothing and write nothing about a case that can't be seen on the front page of the local newspaper and make sure your staff doesn't either.
Be kind to all even the dead.
Counsel your staff on confidentiality and mean it.
As a public health officer try to make something good come out of all the death you see. Become an advocate for safety, civility, healthy behaviors and promote the recommendations for prevention generated by the review team.

How work experience changed me

Learned each day is a gift.
Enjoy life as you go.
Became a public health advocate.

How forensic pathology has changed

More forensic pathologists.
Married women physicians can now serve in the medical corps. Army refused to enlist me and it still smarts.
A journal and now two.
New technologies that helped, AFIS and DNA.
Better microscopes and cameras.
Computer systems to collect our data.
Public awareness thanks to Patricia Cornwell and the TV programs she inspired about forensic pathologists who prior to that were usually portrayed as fat old men who smoked cigars while doing autopsies in their shirt sleeves – weirdoes.
For worse – there are some poor performers out there.

Would I do it again?

Under the same circumstances, yes.
Under today's circumstances – don't know- women have more choices now – it was only a fluke that I took the year in pathology while my husband finished – did not consider path before that.

Personal information

Married 45 years to a Bob Fierro, a gynecologist. We still prop one another up.
Two perfect children – Francesca – a lobbyist for clinical labs, and Robert Jr. a career prosecutor.
Three grandchildren, Robert- 7, Cecilia-3 and lovely Hannah-1.

Retirement is wonderful. Do a little consulting, work for organizations and justice focused organizations.
Hobby remains travel – “Get out of Dodge to restore your sense of wonder”.
Three pooches – 2 Walker hounds (supposed to be beagle rescues) George and Gracie (You have to be over 50 to appreciate those names) and a cocker spaniel rescue named Honey. I need a shirt that says “Let the dogs out, Let the dogs in, Let the dogs out….."

Jerry T. Francisco, M.D.



NAME President 1977-78

July 2011

During my college education I had always wanted to obtain a doctorate degree, but I was having difficulty deciding which field to choose. My parents seemed to favor medicine because of a good relationship with our family doctor. I did not believe I could deal with the "blood and guts" of medicine so I chose optometry. While taking a biology course, my classmate showed me a pathology text. This text persuaded me I could deal with medicine.

After entering medical school at the University of Tennessee, I was again having difficulty choosing a specialty. Each medical school rotation gave me a different perspective. It seemed that any specialty would cause me to give up some aspect of Medicine that I found interesting. A friend exposed me to the idea of the specialty of pathology. It became clear to me that my greatest interest was the study of disease and this was the field for me. The University of Tennessee had a very dominant Chairman of the Department of Pathology, Douglas Sprunt. After a rotating Internship at The John Gaston Hospital in Memphis, Tennessee, he accepted me into the residency program.

Because the military draft was still a fact of life I needed to spend time in one of the services. The best chance for me, in order to stay in Memphis, was to volunteer for the Navy. There was a Naval Hospital in Millington, Tennessee. The Navy needed pathologists and the pathologist there was leaving to rejoin the residency program at The University of Tennessee. I was accepted and assigned to that hospital as Chief of Laboratory. I retained my University association as an assistant instructor. This title did not exist at the University, but Dr. Sprunt gave this title to all residents in their second year. This association worked very well, since the work schedule at the Naval hospital allowed an afternoon off and a weekend free if not on duty. This time allowed me to consult with faculty members of the University on any of my

problems, either surgical or clinical. This experience and the University contacts allowed the American Board of Pathology to give me part credit toward my training as a pathologist.

Upon discharge from active duty, I returned to the training program of The University of Tennessee at the Institute of Pathology. At this time Dr, Sprunt had just negotiated a contract with Shelby county government to provide pathology services to law enforcement agencies in the county. This contract was used to remodel spaces in the pathology building and provide separate space for a forensic morgue and autopsy facility. It also provide salary and supply money. The faculty member who was to provide these services had created some problems and had to resign. After his resignation, the other faculty members had to provide these services and were unhappy. Dr. Sprunt offered me the opportunity to be the person to fulfill the terms of this contract. I had had several experiences with forensic problems during my Navy service. This had even included criminal court testimony in a murder trial and thus I believed I could handle this activity. These forensic activities were authorized under a private act of the Tennessee legislature authorizing Shelby County to enter into contracts with agencies.

I received the title of Coroner's Physician. It was my duty to perform an external examination on all deaths that were pronounced D.O.A. at The John Gaston Hospital; to contact the law enforcement agency investigating this death and either assign a cause of death for the Coroner to sign or recommend that the District Attorneys General authorize an autopsy. If this authorization was given, it was to be my responsibility to perform the autopsy. All laboratory activities associated with this autopsy were to be provided by the Department. This included the development of a toxicology laboratory.

During the final phases of my Pathology training, Dr. Sprunt arranged extended visits to Cleveland, Ohio and Richmond, Virginia. This included visits with Alan Moritz, Lester Adelson, Samuel Gerber and Geoffrey Mann. My reading included several textbooks, both English and American, and a variety of medico-legal journals. After the completion of formal Pathology training in 1960 and passing the board in Anatomic and Clinical Pathology, I was offered a position of Assistant Professor of Pathology at The University of Tennessee, Institute of Pathology.

Dr. Sprunt was grandfathered with the Board of Forensic Pathology and because of this I was able to claim supervised training in Forensic Pathology. This allowed me to take the board examination in Forensic Pathology and become certified. During this time, with the support of the Tennessee Medical Association, Tennessee Society of Pathologists, Tennessee Department of Public Health and the District Attorneys General Conference of Tennessee we lobbied the Legislature to pass the Model Medical Examiner Law as proposed by the National Municipal League. There were some modifications that were made. There included the exclusion of two of Tennessee's ninety-five counties from coverage and the withholding of the authority to order an autopsy from the County Medical Examiner. Both of these changes were later altered with the inclusion of all counties and the giving autopsy ordering authority to the County Medical Examiner.

I was appointed as County Medical Examiner for Shelby County in 1961 with the passage of the Postmortem Act. We adopted a modified form of Report by County Medical Examiner used by Dr. Mann of Virginia. The first Chief Medical Examiner for Tennessee was Dr. Thomas Littlejohn. He was not a Forensic Pathologist and appointed me as one of his consultants. Dr. Littlejohn left the state in 1963 to seek training in forensic pathology and I was appointed Chief Medical Examiner. A contract was negotiated between the state Health Department and The University to provide these services which included the salary of a Forensic fellow. The trainee once trained would agree to serve as a Forensic pathologist in the state for a period of two years or repay the stipend. Dr. Maurice Acree was the first trainee to get training in the Forensic Pathology program of the University of Tennessee, Institute of Pathology.

The development of a system of Forensic Pathology in Shelby County required support services. The first service was a laboratory to provide toxicology. The first director of this laboratory was Dr. Richard Walker. He decided to focus his time into Blood Banking and I became acting director until we hired a chemistry professor from Southwestern (a local Memphis Presbyterian college). This was not a full time effort and we later employed a fulltime director. He was an analytical Chemist, graduate of Virginia Tech, Dr. David T. Stafford. With the full development of toxicology services a special tract in the graduate program of the Department of Pathology was begun. The graduates of this program are still functioning in the states of Utah, Texas, Alabama and Washington as well as the country of Brazil. Dr. Tom Littlejohn returned to Tennessee after completing his Forensic training and reassumed the role of Chief Medical Examiner for Tennessee.

In 1971 a new Commissioner of Health, again, appointed me as Chief Medical Examiner. At this time the record of the investigations by County Medical Examiners had not been received and stored by the central office. There was no co-ordination of the ninety-five counties. Each county was operating as an independent unit. There was little state support, including no toxicology and few autopsies. The first efforts were to make sure that all counties had an informed medical examiner and that all reports were sent to the state office. The state's pathologist were approached requesting that they provide autopsy support to all counties in the state. This was to be funded by contracts between the state Health Department and the individual pathologist who agreed to participate. None of the state's pathologist were forensic trained and often needed guidance in certain cases.

This guidance was to be provided by a series of seminars to be given throughout the state. They were patterned after the schemes of Dr. Mann (Virginia). The attendees were both medical examiners and pathologist. A training handbook was written so that practicing physicians could be informed of the rudiments of legal medicine and the role of the autopsy in death investigation. A microfiche was prepared so that visual images of real cases could be shared among all physicians who were serving as County Medical Examiners. Narrative vignettes with accompanying photographs were prepared for use by county medical examiners to educate

their fellow physicians and various public groups in the role of medical examiners in death investigation.

Because of the presence of a dental school in Memphis it was rather easy to obtain local dental consultants in medical examiner cases. Dr. Harry Mincer (DDS, PhD- pathology) became the Chief Dental Consultant to the Chief Medical Examiner and organized seminars to inform local dentist who would become local consultants to County Medical Examiners or pathologist through the state. When Dr. William Bass (Physical Anthropologist) left Kansas to become Chairman of the Department of Anthropology at The University of Tennessee in Knoxville, he was prevailed upon to become the Anthropology consultant for the state. In this role, all skeletal remains found in the state were referred to his group.

As Forensic Pathology trainees became available, regional offices were established throughout the state. There were offices in upper East Tennessee at East Tennessee University; Middle East Tennessee at The University of Tennessee, Knoxville; Lower East Tennessee in Chattanooga; Middle Tennessee at Nashville; to join the office in Memphis at The Medical Units. Throughout my career I trained eighteen (18) forensic pathologists, who included:

Maurice Acree 1963
Augustine Torres 1964
Elizabeth Faye Sinclair 1965
James A. Watt 1966
James S. Bell 1969
Jack Richmond 1972
Michael Jackson1973
Joseph Sapala 1974
Michael Diamet 1975
Charles Harlan 1976
O'Brian C. Smith 1982
Frank King Jr. 1985
Richard Harruff 1985
Mark LeVaughn 1988
Joseph A. Fedrick 1992
Sandra K. Elkins 1993
Thomas A. Deering 1996
Cynthia Gardner 1998

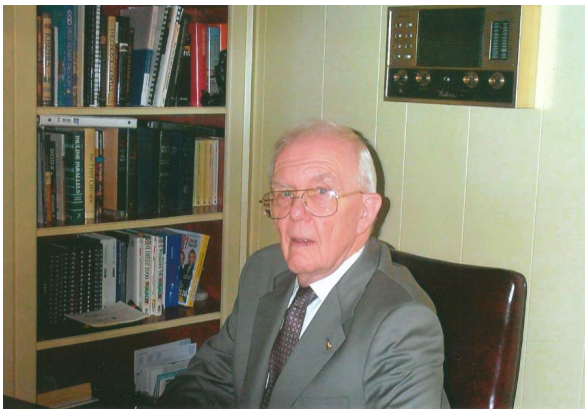
Because of the necessity of making changes in the Postmortem Law and the efforts of preventing the mischief of non-needed changes in the law, it became obvious that the office of Chief Medical Examiner needed to be in the Capitol City (Nashville). In view of this in 1988, I resigned as Chief Medical Examiner. This allowed the Department of Public Health to combine the office of Chief Medical Examiner with the Office of County Medical Examiner in Davidson County (Nashville). I retained my position as professor of Pathology at U.T. Memphis, County

Medical Examiner for Shelby County and West Tennessee Associate Chief Medical Examiner. At this time there were five (5) Regional Forensic centers in Tennessee. Each center provided autopsy support for a defined region of the state, three toxicology laboratories and five locations for anthropological consultations. Every county had a County Medical Examiner and the public was well aware that certain deaths should be reported to a County Medical Examiner.

Many successful outcomes developed from our cooperative efforts. Most importantly, a poorly organized coroner's system, established by constitution in the late eighteenth century had been replaced by a well-organized and funded county medical examiner system. In addition, we were able to inform the public, legal and medical professionals of the purpose and value of a professional death investigation system. We developed physical facilities to conduct the death investigations, autopsy and toxicology services. Initially, the office began as a 350 net square feet office in 1961; by 1999 had expanded to and had about 35,000 net square feet. We incorporated on-site forensic anthropology services and employed two full-time, board-certified forensic anthropologists. In addition, in the same year, we provide the services of an on-call forensic odontologist. We included full-service criminalistics with a full-service Toxicology laboratory, staffed with trained toxicologists for 24 hour turn-around time; developed blood spatter interpretive support for law enforcement, volatile accelerants testing, and educated the public, law enforcement and the legal community about the significance of alcohol in traffic accidents.

N.A.M.E. has played a major role in the organization of the forensic sciences for the State of Tennessee. Three (3) of the five regional centers have been inspected and accredited by N.A.M.E. There have been designated buildings acquired in all five locations to provide space for forensic services. The funding for these services is provided by both state and local county sources. Qualified Forensic Pathologist serve in all centers. There are over a dozen board certified Forensic Pathologist practicing in the state.

My own participation in N.A.M.E. began when I became a member at the first meeting of NAME in Chicago following its incorporation. I subsequently served as a member of the Board of Governors 1970-1976, President-elect 1976-1977, President 1977-1978 and Chairman of the Board 1978-1979. We sponsored the second NAME annual meeting, the first was in Rhode Island with William Sturner as the local host. The support of the conference included a grant from the state to partially underwrite the cost of our meeting.



Dr. Richard C. Froede – Oral History Interview

Armed Forces Institute of Pathology Oral History Program

SUBJECT: Dr. Richard Froede
INTERVIEWER: Charles Stuart Kennedy
DATE: October 27, 1994

[Note: This transcript was not edited by Dr. Froede]

Q: Doctor, could you tell me when and where you were born, and a little about your family, please.

DR. FROEDE: I was born on 1 May 1929, in Milwaukee, Wisconsin. My father was a physician at the time. But if you recall the date, it was about ten days before the stock market crash. Things were pretty rough around there, so he decided that he would come out of his residency, which was in neurology, because he had to make some money. And he went up into a small town in Wisconsin to practice in a general-practice situation.

He was there, in this little town called Jackson, Wisconsin, for about ten years, until World War II came along, when he decided that he was gung ho and wanted to practice military medicine. He was about 45, 46 years of age at the time. He went into the Army and was sent to Fitzsimmons to work.

And then one day, running to an emergency, up a flight of steps, he had his first heart attack. And that was it as far as his practice was concerned. He didn't do much after that.

Although I will say that, over the years, when I got to college and eventually into medical school, he and some of his friends would put me through the mill. I learned a tremendous amount of material from them, particularly from one of the internists who used to live next door to us. I'd go out on house calls with him at the same time.

Q: Did you grow up, then, in a medical atmosphere?

DR. FROEDE: Oh, yes, it was very much so. My middle brother probably would have been a doctor if it hadn't been for World War II, because he was slanted in the same direction I was, not because we were pushed, but we just found it interesting what my father was doing. But he and my oldest brother ended up enlisting in World War II and spending most of their time there. My oldest brother stayed in until he retired. He was in the infantry. And my middle brother decided to go into the ministry when he came back. My father used to have three pictures there: One tries to patch them up; one shoots them; and one has to pray for them. And people in his office would kind of laugh about it.

Our family stayed in Jackson till about '42, and then we moved to Milwaukee. And from then on, until I left medical school, I was in Milwaukee.

Q: Talk a bit about your high school.

DR. FROEDE: My high school was Riverside, where I went from 1943 to '47. It's on the east side of Milwaukee. It was a very interesting school. It was an amalgam of a lot of different people, a lot of different backgrounds, religions, races, and so on. But there was something there in that high school that you couldn't do today, and that was we had a three-track system. Which I don't think any one of the students ever found discriminatory. But there was the college track, and there was the business track, and then there was the trade track. Those would go in for mechanical drawing and engineering and things like that. But we all had the same basic courses, which we all shared, too. But when you got into the higher mathematics, you were in the X track. And so I felt it was an extraordinarily good education.

Q: Were you working towards being a doctor at that time?

DR. FROEDE: Yes. I had sort of made up my mind when I was probably about 12 years old. I liked to watch this. As I say, I was never pushed into it, but they would always talk to me about it, always describe certain things to me, and it became very interesting from that standpoint. Also, at that time, my father had some pathologists who were good friends, and they used to come over to the house and drink coffee, and they would sit and they talked to me about pathology and described it. To me, it was probably medical detective work; that's the way I felt about it at the time. From then on, I always wanted to be a pathologist.

Q: That's interesting, because most of the people I've talked to, almost all of whom ended up pathologists, sort of backed into it or picked this up much later on. But you actually got the bug quite early.

DR. FROEDE: I did.

Q: After high school, where did you go to college?

DR. FROEDE: My brother, before he had gone into World War II, had been a freshman at Ripon College, which was upstate. It's also the birthplace of the Republican Party.

Q: Yes, yes, very famous.

DR. FROEDE: He said that, when he got back, he wanted to go back there someday to finish his education. But he wasn't available, so I started in 1947, and then he came back in '49, and both of us graduated at the same time, in 1951. Again, I feel that even though it was a small liberal-arts college, both of us got involved in a lot of activities, and we both graduated, I think, with an educational background that was excellent.

Q: Was there such a thing as a pre-med there?

DR. FROEDE: Yes, it was a pre-med course, a lot of science and things like that. But mostly we had a lot of the liberal arts. In fact, my degree is a Bachelor of Arts, rather than a Bachelor of Science degree.

Q: You graduated in 1951, and what did you do? The Korean War was in full swing at that point.

DR. FROEDE: Well, when I applied to medical school, it was about a year and a half before. It was my father's medical school, which was Marquette University. I had been accepted, and so, as far as the military was concerned, I had a deferment to go to medical school. They had no idea how long it would go, so they decided to send people to medical school and let them get their doctorate, and then you put them into the service.

Q: So you went to Marquette for how long?

DR. FROEDE: Four years.

Q: Could you describe a bit about the medical training at Marquette at that time?

DR. FROEDE: Medical training then, again, was a little bit different than what it is now. A lot of basic material. The first two years, of course, were the basic sciences: pathology and microbiology, which was then called bacteriology, and embryology and anatomy. We had cadavers, and four of us would share the dissection. In the junior year, we began to get more into the clinical aspects of it. Although, during the first year, we had one course that took us into the clinics, just to give us a taste of what was coming. But the junior year was spent in the clinics and the emergency rooms. Then, in our senior year, it was more of ward work and surgery and medicine, orthopedics. At this time, because I wanted to go into pathology, I took a month's training in pathology at the VA hospital there in Milwaukee. Again, it whetted my appetite, so I wanted to stay in the field of pathology.

Q: In your class, were you somewhat off to one side, as far as being interested in specializing in pathology?

DR. FROEDE: No, I think there were at least about half a dozen of us who had decided that we liked pathology. We had a very good pathology department. W.A.D. Anderson, who had written the big book on basic pathology, was head of the department, and he got us all interested in it. And then, as I say, my father's friends kept it up.

Q: In medical school, in those days, were there many women in your class?

DR. FROEDE: We had a class of 89, and I think there were nine or ten women.

Q: You became a doctor after getting out of Marquette, is that right?

DR. FROEDE: Yes.

Q: You got out of there when?

DR. FROEDE: In 1955.

Q: Now did the Air Force or one of the military services pick you up at that time?

DR. FROEDE: At that point, no. I volunteered and went into the Air Force. I wanted a residency, and they promised me an internship and a residency. And they kept their word. I went to Walter Reed for my internship, which was a rotating type. And then, from 1956 to '60, I was at Letterman General Hospital.

Q: In San Francisco.

DR. FROEDE: For my residency in anatomical and clinical path.

Q: In 1956, you were here, where this interview is taking place, at Walter Reed. Did you run across the AFIP?

DR. FROEDE: Very much so. After I had finished my ordinary rotations in surgery and medicine and pediatrics and Ob/Gyne, I decided again I wanted to sample pathology, just to make sure. And so I came over here and spent two months in the anatomical part of the Department of Pathology, which was in the building at the time, which meant that I could go off and sit in on some of the conferences and enjoy the entire AFIP, as well as learning surgical path and autopsy path.

Q: Who were the big guns in surgical path and autopsy path in those days here?

DR. FROEDE: Well, Dr. Earle was here in neuropath, Dr. Mostofi, Dr. Johnson.

Q: They're all still going.

DR. FROEDE: They're still going, and I know them all.

Q: In one of my interviews, I talked to one doctor and she said that the theory was that pathologists don't die.

DR. FROEDE: I spent a few days with Dr. Helwig, looking at dermpath and GI path. To me, it was just priceless. I couldn't have had a better experience.

Q: You were at Letterman from when to when?

DR. FROEDE: From about July of '56 to about July of '60. And there, by the way, the chief of the department was Nelson Irey, who is now here and has been here for a number of years.

Q: When you went to Letterman, were you by that point specializing in pathology?

DR. FROEDE: Yes, by then, I was on my pathology track.

Q: In the late '50s, you were on the pathology track. Were there specialties at that point, or was it general pathology?

DR. FROEDE: There were specialties. There were people interested in dermpath. Some of the boards that are in existence now had not come into existence, but we were encouraged to try to pick some area that we thought might be of interest. At that time, I was very much interested in clinical path., and got involved in blood bank, chemistry and toxicology more than microbiology. I thought that I wanted to be a clinical pathologist. I enjoyed surgical path., but I also enjoyed very much the autopsy pathology. To me, it was such a challenge to come up with a diagnosis, a total diagnosis, rather than just a surgical biopsy.

Q: Were you able to indulge in what you were interested in at Letterman?

DR. FROEDE: Yes. Yes. In fact, probably some of us who were interested did extra work in various fields.

Q: What type of a hospital was Letterman and who were they seeing?

DR. FROEDE: It was a general hospital, seeing military patients, as well as dependents. It was about a 500-600 bed hospital at that time.

Q: Tell me, in the military, do you get the same type of experience (except, obviously, in wartime) that, say, a young doctor might get at a city hospital, with all the trauma of city living?

DR. FROEDE: We didn't see too much trauma, probably for two reasons. One, it was a military hospital, and most of the trauma cases would have first been triaged before they came in there. The second was that we lived in an era when we didn't have to worry too much about all this trauma that you see coming into the hospitals today. Larger cities, yes. I suppose that would be something that the people at Letterman would have needed to go to the city and county of San Francisco hospitals and that. But, as far as pathology was concerned, we saw the gamut. In fact, we saw some really strange diseases, too.

Q: Where were they coming from?

DR. FROEDE: Well, there was a public-health hospital not too far away, on the grounds of the Presidio, and we exchanged cases. So we'd see some of the diseases coming off theses ships.

Q: Did you have much contact with the AFIP while you were doing this?

DR. FROEDE: No, only from the standpoint of consultation. We would send our cases to the AFIP. And, since I knew some of the people, I could pick up the telephone once in a while.

Q: You left Letterman in 1960, and then where did you go?

DR. FROEDE: Well, that was an interesting part of my career. Dr. Townsend, who was the director at the time, came out to San Francisco, and he asked me where I'd like to go. Oh, I named all kinds of places, like Dayton, Ohio, and places where the big Air Force hospitals were, such as San Antonio. And then he looked at me and he said, “How would you like to go to England?" I said, "Fine, I'd love to go to England." He said, "Well, it's not going to be to an Air Force base. It's going to be a Royal Air Force base." And so, for the next three years, I spent the time at the RAF Institute of Pathology and Tropical Medicine. There, to me, that was a wonderful experience, from the standpoint of if I thought I'd seen things at Letterman...But at that time, of course, the British Empire was still where the sun never sets, and the different diseases that I'd only read about in textbooks would come in. We even had one episode of typhoid fever coming out of Zermatt, Switzerland. They brought some of the RAF people in; they'd fly them in with the various parasites, because this was one of their biggest hospitals.

Q: Did you find the British and the American approach more or less the same to pathology, or was there a difference, subtle or otherwise?

DR. FROEDE: The surgical pathology was more or less the same. They did not have pathology training like we had, you know, four years, or two years, or three years of anatomical, three years of clinical, two and three. And so we actually trained some of the general pathologists in surgical path., clinical path. Mostly clinical path., because the RAF Institute was more or less like a small AFIP, where all the surgical biopsies were sent in. But we also did some training in forensic path., which was essentially aviation pathology, so that they would know what to do when they went out on an aircraft accident. So that way, I think I picked up my first interest in forensic path., and would go out on aircraft accidents with them.

Q: What's the reason, I'm speaking as a layman on this, for wanting... I mean, somebody gets killed in an airplane crash, they're dead. What's the...

DR. FROEDE: If it's true, you want to do the analysis of all the examinations, so you can study was it something that they had eaten, like a toxicologic? Some drug that they had taken? Was it injury, a pattern injury that they had and how they might have struck something? The other thing, did they have a heart attack? Group Captain Mason and I had a case where a fellow was

landing a plane up at Prestwick, Scotland, and he suddenly collapsed at the controls. Ken and I went up and looked at it—MI (myocardial infarction), and we found an occluded vessel in the anterior descending branch. So these are the different things. Also, we felt that negative findings were as valuable as positive findings, sometimes.

Q: Did the British use their pathologists differently than...

DR. FROEDE: Most of their pathologists were doing clinical path and blood bank and microbiology. A few of them, in some of the bigger hospitals, in the Far East and in Africa and the Aden Protectorate, would do some surgical path. But most of the biopsies were sent on in to us. In the clinical path area, sometimes they were ahead of us in certain things, and sometimes a little bit behind us in adopting new things, new techniques, new reagents, and things like that. And so it was rather interesting to me to do some of this, because I'd go down to the American base, the USAF base at South Riceland, and we'd swap reagents. If the pathologists there couldn't get anything, I'd take something down to him and he'd send stuff back up, particularly in the area of blood banking. They used the Oxford system, where it would incubate for an hour to get your blood group, and then you'd incubate an hour to get your cross match. Well, I had the rapid reagents that I'd brought back with me, and so what I would do was tell them to do a quick grouping on it, so we didn't violate any of the regulations. What we'd do was a rapid group, so at the same time that he set up the group in an hour, he would set up the cross match in an hour. And I could come in one time in the middle of the night, instead of spending a couple of hours there. So that's the type of thing. Then they changed; even in the three years, they began to change some of the...

Q: You had the AFIP here, with some of these doctors you've mentioned who had been specializing in various branches for years and looking at thousands of specimens. Did you find that the unique collection of the AFIP gave a stronger delivery system to people with problems?

DR. FROEDE: I think it did, because if I had something, and several of us who were reading the surgicals, we would quick air ship it to the AFIP. It made it nice, because I knew some of the people here and we could have a very personal type of consultation. So I think it's a tremendous thing to have the database that they have now. Its things that you look at, I've seen this pattern before; where have I seen it? And then you send it off to a consultant, or you look at a database, and you find it. The fascicles are a tremendous database. And this new CDROM I was playing with the other day on the... to me, I wish I had had that 20, 30, 40 years ago.

Q: After your time with the British, when did you leave and where did you go?

DR. FROEDE: I left in '63, and from '63 to '65, I was at Orlando Air Force Base, which is now Navy, and I guess it's closing now, from what I hear. But it was Orlando Air Force Base, and I was chief of pathology there, all alone; there were no other pathologists. But I had consultants in the city who were excellent--Paul Berrick and others—that I could always turn to, so I never

was at a loss. And also I had the AFIP that I could send them to. I was there for two years. But also, besides those duties, I was a consultant to Project Gemini.

Q: Could you explain what Project Gemini was.

DR. FROEDE: This was one of the first projects out of Cape Canaveral putting a man in space. I knew Gus Grissom and a few others. At that time, we set up the blood bank. We taught them how to cross-match, we taught what drugs they could use, and we did chemistries and everything else. We had a regular little clinical lab.

I'll never forget the day that Gus Grissom said to me, "I know why you're here, doc. You don't have to tell me." And, of course, he was one of the first ones who perished.

Q: In a fire. Did you get involved in any of that?

DR. FROEDE: No, that occurred after I left. So I never got involved in anything like that. And then, in the last six months of my tour there, I got word from the surgeon general's office that they needed a pathologist in Germany, was I willing to give up down there and go to Germany? I said yes, because I enjoyed England so much. I said fine, and so I ended up in Wiesbaden, Germany, from '65 to '68.

Q: On the family side, were you married?

DR. FROEDE: Yes. One of my children was born in San Francisco, and one in Florida. I think they still remember their days in Germany.

Q: What were your main concerns in Wiesbaden?

DR. FROEDE: The workload. There were three pathologists, but at times I was alone for three-week periods, when people were transferring. We had a tremendous workload, because it would feed into Wiesbaden from all over Europe. I'd walk in and I'd find 300 surgicals there, to start in processing. Some days there were only a few; some days many of them. But, again, I still had the backup of the AFIP, and I used it.

Q: Let me ask a bit about the backup of the AFIP, at this point. We're talking about the mid-'60s. You've got a surgical problem. You're in Wiesbaden; the AFIP is in Washington, D.C. How would you do it, and how was the response time?

DR. FROEDE: Rather than use the mails, we put it onboard an air-evack flying out of Rhein Main, which is just up the road from Wiesbaden and Frankfurt. And it would be landed down here at Andrews Air Force Base. So you knew that, within that same 24-hour period, at least it was on its way to the AFIP. And then, of course, you could mark it "Rush," or you could mark it "Routine," whatever you wanted to do. And I thought the response time was pretty good.

Q: Would you get back cables?

DR. FROEDE: If there was something the matter there and they felt I should be notified, they'd probably pick up either a cable or a telex or a phone call.

Q: Did you get involved at all with German pathology while you were at Wiesbaden?

DR. FROEDE: We had an interesting group there of military pathologists, as well as a few civilian pathologists, that we'd get together about quarterly and swap cases. We got to know some at the various universities, Mainz and so on, that had very interesting cases. I will say this, that we always picked a good place to go. Like Oktoberfest time, we'd be in Munich.

Q: You were in Wiesbaden from '65 to '68. Then, all of a sudden, we move to the major focus of what we're talking about.

DR. FROEDE: Actually, the major focus, as I mentioned, probably started back with my days with the Royal Air Force. But then I was doing some medical-examiner type cases when I was in Florida.

Q: Could you explain what a medical examiner does.

DR. FROEDE: Well, we had a suicide and some accidents on the base. And then the local medical examiner, Tom Haydred, got me interested. I'd go down and look at some of his materials. So, when I was interested that way, I decided, well, maybe I like forensic pathology. And so I went to the surgeon general's office and I was inquiring about it. In fact, I was probably on my way to a forensic path residency here at the AFIP in '65, when... meeting of pathologists in Germany came up. They did ask me if I would give up that idea for a short while and go to Germany, and I still have the letter that says, upon my return, I would be assigned to the AFIP as a forensic pathologist in the residency program. And they carried out their word.

Q: What did a forensic pathologist do at the AFIP when you came here in 1968? What was the job description?

DR. FROEDE: At that time, it was, I believe, the Division of Forensic Sciences, which had a forensic pathology section, a legal medicine section. But they were doing the same thing that we did as the years progressed: suicides, homicides, any of these cases, we would review them. And then the Registry of Forensic Path was here, and some of the civilians would send their cases in. So this is what they were doing. At that point, there was another section, the Radiation Path section, which was doing almost all the aircraft accidents. So it really was a separate entity there, from our viewpoint. But we saw all the other medical/legal cases.

Q: You were in more the medical/legal side, rather than the aircraft?

DR. FROEDE: Right. Don't get it wrong, an aircraft accident is essentially medical/legal. It can be criminal, if somebody blows up an airplane, like at Lockerbie. It can end up in civil cases, court actions against someone. And this is why you want to do a good workup. One of the biggest things, of course, in aircraft accidents is identification. Forensic pathology, in essence, will start the identification process.

Q: In '68 and thereabouts, was the focus of your work pretty much on incidents within the armed forces?

DR. FROEDE: Yes.

Q: You weren't being called upon for other things? Because I know, later, we'll be talking about the Azores and Jonestown.

DR. FROEDE: It was pretty much limited to work in the military. The year of training was a diverse year for me. It wasn't all here at the AFIP. Dr. Stahl was in charge of it at the time, and I spent four months at the Office of the Medical Examiner of the State of Maryland, in Baltimore. During that four-month period, I think I did 40 homicides and something like 140 cases; at the same time, getting a couple of weeks of training in toxicology in the tox lab with Dr...

But then the other thing that we were doing was going down to the Smithsonian for two weeks of training in anthropology. And then another two weeks would be at the Bureau of Narcotics and Dangerous Drugs (BNDD). We learned a little bit of what goes on in the streets. All of this information could ultimately be used to help analyze your own cases.

Q: Litigation has always been a factor for forensic pathologists. Were you feeling the pressure that everything had to be just right, or understanding that, behind whatever you did, some lawyer might attack it from whatever angle?

DR. FROEDE: In later years, while I was out at the University of Arizona, there was a retired trial attorney out of Chicago, and he had a famous saying that anything you do, anything you say, anything you write, and, sometimes, anything you think will usually be used against you in a court of law.

So the answer is yes, you try for perfection. You don't always achieve it, and sometimes you make a mistake and so on, but you try to do the best, and you try to set up a protocol so that you don't miss anything.

Q: Were there, particularly in the earlier years, in the late '60s, a feeling of constant looking over your shoulder of litigators?

DR. FROEDE: Oh, yes.

Q: How would this impact on what you all were doing?

DR. FROEDE: We did our cases, and that was it. We knew that we would be questioned in the courtroom, and they would try to find something and dwell on that, that you missed this, therefore you didn't do... But I never worried about it. In fact, courtroom to me was, and still is, fun. I have a couple of cases going to court here in the next few minutes.

Q: Do you have any stories of any problems or incidents that happened in the courtroom while you were here at the Institute that are etched in your brain?

DR. FROEDE: Not so much here, because there were only a few cases that ultimately went to court. There were only about six cases when I was up in Baltimore where I had to go to court, and I never got called on. Even though Dr. Fisher and I went on a murder case, he was on the stand, and they didn't bother me. So I didn't get that much court experience. It wasn't until I left the Institute and became medical examiner in Arizona that I ended up anywhere from one to two, three times in court every week.

Q: In this period from '68 to '76, what type of equipment were you using? Was that different than, say, what one would use now?

DR. FROEDE: Yes, the instrumentation in toxicology wasn't as nice as you have now. We didn't have DNA. And the types of microscopes that you would use weren't as nice compared to microscopes that you have now. We had a range downstairs, but we didn't have some of the equipment in the range that's here now. We developed a system here. And thinking back over it, in fact, I presented a case down here at a CAP meeting in 1971, and if we'd had DNA at the time, what a fantastic job we could have done. We might have convicted the person who murdered another one.

But this is true anywhere now. Everybody who has been through those days from about '60 to '90, that 30-year period, could look back and say, gee, if I had had this instrument, if I had had this technique, what a wonderful thing it would have been. The radioimmune assay technique, when it came in in the early '70s... I thought, gee, we can't even measure LSD. A couple years later, you could measure LSD in the tissues. So these are the things that have been fun watching develop, and being able to participate in this development.

Q: You mentioned LSD. You were here at the height of the drug culture, where, across a large spectrum of society, people were playing around with various forms of drugs, particularly things such as LSD.

DR. FROEDE: It's an interesting term you used: "the height of the drug culture." As far as I'm concerned, it has never slackened. You're thinking of the Beat Generation, the hippies with LSD and some of the other drugs. It's back again. It's a cyclic type of thing. They suddenly rediscover

the wheel. Right now, the concern is about the new generation of opiates, LSD and things like that. So it hasn't changed.

Q: Was this a big part of your work, looking for traces of self-induced drugs?

DR. FROEDE: Yes. We had a very good toxicology section here, with Dr. Peninos and Dr. Goldbaum. So it was really nice to have something like this. They did the research and they did the routine stuff. And then they would sit down with us, “What does this mean?”. And I think that part of it is the interpretation. In fact, all of forensic pathology is interpretation of patterns. Whether it's a blunt-force injury on the skin, where you can say, well, this is a claw hammer, or the pattern of drugs in the body, or patterns of diseases. So my lectures, when I talk to the students who will be talking to the residents this coming month, the one lecture is Patterns of Injury. I like to call it the KGB--knife, gun, and bomb.

Q: Did you have your favorite murder instrument?

DR. FROEDE: That's another interesting question. Almost all forensic pathologists are fascinated with weaponry, from the standpoint of guns, because we see so much of it. We used to see a lot then, but we see a lot more now. And you have to understand this, because it's usually the gunshot victim that turns into... Yes, you have stab wounds, and, yes, you have blunt-force trauma, but it's usually the guns.

Q: Much more effective.

DR. FROEDE: Much more effective, and much more final. So that's one of the reasons why Dr. Fink developed the range downstairs, to test weapons.

Q: Could you explain what the range is.

DR. FROEDE: It's just like an ordinary gunnery range, except it's down in the basement of the AFIP. You test fire the weapons at targets, and determine distance, determine the patterns, then just to see how fast the bullets are, what it would do to a gelatin block. We did all that kind of work.

Q: If you want to find out how a gunshot wound would work on a human body, what do you use as a substitute?

DR. FROEDE: Of course, there is always the animal work. But that's a problem, particularly today. The animal rights groups have really put a stop to a lot of animal testing.

So that, here, we went to the gelatin block. It's just a mass of set industrial gelatin, with oil of cinnamon as a stabilizer. It smelled very good. You'd get them in long blocks, about 15 inches long, about six inches high, four inches wide. Using that as the target, you could tell how the

bullets reacted within that mass. Now it's supposed to simulate muscle, but it's nowhere near muscle, because what you can't do is change what's going on inside the block like you can with a muscle. If I kicked and you saw my foot coming toward you, for example, you might tense up. Well, you can't do that with a gelatin block.

Q: How about bones, do you put bones in the blocks?

DR. FROEDE: We would put bones in the blocks, yes. I had a very famous case out there in Arizona where we put a jawbone in a block, then we could tell the distance that weapon was fired.

Q: Did you find in forensic pathology that you were having an impact on the designs of weapons systems, for instance, airplane configuration, tank configuration, this type of thing?

DR. FROEDE: I don't think we had as much as some of the other places, such as Aberdeen. Ours were more tissue type. They call it wound ballistics, what happens to you. Some of the information that was given from the wound ballistics' studies, yes, it would show up, but I don't think we had that much influence on the design of weaponry. I think more in the aviation area and the automobile, where we tried to deal with the patterns. If we could determine that that stick shift sticking out of the floor was going to put a hole in your head every time you stopped, get rid of it. I think that's the type of thing that we were looking at, more than redesigning weaponry.

Q: How did the Forensic Department fit into the AFIP, in the '68 to '76 period, administratively? How did it work?

DR. FROEDE: Well, it was part of the Department of Pathology, under Dr. Helwig. It was just another one of the divisions there, and we had access to everything in the AFIP. So if we had a case that we wanted to tox, we went down to tox. If we had something that we were interested in pulmonary pathology, we walked upstairs to Pulmonary. And I think, there, one of the nice things about that was the instant communication, that you could walk that case and come back, or they would say, come back tomorrow, we'll pass it around. I think that is probably one of the problems today with the mail-order business, although with fax machines and things like this, your diagnosis takes a while here at the AFIP to go through accessions and everything else. Whereas, I can take a slide now, I can put it in overnight mail or Federal Express to one of my colleagues, he looks at it, he faxes an answer back within 24 hours. I think that is probably one of the one drawbacks here, and I think they're trying to rectify that now, based on what I heard about... But that's why the instant communication that we have being here was so wonderful.

Q: You could go to a world authority on almost anything you wanted.

DR. FROEDE: Right.

Q: When you first arrived, Captain Bruce Smith was the director. How did he run the organization?

DR. FROEDE: Can I use the term "a tight ship"? I have known him since that time. I've lectured for him when he left the service. He retired and went down to the VA hospital, and I'd go down to the VA Hospital and lecture for him in forensics. So he obviously knew that I was capable of putting on a good show. He ran the place very well as far as I could tell. During that period of time, it was Dr. Smith, then Dr. Morrissey. As far as I was concerned, it went very well. If nobody bothered me, and they let me do my work, then I thought he was good.

Q: Dr. Morrissey, an Air Force colonel. I interviewed this morning Dr. Cowan, who was saying Morrissey was sort of yanked here and really wasn't too happy here and left rather disgruntled about the way the place operated.

DR. FROEDE: That's true. But as far as I was concerned, I had known Bob for a number of years before, so I got along well with him.

Q: At the time, was there anything like the armed forces medical-examiner system, which developed later on and with which you became involved?

DR. FROEDE: What happened in that period of time was the conversion from a division to a Department of Forensic Sciences, with, then, a Division of Aerospace Pathology, a Division of Toxicology. Tissue Reactions to Drugs was under it at the time. Legal Medicine. Some of them went on to become their own departments. This was a period of time that there was expanding. During the Vietnam affair, there was an expanding workload for us, expanding challenges, trying to put these cases together.

It was at this time that Dr. Stahl and I, probably over a cup of coffee one morning, decided that maybe we ought to have a medical-examiner system. We put a set of slide together. And I still have those slides, going back 20 years from the time that we actually started it. So the seed was planted then. And it took a long time before it finally reached fruition.

Q: Why did you feel that a medical-examiner's office was necessary?

DR. FROEDE: For a couple of reasons. One, was to legitimatize the office. The Department of Forensic Sciences – that sounded great. But it was not like my colleagues outside, who were running coroner's offices or medical-examiner's offices. We felt that the workload should be more in line with a medical-examiner's office, developing protocols and trying to work out the problems this way. And I think, in the long run, it was proven to be very valuable and very true.

Q: Well, you mentioned Vietnam. The Vietnam War was going strong during this period. It was also going sour. In our armed forces, there were cases of fragging of officers, tossing fragmentation grenades at officers, and a lot of drug use and all. There were some real

problems. I would have thought this would have put an extra burden on the forensic side to find out was somebody killed by enemy fire, or by a disgruntled member of the American Armed Forces behind the barracks, that type of thing.

DR. FROEDE: It's true, during that period of time, the workload increased quite a bit. In the tox area, we did some research studies and published some papers, with Dr...and Dr. Goldbaum. There was a study at that time of wound ballistics, by Dr. Fink, and some of the materials he would gather from there. Unfortunately, somebody over in Vietnam threw out a lot of that material. And so we never really did get a good collection of data that way.

But from the standpoint of what you're talking about, the caseload, the fraggings and things like that, they would come in here and they would increase our workload. But we accepted this, and we did what we could. It was very difficult, for example, to look at this in an autopsy protocol. The one, probably, hard part about the system here is that you have field pathologists doing your work, and then you review the protocol. You don't actually do the autopsy, you don't see anything, and so there may be some things missing. Yet the missing things have, in some ways, value. One, for teaching. You can teach the new residents: Don't miss this next time. The other is that what we have, the missing things, may be not accounted in this, but only the positive findings... so we could interpret them. It was an interesting era.

Q: Speaking of training, were you involved in training?

DR. FROEDE: Yes.

Q: What was the main thrust of what you were teaching?

DR. FROEDE: Well, all of forensic pathology. The residency program is a real long one. And so we had residents all during the time I was here. In fact, I was one of the residents at that time.

Q: Also, you were benefiting, weren't you, from the Berry Program?

DR. FROEDE: Yes.

Q: So this meant that you were getting a fairly picked group of people.

DR. FROEDE: We were getting some very good people in. They did some very nice research there. The other thing is that Dr. Stahl had started on was trying to expand from just forensic pathologists. We had a veterinary pathologist, and we had lawyers coming in for a training program... fellowship with. It was really forensic sciences, if you want to use the term, but we still thought that it needed that title: Medical-Examiner's Office.

Q: Where were, in your opinion, some of the best medical examiners coming out of? Was it universities, or hospitals?

DR. FROEDE: Almost all of them are connected with a university. I think New Mexico has a wonderful program. Dade County, Florida. There's Baltimore. St. Louis. They're developing a new program in Milwaukee. Seattle. You notice I've not mentioned New York, because they don't have a residency. Of all the places you would think would have a residency, they don't have a residency program.

Q: They really don't?

DR. FROEDE: Unless they've started up this past year. But, to me, the best programs (and the AFIP is considered amongst the best) had diversification. It wasn't just working the pit day after day until your year was up. They would send their people out in the field for field work; they would send their people for anthropology courses, which is what they're doing now. The resident is going to do an awful lot of cases, on his own, of gunshots (my KGB-type cases), and he'll never have time again to do some of these things that he has during his residency. Because really he's not under an obligation to do the daily work; it's a learning experience. And I feel that experience that I had at the Smithsonian, at the BNDD, at Baltimore, that was very good. Any residency like that is in the top bracket.

Q: Did you see a change and upgrading of the forensic work done by pathologists in the armed forces? Were you able to see a discernible result?

DR. FROEDE: Yes.

Q: How? In what manner?

DR. FROEDE: Well, I think their autopsies were done better; they were looking for other things. And, of course, they would call in, too, "I need some help." Then, if we couldn't send anybody, we'd tell them what to do. And I think the admission that I'm not omniscient and omnipotent is something that some people don't have. I think when they do that, they then are knowledgeable enough to know their shortcomings and request help. I think this is one of the problems today in the forensic area, that there are a few people out there who are very willing to say, "I have never been wrong; I have never made a mistake." I will say this, there are fewer and fewer in that category, because I think they all now appreciate the value of consultation, which is just what the AFIP is, a consulting body.

Q: Did you get involved with the museum at all, or was it more or less dormant at that time?

DR. FROEDE: At that time, it was shut down for a while. We did make a display on the toxicology of drugs. And then it shut down complete when the University of the Uniformed Services came in. So everything was tucked away, and by the time I left, it had not reopened.

Q: You left here in '76. Where did you go, and why did you go?

DR. FROEDE: Well, I had my 20 years in. In fact, I had enough time to have a good retirement. I have 25 years, for pay purposes. Somebody I had known over the years, Dr. Jack Layton, who was out at the University of Arizona, was looking for a forensic pathologist to help develop his program. He gave me a call one day and said, "How would you like to...?" We'd always wanted to live in the Southwest, and I had other friends out there, so I said, "Fine. What you got?" He told me what he had, and that was intriguing enough for me to decide to retire and go out there.

Q: How did you find work at a university? Was it different from here?

DR. FROEDE: Well, different only from the standpoint of changing your master. Here, the master was the federal government. Out there, it was the academics and the state. Sometimes I wonder which is worse. In general, I was in the Department of Pathology. My title is chief of forensic sciences. There was nothing there when I came. It was strictly develop it from the ground up, develop all the connections within the university, and develop the connections within the state. There were a few pathologists out there who decided that I was a threat, a terrific threat, and they did everything they could in their power to try to stop this development of the system.

Q: How did they perceive you as a threat? Was it just that you were taking a piece of their action, or what?

DR. FROEDE: The problem was whose turf it was. And they could see where the university might become the Office of the Chief Medical Examiner in the State of Arizona, which meant they either worked for it or they didn't. And that meant money out of their pocket. And when you take money out of somebody's pocket, they get a little bit upset.

But, in the long run, we did develop as much as we could. We covered half the state, the counties around there. Every county attorney that we had wasn't willing to trade. The system was kept up after I left in 1987, and still is in effect today, except it's not with the university, it's with the county. But the same counties are still with this group. And the new chief medical examiner was my former resident.

Q: Well, you got hauled back to the AFIP for a while.

DR. FROEDE: Yes, in 1987.

Q: How did that come about?

DR. FROEDE: A number of years before, I think about '83, '84, Dr. Collins had said, "Why don't you come back to the AFIP in a Distinguished Scientist slot?" At that time, I was still in the developmental stage out there, and I really didn't want to.

Then one day I was in Dr. McMeekin's office, and he said, "How would you like to come back?"

Well, I tell you why: I saw the handwriting on the wall at the university. Dr. Layton and I had been together for about 11 years, and he was reaching retirement age. You've heard, after the old academic, the new broom comes in. And I was afraid they'd sweep all that stuff out that he and I had worked on so hard to develop within the department. As it turned out, that was right, because within a few months after I was gone, they swept it out of the university and sent it up to the county.

But when he said come here and be a Distinguished Scientist for a couple of years, do some research and things like that, I had no idea that I would ever end up as the Armed Forces Medical Examiner at that time. And so I decided I was getting old enough, and it was getting pretty hard to do 11 autopsies a day, pretty tired at the end of the day. And there were only three of us. At that time, I was trying to keep up my peer-group activity, working on the Journal of Forensic Sciences, and I was also in the chairs going on up to become the president of the American Academy of Forensic Sciences. So I thought, well, this is a good opportunity to change and see how I like it.

So I came here in 1987. And one of the first things they asked me to do was to take a look at the new medical examiners' reg. that they were trying to put through. And I found a lot of things in there that needed some change. I spent a good number of hours down at the Pentagon with an Army colonel there and with the lawyers, trying to get these changes.

That bit of paper gave whoever was sitting in that job a lot of responsibility and very little authority. We tried to change as much as we could, but it was very difficult, because if we changed too much, it would have to make the round-robin again and it'd be another five years before you'd get started again. Nobody was willing to go through this. Let's start it up, let's see how it works, and then let's work from there. [end side one]

Q: ...medical examiner?

DR. FROEDE: It was coming from here and, interestingly enough, from the criminal-investigating people. They were fed up with the hospital pathologist who was allowed to do a case, or wasn't allowed to do a case: "You can't do an autopsy, you've got surgicals." And it was also coming a little bit from the outside: "It's about time you people shaped up and got a medical-examiner system in the military." There had been several cases over the years before where everybody got upset about it. Congress got upset about it. And so Congress sort of mandated that this thing be set up. Now when they mandated, they didn't pass a law. If they had passed a law, we'd be on our way home right now without any problems. But they didn't, so it became just a reg. And with that, everybody would be sniping at it.

I felt at the time that I was fairly well supported by the Medical Corps, but there were several people who did not understand what a medical examiner was. I suppose the term "medical examiner" is a misnomer. It should be changed, because a medical examiner to them was somebody who came in, like the FAA, and did medical exams. Or a medical examiner came in and examined your records. There was one surgeon general who was very upset about this, that I was going to storm into his hospital, review all the medical records, and close the hospital down. But we finally convinced him. After that – he became pretty good friends of the system – we weren't going to do that.

Q: Would a better title have been "coroner?"

DR. FROEDE: You know, that's another interesting thing. Most of us, when we go out, are called coroners. I mean, the press calls you a coroner; it doesn't say medical examiner. "The coroner was out there," even though you're a medical examiner. But the name coroner, in this country, unlike in England, is bad. In England, the coroner can only be either a lawyer or a doctor or both, and very professional. When I was with the Royal Air Force and I testified in Coroners' Court, it was totally professional. Here, it could be anybody. It's an elected office, it could be the local bartender; I've seen nurses who were retired; I've seen funeral directors; I've seen furniture salesmen, they're all coroners. Now, in some places, they're very good and they have medical-examiner doctors and so on. So the name coroner, maybe we should get something new. It's bad at this point.

Q: I know, when you say "medical examiner," to me, this is somebody who comes around and takes your blood pressure to find out whether he gives you...

DR. FROEDE: That's it. Now, in New Mexico, realizing this, Jim Weston, when he created the system out there, used the term "medical-legal investigator," which now implies you investigate. But even that's a little bit lengthy. You're right about coroner. Gee, it's handy, you can click it right off.

Q: You were the first Armed Forces Medical Examiner, is that right?

DR. FROEDE: Yes.

Q: You started on the 2nd of May, the day after your birthday, 1988. How did you see the office at that point?

DR. FROEDE: Dimly. It was a time that we didn't have a big staff. It was a time that people were sniping at us, because they didn't want to see a system run into. It was a time that we didn't have a lot of money to do the things, because it would be draining the AFIP funds; we didn't have separate funding. I really had only four people to send out to do the job. There were times in that first year that literally I'd be the only one in the office, just trying to handle the telephones.

Then we began to develop the teaching program, and I spent a lot of time on the road, going to Europe, going over to Japan and Korea, and even around the country, trying to tell people what the system was, what it did, what it could do for them. I always tried to achieve the positive with them; how, even in a malpractice case, we might be able to help out the hospital. And I think I got the point across almost everywhere. But it was time consuming. You'd spend two weeks in Europe, and you'd spend...

Q: Why go to Europe?

DR. FROEDE: Because we had a very large force of people there, and most of our cases were coming from the European area. We had a couple of good pathologists in the Pacific area who were taking care of things, so from that standpoint, the Pacific kind of handled itself. But Europe needed a lot of help, and particularly the criminal investigators were very adamant about my coming over and setting up seminars, teaching other criminal investigators, working with the German police, and working with the hospital commanders. I think I made about three trips over there in the first few years, and then set up programs.

Q: You stayed on until, what, 1991?

DR. FROEDE: Ninety-two.

Q: In this time, were there any particular cases?

DR. FROEDE: Oh, there were a number of cases. You betcha! I think the first really big case we got involved in was the Iowa.

Q: This was the battleship Iowa, when one of its 16-inch guns blew up.

DR. FROEDE: That was the first time we really pressed the medical-examiner system into effect. We had some air crash accidents and things like that, but up until that time, we did not really act as a medical-examiner's office. At that point, when this happened, we moved over to Dover, Delaware. And Dover ultimately became the medical examiner's office in all these cases, the Saratoga, the Higgins' case, then, of course, Panama, and, recently, Somalia and other areas.

Q: Well, about the Iowa. The Iowa was a very controversial one, because there was strong questioning of why there was an explosion there. The Office of Naval Investigation pointed the finger at one time to one sailor and said, "Well, he was a homosexual and he was unhappy." And this aroused a firestorm of protest in the media and all that. Did you get into it early enough?

DR. FROEDE: Well, there again, no, we didn't. We never were able to send anybody to see the Iowa until after the fact. Which is where my civilian colleagues have it all over the military, and

that is, the phone rings, and you're on your way to the scene. Had we been able to see the scene, had we been able to work with the NIS and any of the other people, the engineers and so on... Later on, we did get engineers. But since it was the first time, nobody really wanted to send anybody to us. They finally sent a gunnery officer, and they finally sent an engineer to us, but it was several days into the investigation. They sent them up to Dover, and we worked together on that.

But it did point out the one thing that I think has been helpful, and that is, you've got to use your medical examiner system to assist you. They are there to help you. Not to be a hindrance, not to put you down, but to help you. And in helping you, you're going to look pretty good. If we had been in there, maybe we could have made the NIS look a lot better.

Then we had Saratoga.

Q: What was the Saratoga?

DR. FROEDE: This was the carrier where the sailors had gone on a holiday right around Christmastime into Tel Aviv, and on their way back, the ferry boat tipped over and 21 people lost their lives.

We had Panama, just cause.

Then probably one of the most memorable cases was in 1989, the end of July, early August, with the film on Col. Higgins, the Marine Corps colonel.

Q: He was an American Marine officer assigned to the U.N. peacekeeping force and was kidnapped.

DR. FROEDE: He was kidnapped, and then they released the film of him hanging, suspended. And we went to work on that one, on the identification. The FBI did a magnificent job on that. We worked several nights with them on that, to identify him, by taking a picture of him and doing superimposition, by getting a picture and adjusting him as he's turning, to a certain point, and then we could actually just point-for-point. And we were able to demonstrate to the Marine Corps things that they claimed had happened did not. As far as we were concerned, Higgins had died many months before that. And that's all I can tell you about that case at this point. It's still considered an active case. The bodies came back in December '91, and we did the autopsies on the Army Lt. Col., retired, Buckley. Buckley and Higgins came in.

It's interesting. I mentioned Saratoga at Christmas, Just Cause, Christmas. For about five years, we spent most of our Christmases at Dover, Delaware.

Q: Did you have an actual office at Dover? Was this your operational office there?

DR. FROEDE: It was just simply a mortuary where we could do the autopsies. And, of course, during Desert Shield, we went up there and began to stock it. But we couldn't do anything; no construction could be done. And we knew, if you followed Jack Anderson's figures, that we would lose somewhere between 17,000 and 25,000 dead. There was just no way Dover could have handled them.

Q: We're speaking now of a conflict between the United States, with its allies, and Iraq in 1990. Jack Anderson was a columnist who, along with many others, was predicting horrendous casualties.

DR. FROEDE: So Congress authorized the expenditure of the funds, but wouldn't permit it to start until everything started, which, in their infinite wisdom, sounds great.

It started on a Tuesday night, and I went up there the next morning. Construction started, and it was an extraordinary battalion of Air Force engineers and construction people out of Indiantown Gap. In 21 days, from the footings to the final, they had put this thing together for us. I spent about 60 days up there, just fighting all the battles of construction. I learned a lot about the construction business. You don't put drinking fountains next to the autopsy table, and you don't put 3 x 3-foot ducts over the autopsy table, because nobody could straighten up.

Working with them, there were some mighty fine people up there. But the red tape was horrendous. I think probably my biggest problem there was the Army red tape, trying to get records from the Army so we could sign out the death certificates. The Navy and the Air Force and the Marine Corps were very cooperative that way.

The FBI did all the fingerprinting, and we did have some Army CID people who helped them along with it, which was very good. We would go to the Ops. Center about nine, ten o'clock at night. We knew what flights were coming in, and we had the tentative names of the deceased, so we would send them down to FBI headquarters, and they would pull these files, so that the next morning, when their team came up, they had the fingerprints and they could do it right away.

We wanted the Army to do this; look, here are the names, get us the records, so that we can sign out the DCs by the end of the day. Well, my poor fellow who was doing a lot of this work spent hours there every evening, because they'd come in one at a time. If anything held up the return of bodies to their loved ones, I felt it was the paperwork. Although we were criticized by people saying the reason the body can't go home is because the pathologist hasn't done the autopsy; that was wrong. It was the pathologist and the anthropologist and the dentist working together to put the pieces back together. And that takes days.

We had one case that I'll never forget, when a name was given over CNN at eight o'clock in the morning. At five o'clock, I had a call from a congressman, saying, "Why isn't the body in the hands of the family?" Well, it takes 18 hours to get it from Kuwait to Dover. Then it has to be

identified and has to go through. So I explained the whole thing, he said, "Thank you very much, doctor," and that was the end of that. But that's the type of thing that we ran across.

I'm very proud to say one thing: there is no body going into the Tomb of the Unknown Soldier from that conflict. We identified them all.

Q: I might add that you received the Defense Meritorious Civilian Service award for your work during Operation Desert Storm.

DR. FROEDE: That's right.

Q: Well, you, in many ways, as you had at the University of Arizona, were setting up the structure on which this medical-examiner office would operate, weren't you?

DR. FROEDE: That's right.

Q: When you left there in '92, did you feel that the authority of the medical examiner and the legal framework in which that office worked were better and stronger?

DR. FROEDE: Yes. And I think my successor has been able to do a lot more, too, because of the framework that it started on. By then, four years later, I think it was recognized by my colleagues in the forensic field as being the Office of the Armed Forces Medical Examiner. And that, to me, was the most satisfying aspect of it.

Q: The Dover facilities are there still?

DR. FROEDE: They're still there. They have been used for Somalia. Had the Haiti campaign gone through, they would have been used for that. They're there for anything. They've used it for aircraft accidents and other identification problems.

Q: Well, doctor, is there anything you'd like to add?

DR. FROEDE: Oh, no, I think we've covered just about everything that there is.

Q: Well, I thank you very much. I appreciate this.

DR. FROEDE: You're welcome. It's been a pleasure.

Jan Garavaglia



"Dr. G"
NAME Foundation Advocate 2014-2019

Focus on Jan Garavaglia, M.D. - Foundation Newsletter September 2015

Jan was born and raised in St. Louis, MO, where she also attended St. Louis University for her undergraduate education, her medical school education, an internship in internal medicine, and training in a combined anatomic and clinical pathology residency program. During medical school, Jan was introduced to the world of forensic pathology by none other than Dr. George Gantner, as he lectured to the medical students. It was during her internal medicine internship year that she became convinced, through conversations with Dr. Gantner, that forensic pathology was the career for her. Despite warnings from her first husband that such a career move would be tantamount to "throwing away your medical education," Jan fully embraced her decision and, after finishing her pathology residency training in St. Louis, she completed her formal training by participating in a forensic pathology fellowship in Miami, FL, at the Dade County Medical Examiner's Office, in 1987-88, under the direction of Dr. Joe Davis. Although she was offered a job in Miami following her fellowship, Dr. Garavaglia chose not to accept the position, since her husband did not like southern Florida, so she followed him to Jacksonville, FL, where she worked as an associate medical examiner under Dr. Peter Lipkovic. The next year, after her husband grew tired of northern Florida as well, Jan followed him again, this time to Ottawa, Canada, where he could complete his fellowship training. During the two-year stint north of the border, Jan was unable to work as a forensic pathologist, because of her US citizenship; however, they then moved back to the US, where she worked with Dr. Joseph Burton in a private forensic office in the metro-Atlanta area. After two years there, Jan's husband had also gotten his fill of Atlanta, so it was time to move again. This time, Dr. Garavaglia moved to the Bexar County Medical Examiner's Office in San Antonio, TX, to join Dr. Vince DiMaio. She remained in San Antonia from 1993 through 2003.

In 2003, Dr. Garavaglia accepted a position as Chief Medical Examiner in Orange and Osceola Counties (Orlando area). Prior to her arrival, the office had experienced numerous problems, including lawsuits, allegations of incompetence, poor cause of death determinations, loss of confidence by law enforcement, citizen complaints, poor employee morale, and, of especially great concern to county officials, bad media coverage. Jan saw the job as an opportunity to make a great impact and improve the office and the forensic pathology services provided to the community. Following some initial turmoil that occurs with the hiring of a new chief, Dr. Garavaglia oversaw and directed the creation of an outstanding Medical Examiner's office which was dedicated to quality and provided excellent services. The office had a pleasant atmosphere and was trusted and respected by law enforcement, the local legal profession, and the citizenry. Jan is particularly proud of the fact that the office became NAME accredited and she was able to help design one of the first "Leadership in Energy and Environmental Design" (LEED)-certified morgues in the country. Despite becoming one of the best-known, and arguably the best-loved, "real" forensic pathologists on television (see Dr. G details below), Jan recently decided to retire from her position as chief in Orlando, in June of 2015, in order to fulfill a promise to her second-husband, Mark, whom she actually knew and dated during medical school. Following her move to Orlando, Jan and her first husband had divorced. Shortly thereafter, she reconnected with Mark, whose first wife had recently died. They married soon thereafter, but he worked as an infectious disease specialist in the Navy in San Diego, so he actually retired from the Navy and relocated to Orlando. At that time, Jan promised that, after her boys had headed to college, she would repay him by following him to wherever he wanted to go. So, Jan and Mark have recently moved to the great northwest. Jan says of her decision, "Although it was terribly hard to give up my position in an office I loved, I love my husband more, so I retired and moved to his hometown in northwestern Washington State where his family has a large potato farm."

Jan was asked about her role as teacher/educator over her career. She said that she really enjoyed all of her roles as teacher, but especially when that role involved medical students, residents, and fellows. She is especially convinced that reaching-out to medical students is an excellent way to not only educate future physicians about the importance of death investigation and proper death certification, but to recruit intelligent, thoughtful people into our profession.

When asked what she liked most about her job, Dr. Garavaglia responded with the following: "From my beginning conversations with Dr. Gantner to this very day, the aspect I like most about forensic pathology is putting the pieces together to determine, to the best of our ability based on the findings, reason, science, and circumstances, what happened."

We asked Jan about who she considers an important mentor in her career. She responded by saying that absolutely every pathologist, including trainees, that she has worked with has had a lasting influence on her practice of forensic pathology. She makes specific mention of Drs. Lipkovic, Wetli, and DiMaio, and reiterates the fact that Dr. Gantner had the biggest influence on her as far as career choice. Ultimately, however, as with many who have been blessed to

have served under his direction, Joe Davis undoubtedly had the greatest influence on her professional career. Of the icon Joe Davis, Dr. Garavaglia offers these fond words of praise and remembrance: “He was always passionate about the field and always enjoyed learning more about both forensic science and medicine. He emphasized the good we do for public health and families, not just the criminal justice system. He believed that the medical examiner’s office should be service-oriented and accountable to the population at-large. Later in his career he also served as a role model when he refused to use his expertise and experience to ‘cash in’ as an expert witness. He explained to me that he would only take a case to right a wrong, if it appeared that someone was falsely accused by bad forensics or decision making. He would never take-on a case to muddy the waters for either side in a legal tug of war.”

We also asked Jan what she considers some of the major challenges facing our profession and how could we work to make improvements. She considers a major challenge to be convincing politicians, bureaucrats, citizens, and even other physicians the importance of advocating for a good death investigation system. Death investigation systems do not just serve the criminal justice system. Rather, good systems serve all aspects of public health. In addition, she believes that our profession should be increasing the utilization of modern technology, including DNA/genetic testing and advanced imaging modalities. Finally, Jan believes that performing high quality and meaningful research should be a priority within our profession. Despite our profession’s workforce shortage and tendency to be overworked, the material seen in most offices can provide a wealth of information that could be better 1utilized to answer many important public health questions. She states, “Our organizations, including NAME and the NAME Foundation, must continue to educate politicians, clinicians, researchers, public health entities and universities about the wealth of information and research opportunities that detailed autopsies can provide. Meaningful research is the only way we will continue to improve as a field.”

The latter comments by Jan represent one of the reasons that the NAME Foundation Board of Trustees asked her to join our ranks. Upon her acceptance of the invitation to join the BoT, the Board then quickly followed with an invitation to become the first official NAME Foundation Advocate, a volunteer position to which Jan humbly agreed to take-on, despite the fact that the job description remains somewhat of a work-in-progress. Suffice to say that our new Advocate is up to the challenge. As can be gathered by her comments throughout this article, Dr. Garavaglia is eminently qualified to be the “public face” of the NAME Foundation in its endeavor to advance forensic pathology and death investigation in terms of education, research, and history preservation. Jan says of her new position, “I am excited to have been asked to take on the role of NAME Foundation Advocate. One of the Foundation’s missions is to advance the field of forensic pathology through advocacy and education about our profession. We need to get the word out about the great societal value of our profession and the potential for even greater benefits. Although this is a new position, with specific duties still being worked-out, the overarching mission will be to create goodwill for our field.”

Dr G: Just prior to leaving San Antonio, Jan participated in the filming of the pilot episode of "Dr. G Medical Examiner." During the next eight or so years (from 2004 until 2012), while serving in her role as Chief ME in Orlando, Jan filmed 98 episodes of the show. The idea for the show came about because of a Redbook magazine article written about Jan in the late 1990s. Mary Fran Ernst had been approached about the subject of a female medical examiner for the Redbook article. Mary suggested Jan, as well as several other highly qualified female MEs. As fate would have it, the article was written about Jan, and someone at the Discovery Network who just happened to be thinking about doing a TV show about an ME saw the article and contacted Jan. At first, Jan refused to do the show, as they wanted to focus on homicides. Jan said she would do the show only if it would accurately depict what MEs really do, including the investigation of a variety of case types.



Jan on the set of "Dr. G"

"At first, they were not sure they wanted to proceed, so I had to convince them that nearly all cases can be interesting if presented in the correct way, even simple atherosclerotic cardiovascular disease. The producers and directors eventually became intrigued with natural disease (as well as crime) stories that came through the office and we started the process." During the years that it aired, it was frequently the number one show for the Discovery Health Channel, and in 2007, the show won a prestigious international health in media award for the "Best Health Education Series." The show continues in reruns on Discovery channels and has been syndicated around the world. Dr. G frequently receives fan mail from around the globe. Asked to comment further about the show, Jan responded, "The hardest part of doing the show was juggling the time commitment of the show with running the office and raising a family. Except for filming me actually doing cases, the real work on the show was done after my normal work hours and frequently late into the night. Despite the long hours I put in on the show, I very much miss filming the show and the camaraderie I had with the crew. It was a fantastic experience."



Jan Tending her garden



Jan and Mark on a recent trip to Roswell, NM

Although Dr. G no longer films her popular TV show, and her retirement has just begun, Jan will be staying busy. In addition to her new role as NAME Foundation Advocate, she plans to do some locum tenens work and perform autopsies for some of the local coroners. In addition to her continued involvement in forensic pathology endeavors, Jan plans to enjoy living outside of a large city for the first time in her life. "I still can't get used to how dark it is at night without streetlamps!" She has quickly learned that she loves working in the garden. She mentions fresh raspberries, blackberries, blueberries, cherries, apples, and plums, as well as squash, corn, and many other veggies. She says, "This is a far cry from working only with things that are dead. Also, I have gotten to utilize some of my knife skills filleting the salmon that we catch." In addition to her husband, Mark, Jan's family includes two sons and a stepson. Her oldest has almost completed his doctorate in meteorology at Penn State, while her youngest is a junior at Whitman College in Washington State, and her stepson works with and designs 3D printers in Colorado.

Please join all of us in the National Association of Medical Examiners and the NAME Foundation in congratulating our very own Dr. G, Jan Garavaglia, on her recent retirement, as well as on her successful and inspirational career, and for remaining the down-to-earth, caring, family loving, outstanding professional colleague that we know her to be. We look forward to seeing her and supporting her in her new role as NAME Foundation Advocate, and we wish her even more success in this new role, as she advocates for the profession that is near and dear to her heart, as well as ours. Congratulations and Good Luck, Jan!

Michael Graham, M.D.



Chief Medical Examiner, Kansas City, MO, 1989-present
NAME President 2004

After three decades as medical examiner, Michael Graham can still say, 'I like a mystery'

In *Science* by Gloria S. Ross, special to the Beacon
7:56 am on Fri, 07.06.12

Kathy Reichs was looking for a new way to murder someone.

She checked with a few friends, including Mike Graham. He suggested ricin, a substance so toxic that the equivalent of a few grains of sand is sufficient to quickly kill an adult.

It worked beautifully.

Kathleen Joan Toelle Reichs is a forensic anthropologist, professor and crime novelist. She's also the producer of the hit television series, "Bones." She got some of her deadly poison facts for her latest novel, "Flash and Bones," from Dr. Michael Alan Graham, chief medical examiner for St. Louis and professor of pathology at Saint Louis University.

"I heard she mentioned me in her acknowledgments," Graham smiled, admitting he hasn't read the book yet.

She did and he might want to read the book; it made it to No. 1 on the New York Times best seller list last September.

Graham has also consulted with Patricia Cornwell, who has written a series of novels about a medical examiner, Dr. Kay Scarpetta.

He quickly disavows any interest in writing novels. His five books are all deadly serious, tending toward titles like "Forensic Pathology in Criminal Cases." They are all textbooks.

Unraveling mysteries



Graham has contributed chapters to more than 20 other books and written hundreds of papers. He lectures all over the country and has the golf balls to prove it -- about 300 of them, souvenirs from the courses he's played during his travels. They are neatly displayed in his spacious but far from lavish office on the top floor of the medical examiner's building, a two-story granite affair that's plain even by mausoleum standards.

Tall, irregular stacks of paper cover every inch of surface, except the space reserved for a high-powered digital microscope and coffee-making paraphernalia, including four containers of Coffee-mate ("I can't take a chance of running out," Dr. Graham explains.)

The M.E.'s office will not be relocating when it's next door neighbor and primary patron, the police station, eventually moves from the 1300 block of Clark Avenue downtown to parts westward.

"We are specialized," said Graham's assistant, Roberta Steele, a former embalmer, explaining why the office would stay put. "You, know, the refrigerators and all."

That would be the morgue in the basement.

It's where Graham and three other pathologists unravel the mysteries of death.

"He is very brainy and he likes to solve puzzles," said Dr. Jane Turner, assistant medical examiner and an associate professor of pathology at SLU med school.

"He takes an intellectual approach to forensic pathology."

He has seen a lot of changes in the field.

"With technology, like digital microscopes, we can do more with less. We understand more about basic diseases like crib death, and DNA has been a big change for diagnostic purposes," Graham said.

What hasn't changed is human nature, ensuring steady work for him and his staff of a couple dozen people, including three other forensic pathologists and four investigators.

"I like a mystery; I still enjoy unraveling them," Graham says. "I try to pick up the pieces and get the right story."

But some pieces are harder to pick up than others.

The hard cases

On a mild winter day in February 1983, two men were sifting through debris in the basement of an abandoned house looking for some useable metal.

What they found, instead, has haunted Graham ever since.

“My most frustrating case was the little girl whose body we found with no head,” he said.

After more than three decades in the city’s medical examiner’s office, the 61-year-old M.E. has determined how thousands of people died, but this is the case that lingers in his mind for one simple reason:

“We still have no idea who she is,” Graham said.

From time to time, Graham still takes another look at little Jane Doe’s file.

It has been one of his most troubling cases but perhaps not the biggest. Two national cases vie for that honor: the 1993 federal raid on the Branch Davidian compound in Waco, Tex., and the murder of child beauty queen JonBenet Ramsey in Boulder, Colo., three years later.

Graham spent a year reinvestigating the actions of government agents at Waco as part of a committee led by former U.S. Sen. John C. Danforth. The agents were exonerated.

“It was pretty interesting to be on the inside of a federal case,” Graham said, still marveling at the “impressive” size of the government’s resources.

He reviewed the piles of conflicting information in the death of 6-year-old JonBenet, who was killed in her home one day after Christmas in 1996. That “very difficult” case has never been solved.

“Mike is highly recognized nationally as an outstanding person in his field,” said Dr. Mary E. Case, chief medical examiner of St. Louis, St. Charles, Jefferson, and Franklin counties.

The lives of the two M.E.s have been intertwined since Graham did a fellowship in forensic pathology at Saint Louis University under Case in 1981.

Weird science

Graham graduated from Saint Louis University School of Medicine in 1977, four years after receiving his bachelor’s degree in biology there. He did a residency in anatomic and clinical

pathology at St. Luke's Episcopal Hospital in Houston from 1977 to 1981, then returned to SLU for his fellowship with Case.

He became her colleague in the pathology department at SLU and joined her in St. Louis' M.E.'s office. He has been a professor of pathology at SLU since 1996 and the two co-direct SLU's forensic division in the pathology department.

"He is mild-mannered, calm and easygoing, but we are all weird," Case said of forensic pathologists.

"We don't find our work morbid," she added. "It is kind of odd what we do, but it's extremely interesting; when you actually do the work, you don't think of it as strange in any way."

Graham agrees nothing strange is going on.

"If you are just focused on the macabre aspects of death, that would be pretty morbid," he said. "Our role is to resolve issues around a particular death and help a family get through a very difficult time."

The unflappable Graham has been the city's chief M.E. for the past 23 years. He was appointed by Mayor Freeman Bosley Jr.

"I've never met the mayor," Graham says with a sly grin, "but we aren't really involved in city politics. They pretty much leave us alone to do our thing."

Their "thing" is performing around 700 autopsies a year, after investigating approximately 3,000 cases of people who died alone, suddenly or unexpectedly.

"Like a 14-year-old dying during football practice," Graham explains.

Or suspected homicides.

As an expert witness, Graham has given his share of testimony in high-profile, sometimes controversial, cases.

In 1999, two city police officers said that a burglary suspect they encountered on a roof, Julius Thurman, died from falling on his head. Graham begged to differ. He said his autopsy showed that Thurman's death resulted from a powerful blow that fractured his skull. No one was convicted in the killing.

The Paula Sims case had a much different outcome.

In 1990, Graham testified that Sims' 13-day-old daughter, Loralei, died in 1986 from "homicidal violence." The Alton woman eventually pleaded guilty to murdering both Loralei and another daughter, 6-week-old Heather, three years earlier.

Saving suspects and children

The two cases are emblematic of areas of particular concern to Graham.

"I have an interest in why young people suddenly drop dead and death in (police) custody," Graham said.

The two types of death have something in common: They are often preventable. Graham has researched, written and lectured extensively on both.

His work includes teaching police officers how to restrain safely suspects who are in no mood to cooperate. He advocates the "three-minute rule"; getting control quickly helps prevent deaths. He received the 1986 president's award from SIDS Resources for work that led to a decrease in sudden infant deaths, the stuff of parents' nightmares.

"My interest in infants was because they made up the bulk of sudden deaths," said Graham. At SLU "we were involved in a lot of the early studies in the '80s and '90s about why the babies were dying.

"We investigated and found that a lot of the infant deaths were preventable."

The most common culprit for SIDS is smothering from unsafe sleeping practices: parents rolling onto babies in a shared bed; face-down sleeping; teddy bears, crib bumpers and covers.

"We were surprised that ordinary soft adult bedding could kill a baby," Graham said.

The worst offenders, comforters, cause swaddled babies to inhale their exhaled breath, which is high in carbon dioxide, a toxic gas.

The cure is education. And therein lies the challenge.

"I knew we were going to have problems getting people to change, but we have had reasonable success," Graham said. "It takes time to break old habits."

The SLU research was also used by the Back to Sleep campaign, a federal program begun in 1994, which encourages placing healthy babies on their backs to sleep.

Graham is as devoted to saving lives as he is to finding out why a life was lost. It's the latter for which he may be best known and least understood.

"Most people don't have a clue what we do," Graham said, "and I consider it a success when people don't know much about us. We are not the type of office you want to see on the front page every day."

Some who know his work have acknowledged it.

Graham, whose clinical research includes forensic issues regarding cardiopulmonary pathology and diagnostic cardiac pathology, has received numerous honors. They include being named health professional of the year in 1992 by the Combined Health Appeal of Greater St. Louis for transplantation activities and the outstanding service award from the National Association of Medical Examiners.

A special personality

A small room that resembles a chapel is near the entrance of the medical examiner's building. It's actually a waiting room for grieving family members.

He's compassionate, thoughtful and extraordinarily patient with families," said Turner.
He's also direct.

"I always tell the family the truth, even if their child died of a heroin overdose," Graham said. "Chief," as Baxter Leisure, Graham's executive assistant, calls him, "is honest with families because they are hearing so many different things about their loved one's recent expiration."

Their work, Leisure says, takes a special personality, recounting the time a promising investigator left his resignation on Graham's desk the morning after he'd had his first encounter with a decomposing body.

Graham takes it all in stride.

More Clark Kent than Superman, he golfs, attends every Blues game his schedule permits, and reads spy and detective novels.

"No highbrow stuff," he says.

When they were young, he often took one of his two sons, Christopher, 25, and Patrick, 21, on business trips with him. He doesn't watch forensic television shows, not even "Dr. G: Medical Examiner," which he heard is "more realistic than CSI."

The now world-class forensic physician – don't call him a coroner – was born in East Liverpool, Ohio, home to football great "Lou" Holtz. He grew up in nearby Salem, a farming and steel town in northern Ohio. His father was a hospital controller, his mother a homemaker, and he a happy, only child.

He is married to Dr. Irene Graham, a physician in the Center for Vaccine Development at SLU. The two met when Graham was a resident in Houston and she was a medical student at Baylor College of Medicine.

They live in Frontenac with two playful Abyssinian cats. The male, Angel, belongs to his wife; Graham gets the “obnoxious, in your face” female, Blue.

Randy Hanzlick, M.D.



Chief Medical Examiner, Fulton County, GA 1998-2016
NAME President 2001

April 2011

This memoir was prepared in response to a request from NAME Past-President Committee Chair Thomas Noguchi. Dr. Noguchi desired to obtain memoirs from all of NAME's Past Presidents, in order to prepare a document for NAME's 45th Annual Alaska Cruise Meeting in August, 2011. I apologize in advance for any incorrect spellings of various people's names, as I have relied heavily upon memory. Also, I would like to note that writing a memoir is much more challenging than one might think, especially in terms of what to include and what not to include. I have tried to be fairly complete but not excessive in detail.

Why did I select forensic pathology as a career?

This is an easy question to answer. I did my pathology training at University Hospital at Ohio State University in Columbus. At that time, the morgue was divided in half by a glass block wall and hospital autopsies were done on one side of the wall and coroner cases were done on the other. I had regular exposure to the coroner cases and a particularly likable pathologist, Nobuhisa "Nobi" Baba (he used to tell us to call him BA^2), who ran the autopsy service but also was a forensic pathologist for the coroner. He was very intent on telling us about forensic pathology. Further, Ohio State was among the first seven places which had an approved training program in forensic pathology beginning in 1961.

Although the forensic pathology program was inactive when I trained at OSU in the 1970s, I had known about it and the program became active again in the mid-1980s until the mid-1990s. Even when the program was inactive, there was strong emphasis on forensic pathology in the anatomical pathology training program at OSU. In fact, forensic pathologists Margaret "Peggy" Greenwald, Michael Clark (deceased), Steve Phillips (no longer practicing FP), and Greg Wanger all were in medical school at OSU about the same time as me. That says something about OSU

and its fostering of forensic pathology at the time. I went into the field and didn't really even consider salary and income when I made my decision.

I had felt since junior high school in Salem, Ohio, that I wanted to be a physician. I had a science teacher named Walter "Bing" Newton who was an excellent teacher and who provided me much encouragement in pursuing science and medicine as a career. I did a science project on catheterization of the heart and actually watched pioneer Dr. F. Mason Sones of the Cleveland Clinic perform one on my father. That experience furthered my interest in medicine.

Places and times I served as Chief Medical Examiner

I have been the Chief Medical Examiner in only one office, the Fulton County Medical Examiner's Office (FCMEO) in Atlanta, Georgia, where I have been Chief Medical Examiner since July 1998. I began working in the office in 1982 when I began my fellowship and I stayed on there full-time until 1991. I then left to work for Emory University and the CDC through an interagency agreement, and between 1991 and July 1998, I oversaw the autopsy service at Grady Hospital and worked on many projects with the CDC's Medical Examiner/Coroner Information Sharing Program (MECIS). Also during most of those years, I continued to do forensic autopsies on weekends at the Georgia Bureau of Investigation and later, back at the FCMEO before I came back as Chief in 1998.

Major accomplishments as Chief Medical Examiner

Although our new facility which opened in April 1999 had been planned prior to my becoming Chief ME, it was during my tenure as Chief that the facility was built and we moved into the new facility. Of course, we had to migrate our operations and change the way we did things. We had to re-write policy and procedure and we faced many challenging problems with the new physical plant. Much planning and time went into remedying those problems.

During my tenure as Chief ME, we pursued, obtained, and have maintained full accreditation by the National Association of Medical Examiners (NAME). Also, after becoming Chief Medical Examiner, we upgraded and improved significantly our accredited training program in Forensic Pathology.

Although we have faced budget challenges in recent years, we have managed to become more efficient yet continue to provide professional service compliant with the law and applicable professional guidelines and standards. The pathologist case load is quite acceptable and our turnaround times for reports are quite good. Maintaining such conditions has been a top priority.

Most gratifying has been a restructuring of our organization and the way we do things. We have many more conferences than we did in the past and all types of staff attend. There are better opportunities for in-house career advancement, and we have developed an improved and more professional approach to medico-legal death investigation. Team work has improved and I

believe everyone feels much more a part of the team than in the past. Turnover has been very low, especially among the forensic pathologists, and has occurred mainly when people have retired or decided to pursue opportunities in the private sector.

Of the awards I have received in my career, the ones most important to me have come after I returned to FCME as FP Training Director and while I have been Chief Medical Examiner. These include the NAME Outstanding Service Award (1997), the AAFS Path/Bio Section Milton Helpern Award (1999), the NAME Lifetime Service Award (2007), and the AAFS Distinguished Fellow Award (2009).

Efforts on behalf of forensic pathology and the forensic sciences

I have attempted, in the list below, to document what I consider to be the most significant efforts on behalf of forensic pathology, forensic science, and death investigation, beginning with the first projects and ending with the most recent:
Along with James "Jack Frost," established the NAME Pediatric Toxicology Registry in the late 1980s. This was later turned over to John Howard.
Developed a nomination and selection process to recommend a new editor for the orange journal upon William Eckert's retirement in the late 1980s. This was a long and involved process but the journal did not accept NAME's recommendation, one of the first issues that arose regarding the relationship between the journal and NAME. Note: this question asked about "efforts," not necessarily successes!
Worked with the CDC's Medical Examiner/Coroner Information Sharing Program for approximately 10 years.
Implemented and edited "NAME News," a regular newsletter for NAME members which continued until email and NAME-L became widely used.
Developed and managed NAMEs first website. This project was later turned over to Mike Bell.
Set up "PIC-NIC (NAME Information Center)," a web based bulletin board for NAME members, subsequently replaced with NAME-L.
In conjunction with Emory University, established NAME-L.
Assisted with the development of the CDC guidelines for sudden unexplained infant death investigations along with project manager Solomon Iyasu of the CDC.
Assisted with the development of the National Institute of Justice's Guide for the Death Scene Investigator under program manager Dick Rau of the NIJ.
Served on the CAP Autopsy Committee (Chair Grover Hutchins, deceased) and CAP Forensic Pathology Committee (Chair Don Reay).
Served on the ABP Forensic Pathology Test Committee (William Hartmann, ABP EVP and Ross Zumwalt, Test Committee Chair).
Co-Authored and edited two CAP Manuals on Certification of Death.
Co-Authored the NAME Guide for Manner of Death Classification and several other NAME guidelines such as infant death certification and others.
Was the initial NAME representative on the Consortium Forensic Science Organizations (CFSO).
Hosted the NAME Office at FCME when NAME, for a variety of reasons, decided to remove NAME from a University setting. This situation lasted about 5 years and worked well, I thought,

but had the unanticipated outcome of NAME then moving its operations back to Missouri. I hope NAME will eventually get its own, NAME-owned facility to house the office and staff.
Developed electronic databases to manage NAME Membership Information (MILTON) and The NAME Foundation. MILTON is still used today to prepare the annual meeting abstract book and for some other NAME activities.
As Chair of NAME's ad hoc Data Committee, assisted in numerous projects involving collection and analyses of data from NAME members and other sources, with nearly 30 reports of project outcomes.
Assisted with the development of the NAME Forensic Autopsy Performance Standards
Helped develop the NamUs system for missing and unidentified persons with Steve Clark in conjunction with the National Institute of Justice and funding provided to the National Center of Forensic Science (NCFS) National Forensic Science Technology Center (NFSTC).
Currently serve as a local advisor to the Whitehouse Subcommittee of Forensic Science (SoFS) Standards, Practices, and Protocols Interagency Working Group (SPPIWG).
Currently serve as Vice-Chair of the newly formed Scientific Working Group for Medicolegal Death Investigation (SWGMDI).

Recollections of places I have trained and worked

I have very fond memories of my pathology residency at Ohio State University. It was a great place to train and the faculty was excellent and diverse in expertise. Further details have been provided elsewhere in this memoir.

My only other training was at the Fulton County Medical Examiner's Office at which I did my forensic pathology fellowship. There is an interesting story here. I applied to the program which was listed as being sponsored by Emory. I was accepted. I then received a letter from an embarrassed Department Chair at Emory informing me that he realized Emory had discontinued their sponsorship of the program. Thus, I basically did a two-year fellowship at FCME in 1982-3 and qualified for the boards based on experience rather than having completed an accredited, one year fellowship program. We took care of the accreditation problem in the mid-1980s and the training program has been accredited since that time.

Since the late 1980s, I have been on the faculty of the Pathology Department of Emory University. I gradually moved up from clinical assistant professor, to associate professor, and eventually to professor of forensic pathology. We have been blessed to have the support of the pathology department staff over the years when we need special expertise. During my time with Emory, the Department Chairs were Kenneth Sell, James Madera, and currently, Tristram Parslow. For many years now, Emory has funded our forensic pathology fellow positions and the medical examiner staff also has clinical appointments in the Pathology Department at Emory.

During the years 1991 to 1998, I worked with both Emory School of Medicine and the CDC through an interagency agreement. At CDC, I worked in the Medical Examiner/Coroner Information Sharing Program (MECISP) primarily with Roy Ing, Gib Parrish, and Deborah Combs.

Steve Thacker, a long-time CDC employee, was one of MECISP's founders. For most of its life, the MECISP Program was run through the CDC's Center for Environmental Health and its program for Injury Prevention and Control, led by Vernon Hauck (deceased) and then Henry Faulk. In its later and final years up to 2001, MECISP was moved to the CDC Epidemiology Program Office. CDC Directors during the MECISP years included William Roper, David Satcher, Jeffrey Koplan, and Julie Gerberding. All of the people I worked with in MECISP were dedicated, talented, helpful, and a pleasure to work with. It was this MECISP group that published the first comprehensive directory of death investigation systems in the United States and Canada, among many other projects such as helping to develop standard medical examiner/coroner databases. At this same time, I served as Director of the Autopsy Service at Grady Hospital. I worked with many people there including Pathology Assistants Linda Leslie and Eugene Semple; autopsy assistants Shirley McWilliams and Audrey Hargrove, surgical pathologists Chester Hermann, Karlene Hewan-Lowe, David Schwartz, Victor Nassar, Victor Napoli, and Bagirath Majmudar; clinical pathologists David Vroon and Bob Allen; and cytopathologist George Birdsong. I learned much from all of these colleagues and they also were a pleasure with which to work.

I also I have done a lot of work with the National Center for Health Statistics (NCHS) and its mortality branch. I spent much time working with Harry Rosenberg, George Gay, Donna Hoyert, Julie Kowaleski, and in more recent years, Robert Anderson and Charles Rothermill. With these persons, efforts were spent to revise the US Standard Certificate of Death, to develop plans to re- engineer the death registration process and for electronic death registration, to improve instruction manuals for completion of the death certificate, and to conduct an-in-depth analysis of the mortality statistics branch of NCHS.

The list of persons with whom I have worked since becoming Chief ME in 1998 is quite long and I cannot mention all of the names here. A comprehensive list is available on the FCME web site at www.fultoncountyga.gov/me-home . During my tenure as Chief ME, I was fortunate to have on my staff Eric Kiesel, John Parker (part time), and Carol Terry in the past, and presently, Michele Stauffenberg, Geoffrey Smith, Michael Heninger, and Karen Sullivan. In addition, one could not ask for a better administrative, investigative, autopsy, and facility support staff than we have working at FCME.

During my time at FCME since 1982, County Managers have included Sam Brownlee, John Stanford, Bob Regis, Tom Andrews, and Zachary Williams. Our office has enjoyed a good relationship with all of these managers.

In the mid-1980s, I "moonlighted" at the Cobb County and DeKalb County Medical Examiner offices which were run by Joseph L. Burton. I remember fondly the days I worked with him and his Chief Investigator Mickey Shockley, Autopsy Assistant Drew Ollie, and Drew's brother Chris. On many days, I would drive from county to county doing autopsies at different facilities. This experience gave me insights into the pros and cons of privatized forensic pathology.

I was fortunate to meet many District Attorneys as a result of testimony I had to render related to autopsy cases I performed for the GBI. I have testified in more than 60 of Georgia's 159 counties and I learned much about the state during my many long drives to court in various regions of the state.

Comments about people who trained me and from whom I have learned

At Ohio State, I received pathology training from a variety of people. I'm sure I will fail to mention some, so I apologize. But the following are ones who had significant impact on me: Don Senshauser, Emerrich von Haam, Nobuhisa "Nobi" Baba, Kitty Claussen, Leona Ayers, Leopold Liss, Alan Yates, Dieter Assor, Bill Holiday, John Neff, NT Shah, Melanie Kennedy, Hari Sharma, Tom Stephenson, and Adelaide "Heidi" Koestner. Adelaide's husband's name was Adelbert and we used to tell jokes that any boy or girl children by them should be named Adaboy and Adagirl. A fellow pathology resident named Joel Lucas and I used to have a lot of laughs. A man named Elwin Poe was the non-physician head of the autopsy service and functioned as a pathology assistant and taught us a lot about the autopsy. I think he sells wine now near Columbus, Ohio.

At FCME, my mentors were Robert "Bob" Rutherford Stivers, MD; John Feegel, MD, JD, and Saleh A. Zaki, MD, PhD. Stivers was practical and to the point. Feegel, also being a lawyer, was the most legalistic and liked to write novels. Zaki concentrated on thinking about one's cases and the issues they raise. Feegel used to tell me "it does not have to be the truth, it only has to make sense." He offered that advice for tough cases, such as trying to reconstruct the sequence of multiple gunshot wounds. One can come up with a plausible sequence which may be useful, but which may not actually be the absolute truth. I think he was emphasizing the role and usefulness of opinion rather than absolute fact. Near the end of my fellowship, I wasn't making much money and local jobs were not particularly attractive. I asked Feegel why he didn't quit and let me have his job, because he had other sources of income. He quit and I took on his staff position. Nice guy. Stivers and Feegel are now deceased and Zaki is retired and has taken up travelling. We also had a great investigative staff while I was training. At the time, they were Fulton County Police Sergeants assigned to the medical examiner's office, and they included John Cameron (deceased), Richard Eskew (deceased), Don Pike (deceased), Hugh Haynes (deceased), Jeri Hendrix, and Eugene Horton. I learned a lot from all of those guys who were always more than willing to take me to scenes and explain the way things work, and provide a good sense of humor and friendship at work.

There are a number of NAME members who encouraged and spent time with me soon after I first joined NAME in 1984. These include George Gantner (deceased), Jerry Francisco, Richard Froede (deceased), Charles Stahl, James "Jack" Frost, John Pless, William Eckert (deceased), R Page Hudson, Bob Brissie, Jack Frost, Bob Goode, Thomas Hegert, Sandra Conradi, Lawrence "Stan Harris," George Nichols, Larry Lewman, Don Reay, Brian Blackbourne, Eliot Gross, Marcella Fierro, Ronald Rivers, John Coe (deceased), Joseph Davis, John Butts (Canada), William Q. Sturner, Thomas Noguchi, Ross Zumwalt, Mary Case, and John Smialek (deceased). Others with whom I worked closely in more recent years as an officer or other capacity and from

whom I have gained insight are Garry Peterson, Ed Donoghue, and John Hunsaker. Other NAME members with whom I have had a long-lasting friendship, and who may be considered "contemporaries" include Mike Graham, Steve Cohle, Jeff Jentzen, Mary Fran Ernst, and Mary Case. And through my work with NAME, I have also appreciated the efforts and friendship of Julie Howe, Kathleen Diebold Hargrave, and Denise McNally who I first met in 1984. There are many others who I am proud to know and to have worked with, but I am reluctant to mention further names for fear of inadvertently leaving someone out.

During my fellowship and in the years after fellowship I met numerous people at the GBI, which is where we got our exposure to forensic science. I worked with former Crime Lab Directors Larry Howard, PhD, and Byron Dawson, PhD (recently deceased). Other forensic scientists with whom I worked at GBI include Bob Clemenson, Warren Tilman, Lou Cuendet, and Larry Peterson. Kelly Fite was the firearms examiner, John Wegel was a serologist, and toxicologists included Ann Eskew (deceased), Horton McCurdy, Everett Solomons, Bill Wall, and Larry Lewellen. All of these people were very generous with their time and I learned much from them over the years. More recently, I have what I view as a positive relationship with current GBI Director Vernon Keenan and administrative staff who work with the GBI Division of Forensic Sciences including Paul Kirk, George Herrin, public information officer John Bankhead, and of course, Kris Sperry and his staff of GBI Medical Examiners, a good number of which trained at Fulton County.

I had two high school teachers in particular who taught me to think. Carl Bevington (math) and Jan Denman (English). We had many excellent teachers at Salem High School in Salem, Ohio, but those two stand out most in my memory. In fact, it was Carl Bevington who made us learn basic computer programming which stuck with me over the years and was very helpful in my later development of electronic data systems used at the Fulton County Medical Examiner's Office, written initially in dBase and later in Microsoft Access. The principles learned were invaluable. Science teachers in high school who also had a very positive influence on me were Glenna Pool (chemistry), Herb Jones (physics), Alvie Hurray (health), John Cabas (biology), and John Olloman (biology). Principal Joe Marra and Vice-Principle John Callahan were also quite accessible, understanding, and helpful.

In college, my interest in biological sciences continued and I majored in Zoology and subsequently received a BA degree. Although my grade point average started off great, it decline in the spring quarter of my freshman year when partying and other activities dominated college life. This was a year after the shootings at Kent State University and campus protests and demonstrations and the like were still fairly common. However, I got back on track and my GPA was fairly high in the latter part of college, which I guess made up for my freshman year.

A teacher I remember well at OSU for continuing to pique my interest in science was Ted Cavender, who taught an ichthyology course I took at OSU. We had field trips to catch and classify fish, classroom work, and we had to write a research paper at the end of the course. The other zoology courses and their instructors required extensive library research and reading

work. The principles I learned from those courses stuck with me and I think that experience was the spark that got me interested in writing articles for journals.

I was never much of a reader of literature and probably because of that I always scored low on the vocabulary portion of college entrance and other exams. When I interviewed for medical school, Floyd Beeman (a physician who smoked and had a pink face and was affectionately referred to as "Pink Floyd") asked me about those low vocabulary scores. He said something like "what would you do if a patient told you a job he was working on was arduous?" I told "Pink" that I would tell the patient I didn't know what arduous meant and could he explain it to me. I guess Dr. Beeman liked that answer because I ended up getting into medical school.

Medical school faculty and instructors who left a lasting, positive impression on me included anatomists George Martin and Martha Sucheston. Detail was the name of their game. On the clinical side were cardiologists Charles Wooley and Charles Bush, endocrinologist Manuel Tzagournis, nephrologist Thomas Ferris, infectious disease specialist Ralph Haynes, dermatologist James Lowney, neurologist John Warmolts, obstetrician-gynecologist Fred Zuspan, ophthalmologist William Havener, psychiatrist Eugene Arnold, surgeon Larry Carey, plastic surgeon Ron Berggren, and thoracic surgeons John Vasko and Gerard Kakos.

I think elementary school teachers have a lot to do with shaping us early and getting us started on the right track. Mine at McKinley Elementary School in Salem, Ohio were all excellent and included Mrs. Weaver, Mrs. Stytle, Mrs. Burford, Ms. Lindemann, Mrs. Duncan, and Mrs. Konnerth. Lindeman was of the old school and not only had a reputation for throwing erasers and slapping fingers with a wood ruler, but a proven performance as well. Weaver was real nice and real pretty and from what I hear, still is. Stytle had a reputation as a disciplinarian but she actually was very nice and had a good sense of humor, at least in the eyes of a 7-year-old. Burford had a heavy West Virginia drawl and when she got frustrated, would say "Boweeeeee." Duncan was very nice and as a classmate of mine agrees, seemed ancient at the time but was probably about the same age I am now. Konnerth, as her name suggests, was Germanic and wore her hair in braids wrapped up around her head. She was big on music and math, and she used to have contests to see who could do math problems the fastest (and correctly) on the chalkboard. All had their unique qualities and I remember them fondly and thank them for helping to shape me. I remember sitting in Konnerth's 6th grade class the day JFK was shot. I also remember David Freshley and David Brooks. They were not my teachers at McKinley, but were good mentors as sports and athletic coaches there. Brooks was word caller at the 6th grade spelling bee. It came down to me and Debbie Kauffman (I think) for the championship and when I incorrectly spelled chaos as "kaos," Brooks said, "Oh, come on, Hanzlick," laughed, and appropriately chastised me before the forum.

Finally, I don't know if I would do this again, but I graduated high school in 1970 and did undergraduate studies year around and when I went to medical school, it was a three year program for twelve months a year. Thus, I got my BA in 1973 and my MD in 1976. Looking back,

it might have better to have some summers off. Since that time, but only in recent years, I have learned to appreciate the value of having a life outside of study and work.

Recollections about people I have trained

Either as a Deputy/Associate ME or the FP Training Program Director, I have been involved in the training the following people who successfully completed their training in our program (the state is where they now are):

Wayne Ross, MD, (PA)
Gerald Gowitt, MD, (GA)
Janet Pillow, MD, (FL)
Keith Norton, MD, (MO)
David Rydzewski, MD, (GA)
Thomas Young, MD, (MO)
Steven Dunton, MD, (GA)
Mark Koponen, MD, (ND)
Cameron Snider, MD, (AL)
Mario Mosunjac, MD, (GA)
Keith Lehman, MD, (GA)
Joyce deJong, DO, (MI)
Kris Podjaski, MD, (FL)
John Younes, MD, (Winnipeg, Canada)
Allan Bennett, MD, (SC)
Christie Elliott, MD, (NV)
Michele Stauffenberg, MD, (GA)
Steve Sgan, MD, (FL)
Karen Sullivan, MD, (GA)
Eric Eason, MD, (GA)
Susan Lee Anne Martin, MD, (AL)
Jason K. Graham, MD, (NY)
Stacey L. Smith, MD, (TX)
Steven P. Atkinson, MD, (GA)
Stacey Tate Desamours, MD, (GA)
Kelly Rose, MD, (SC)
Rhome Hughes, MD, in-training
Anindita Issa, MD, in-training

I have very pleasant memories about all of these trainees. Probably the single most memorable moment involved Gerald Gowitt who trained with us in the 1980s. We were walking along a very long creek and culvert looking for additional bones in follow up to some skeletal remains found in the creek. The creek was heavily grown with moss and algae, and multiple times during our trek, as he followed me, I would hear a splash, an ensuing expletive, and the clanking of his shovel on the stream bottom. Each time, I would turn around to see him lying in the

stream bed. I'm sure he remembers that, probably better than I do. I am sorry to report that despite the effort and calamity, we found no additional bones.

With as many trainees as we have had, I can't really say something about all of them, except that it has been a pleasure to know them and assist in their training. Some were easier to train than others, and some have been more successful in forensic pathology than others. But they were all good people and all have been successful in some form of pathology practice.

One thing I have noticed over the years is that our training program has tended to attract people who are of the worker bee type. Few of them have been interested long-term in academic publications or the administrative aspects of medical examiner systems. There's absolutely nothing wrong with that, of course, and it's why I keep telling the ACGME that some of the fellowship requirements are too stringent and not particularly relevant. Of all our trainees, the only ones that have served, or do serve as a Chief ME for a medical examiner system have been Thomas Young, Janet Pillow, Carol Terry, Joyce deJong, and Gerald Gowitt. I'm sure some of the others will be a Chief ME down the road. I am particularly pleased to have on my current staff three forensic pathologists who trained in the Fulton County program: Geoffrey Smith, Michele Stauffenberg, and Karen Sullivan, along with Michael Heninger, who trained in Minneapolis.

Too numerable to mention are the hundreds of medical students and pathology residents who have rotated through the office over the years.

Major controversies and frustrations in completing my responsibilities

Without doubt, the most difficult part of my career has been being the Chief ME and having to deal with county government structure and the intrinsic bureaucracy that goes with such governments. In addition, since my job as Chief is provided via a contract between the county and Emory University, I have had to serve two masters which, at times, is difficult.

I have been involved in very little controversy over the years, in fact, none of significance that I recall. A recent problem has been related to the CSI effect in which users develop unrealistic expectations about what we can do and how quickly we can do it. Over time, the number of problem calls has increased, almost exclusively because of the CSI effect rather than any wrongdoing by the office. Yes, we have made some mistakes, but in general, they have been honest mistakes, few in number, and have been resolved without major controversy. Only once can I recall adverse press coverage, and it was about a delay in notification of next of kin in a specific case.

Sometimes it seems that "no good deed goes unpunished." For example, after we obtained Accurint to assist in locating next of kin, we applied it to cases that were many years old. We located next of kin in some of those old cases, then some families were angry that it took so long to find and notify them. One must just accept these types of events and move on.

Academic involvement through research, education, and training

As an academic pathology department professor, I have been expected to engage in service, teaching, and research. Teaching was in two forms for the most part. One was an annual lecture to medical students on forensic pathology and death certification. The vast majority of teaching has been on-site at the medical examiner's office through conferences and case supervision involving residents, medical students, and mainly forensic pathology fellows in our ACGME accredited forensic pathology training program.

Research has largely involved case reports, case series, and publications such as guidelines. Overall, I have approximately 200 publications which include journal articles, letters to the editor, books, manuals, book chapters, and author- involvement in professional guidelines and standards.

Legislative change in which I was involved

In the late 1980s, I was involved in the writing of legislation that revised the Georgia death investigation laws and to some extent, laws pertaining to child fatality review. Much of the current Georgia Death Investigation Act includes words from draft legislation which I helped prepare, especially various definitions and qualifications to hold certain jobs. A long-remembered sore point is that we went to much effort to create law which developed a medical examiner commission to help professionalize and improve death investigation in the state, and to lessen the oversight of the GBI and make the office more autonomous and perhaps academic. The law passed, but the commission was never implemented. Then, in the latter 1990s, the GBI had the provisions for a commission stripped from the law (rather quietly), although a State Medical Examiner position was implemented formally in 1997 and operates today under the GBI Division of Forensic Sciences.

I have reviewed and commented upon drafts of proposed federal legislation such as the Coverdell Act, current Leahy bill to improve forensic sciences and other proposed legislation to improve infant death investigation, and have also reviewed much proposed state legislation which could impact on death investigation in Georgia.

My contributions to the field of forensic pathology

I believe that my major contributions involve my service as an officer and active member of NAME and in the Path/Bio Section of the AAFS, in conjunction with my publications and service on numerous working groups and advisory groups over the years, always in a capacity of looking out for, and trying to improve the practice of forensic pathology. I have served on the Editorial Board of JFS, AJFMP, and most recently AFP, the new journal of NAME.

If I had to summarize briefly what I have tried to do in my career, it would be to identify issues that need to be addressed and then address them in a systematic fashion and proper forum to fill gaps or foster needed change. Almost everything I have done relates somehow to that goal.

Other things I have done are mentioned elsewhere in this memoir. I have tried to include typical examples rather than an exhaustive, curriculum vitae-like tabulation.

Perspectives I gained as a medical examiner

Probably the biggest change in perspective during my career was the realization that much of what we do has more to do with public health than criminal justice. I also have realized that the court system is nowhere near as efficient and professional as it could be or as I thought it would be when I entered the field. Unfortunately, I also have the perspective that many others have stated—that in many government settings, the governments do not appreciate the need to have trained and qualified individuals working in the death investigation system and that many governments seem satisfied as long as the jobs are filled.

On a more general note, I have realized that bad and unfortunate things happen on a daily basis, and that we see the same types of violence over and over again. Despite attempts to reduce or prevent violent deaths, little of substance seems to happen. But maintaining a good attitude is important, if for no other reason, to do a quality and professional job on individual cases and address the issues which those cases bring into play. Other societal benefits, studies, and prevention programs are important but less important than the primary case work.

Difficult cases I have managed

I must say that I have tried to proactively avoid having difficult cases by adhering to the principles I try to teach the fellows as described in Question 15 below.
However, difficult cases do occur.

Probably the most difficult I have managed was the unexplained death of a 28 year old, whose death was believed by the father to have been an assassination with an exotic poison such as ricin or abrin. We had no basis for suspecting that and all findings suggest some sort of cardiac or other problem which remains ill- defined. I spent more time (and money) on that case than any other I have ever had, and we did do extensive testing for just about everything known to man.
Seven years later, I still get occasional irate phone calls or emails from the father, some with messages which could be construed as threats or death wishes. It's been the most frustrating case I have ever managed, both in terms of not being able to define an irrefutable cause of death, but in terms of the time required to deal with issues raised by the deceased's father.

Another case I can recall that brought some challenges came at a time when some politicians were claiming that the police were using "exploding bullets." I was asked by one local politician to stay out of the issue. What I did was a local review of cases of police shootings and various ammunitions simply to have some evidence that the claims of excessive tissue damage done by such bullets were not founded in fact. The issue quickly went away. As I recall, this was the only time in my entire career that a politician attempted to influence me. There have been a few

cases in which prosecutors urged us to classify the manner of death as homicide to facilitate prosecution, but we resisted that, explained why, and no significant issues ever arose.

A third difficult case I remember involved an apartment break-in and murder of a woman. The scene was processed by police and the medical examiner and the body was transported to the morgue for autopsy. Hours later, calls began coming in indicating that the decedent had a baby but its whereabouts were unknown. We returned to the scene and found the baby, dead, under a very heavy pillow on the sofa in a different area of the apartment. The mother (victim) had apparently placed it there to hide it from the perpetrator. The issue is whether the baby was alive at the time of first response to the death scene. As best we could determine from the findings and timing, the baby was probably already dead when police first arrived. As you can imagine, however, our conclusions were not without controversy.

Other "enigmas" and difficult cases I have encountered include, but are not limited to: a naked, embalmed, and burned man found in the woods, with a gunshot wound of the head; a young girl with multiple extremity fractures apparently incurred during an attempted exorcism; a dismemberment case in which the perpetrator attempted to get rid of body parts with a in-sink garbage disposal; and determining whether a fetus was "live" when it was expelled through a shotgun wound of the mother's abdomen. There are many more. But I have discovered that as one's list of challenging cases grows with experience, the challenging cases seem to get less frequent. I have also learned, however, to never say "I have seen everything." I have not, and I never will.

How I dealt with job-related stresses, anxiety, personal performance issues

I have seldom, if ever, demonstrated significant anger nor have I ever "blown up" at work as I recall. Somehow, I have managed to keep frustration inside while at work, and I tend to release it when I am out of the office. On rare occasions, I must admit that I have caught myself talking to myself and have approached the stage of animation like some of those folks you see walking down the street waving their arms and talking nonsense to themselves. I have tried to follow the philosophy of leaving my work-related problems on the coat rack when I enter the house, but that does not always work. Over the years, I have been a fairly consistent "busy body" around the house doing yard work and repairs, and such activities are great stress relievers. Writing articles and the pre-requisite reading has helped as well. I have been known to drink alcohol now and then.

Occasionally I do yell at my wife or my dog, inappropriately. Throughout my career I have been a workaholic of sorts and as far as I know, have not had significant performance problems. I will admit however, in the past couple years after nearly 30 years of practice, I do perceive a little burn out within me. I have tried to address this by spending a little more time out of the office doing things other than work, and trying to do fewer work-related things when I am not at the office. That approach does seem to be working, thus far.

Advice for forensic pathologists entering the field

I will state here what I tell all of our fellows upon graduation. Know your limitations, and know when to ask for help. Never be afraid to admit that you don't know the answer to a question. Try to foresee potential case-related questions and issues and try to address them. Leave no stone unturned. Tie up all loose ends. Don't shoot from the hip or jump the gun. Don't go off half-cocked. Be circumspect, reflect, and think twice or more when needed. Treat co-workers well.

Some other advice I would offer to help one stay out of trouble is as follows. Get things done well and completely and in a timely manner. Use consultants liberally. Do not step outside your area of expertise. When issues arise, refer people to the appropriate person or agency. Make sure all findings and opinions are consistent with the known facts. Do not be a media hound. Address, but try not to create issues, especially ones based on personal politics or agendas. Address problems with logic, planning and fairness, not anger.

What I would recommend as a goal is the following: Live, learn, love, laugh, lead, and leave a legacy. The legacy need not be Nobel Prize material. Just something for people to have a positive memory about you and your work.

How my work experience changed me, changed my life, and what I learned from my work

Coming from a blue collar family, becoming a physician and pathologist has allowed me to live a life that I otherwise would not have known in terms of being a professional and also having the ability to enjoy some niceties that may otherwise have eluded me.

Probably the biggest change that has occurred in my life as a result of my work is that I became more well-known in the field than I ever thought would happen. This has been gratifying but also has placed large demands on my time. In retrospect, I have probably spent too much time working.

I have become a little more cynical with time, not because of the type of work we do and the never ending stream of sad things we see, but because little societal change seems to occur as a result of our work. Yes, we as forensic pathologists do uncover some possible dangers to the public (such as defective consumer products). However, people still kill other people senselessly and kill themselves. Drug abuse remains rampant. People still drink and drive. I have tried to reduce this general cynicism and look at the bright side on a case by case basis and realize that in individual cases, we do have impact and others via our conclusions, testimony, and other case-related activities. And although progress seems to be slow, our cumulative experience does result in data that can be used to address societal problems. It just takes longer that I had hoped.

An obvious lesson I learned from work (especially after a recent motor vehicle accident which seriously injured my wife and me) is that life can vanish at any time, so intentionally trying to enjoy life outside of work is a commendable effort. I have also learned that getting angry

accomplishes little or nothing. Finally, I have learned that if you start out on a planned course and stick with it, despite obstacles and drawbacks, achieving one's goals is possible.

How has forensic pathology changed during my career, for the better and for the worse?

In most ways, I believe forensic pathology has changed for the better. The recent requirement to complete an accredited fellowship for board certification was a good move. Gradually, we are becoming more scientific and less anecdotal. Salaries are gradually increasing although most still remain below average for physicians. Fewer people seem to be selecting forensic pathology as a second career, and more seem to be starting fresh in the field at an appropriate young age. NAME has become much more proactive, and I believe that will be beneficial for death investigation as time goes on. The everyday work of forensic pathology has not changed much during my career. We still see the same things most of the time. But we are evolving toward more reliance on laboratory work such as genetics to make the most of our work and address relatively new questions that case work brings into play, such as the role of pharmacogenetics in the physiologic and metabolic response to drugs. I'm sure that other emerging science and technology will continue to modify the way we practice and think.

I am not sure that "maintenance of certification" will prove useful in the long run. Responsible professionals voluntarily keep abreast of things and provide themselves with ongoing learning and training experience. Imposed requirements and documentation may prove to be counter-productive, or at least, not add anything substantial to the quality of practice.

Speaking of certification, I remember sitting next to Phil Burch (works in St Louis) during the forensic pathology exam that was proctored by Charles Hirsch. I remember seeing Dr. Hirsch get off the elevator at the hotel with a couple of steamer chests full of items he had to put out on tables for the practical portion of the examination. That was in 1985. There were no computers and we all sat in a big room and looked at a screen with projected 35mm slides. Some people needed binoculars to see the screen! At the end of the examination, Dr. Hirsch proclaimed that it was "Miller time."

I cannot think of an example of how forensic pathology has changed for the worse except, perhaps, the increased scrutiny brought about by the entertainment and media industries. This publicity has not changed forensic pathology *per se*, but it has made forensic pathology more difficult to practice. I also am not a fan of the "celebrity" attribution applied to forensic pathologists who frequently appear as expert witnesses in court. The frequency of widely divergent forensic pathologist opinions in court cases seems hard to justify-- is sometimes comical and sad at the same time-- and I believe, not a good thing for our profession in the long run.

Regrettably, there have been a good number of forensic pathologists who have gotten in "trouble" or faced adverse publicity. Whether or not the incidence of such problems is higher in forensic pathology than other specialties is hard to tell, because we often get attention as

government-paid public servants. All we can hope for is that such incidents will be less common in the future, and do our own personal best to avoid them.

Finally, I am pleased to see so many young, energetic, and talented people entering the field of forensic pathology. Many are active, vocal, thoughtful, productive and friendly. It gives me confidence that our profession will be in good hands in the future. There are a good number of emerging "stars" out there.

Knowing what I do now, would I "do it again" under the same circumstances as when I began, or under today's circumstances?

Without a doubt, if I "had it to do over again," I would still select forensic pathology as a career. It's a very interesting line of work, and it is appropriately challenging. The opportunity to work with a variety of professionals in different work areas is a great thing about forensic pathology. The continuous encounters with death (and life) cause one to reflect on life regularly. Although the salaries are often badmouthed, one can live well on such salaries and there is much more to life than money. I don't make all that much money but I can say that I have had no desires for anything material or experiential that I have not been able to obtain with good planning and patience. Even if I were starting my career today, I would select forensic pathology. The course to success is well-defined, there are very good training programs, and the job market is still pretty good and may even get better. I would recommend that if having a higher than average salary is a priority, that one might consider working in a privatized forensic pathology setting or in a practice group that also does hospital-based pathology in addition to forensics. Another more personal option is to separate what you want from what you need. Drawing those distinctions can have major impact on your personal budget, and allow one to work at a lower income than might otherwise be possible, being happy and fulfilled at the same time.

Personal information such as family, hobbies and interests (optional)

My wife, Mary, and I have been married for 28 years and have two daughters, Caitlin (age 27) who is a teacher and Marinna (age 26) who works as a paralegal. Hecter ("the Horrible") is our dog which we think is a Mountain Feist, although he was sold to us as a puppy and billed as a Chihuahua. Mary obtained a bachelor and master's degree in nursing and a Ph.D. in Educational Administration. Her professional career including bed side nursing, nursing administration, teaching, and consulting. My mother, Betty, lives nearby in Atlanta, just turned 91, and still plays golf every Wednesday. I figure between my mother and my father, Walter (who died at age 66), I should plan for an exit from this world when I am approximately 78 years old.

From my first marriage, I have two daughters as well, both in their thirties. Mara is a high school teacher, lacrosse coach and lacrosse official near Youngstown, Ohio, and Catherine, who is an attorney in Columbus, Ohio. Their mother, Lynn, is a former nurse and now a physician in Ohio.

Years ago, I used to write a lot of songs (words and music) but my interest in that has declined over the years. I still get a royalty check for one of them, although its only a few dollars per year. One thing a like to do is write limericks, and I usually write one for each employee who is retiring from the office or graduating our fellowship program. For sure, the largest amount of time I spend outside of usual work hours has been spent writing about, or working on projects which actually do relate to, forensic pathology.

Since a fairly major automobile accident in April 2010, and even in a job where I see death every day, my wife and I (who were both significantly injured in the wreck) realized more acutely that life can end at any time. As a result, we have made an effort to spend more time together and spend weekends doing things we enjoy. We spend considerable time in the North Georgia mountains where we also enjoy boating.

As mentioned earlier, I am not an avid reader and I have a particular resistance to the reading of novels. I do not know why. My wife tells me that one can learn a lot from novels, and she obviously has. When I do read, I prefer to read about the history or science of something, such as the physics of how rivers are formed or the origins of various trout species, for example. I'm getting to where I don't remember much if what I read anyway, so I guess it doesn't really matter what I read!

Although not an avid historian in general, I do like reading or researching some histories. For example, when I was AAFS Path/Bio Chair, I wrote a history of the Path/Bio Section titled "Hanzlick's Guidelines for Passing On" with the idea that subsequent Chairs could add to the history yearly. Similarly, the history of NAME, forensic pathology, and death investigation systems has intrigued me, and I probably actually spend more time writing than reading.

Finally, I have really enjoyed my time with NAME. I have met and gotten to know a lot of nice and very fine people in that organization, and I plan to continue to be active. My life would have not been the same without forensic pathology and NAME. I am quite happy with the choices I have made and pleasures I have derived from working in the field of forensic pathology.

Selected photographs are shown below:



Atlanta's own 'Quincy' solves the case of the telltale trunks

By Sam Hopkins □ Staff Writer

The police were baffled when they found two skeletons stuffed in the big trunks in the vacant south Atlanta warehouse.

There was no apparent cause of death or probable time of death.

Nothing in the trunk indicated who the persons had been. And if there had been a homicide, there was no evidence pointing to the killer's identity.

It sounded like a case for Quincy, the coroner in the popular television series who is noted for solving the seemingly unsolvable.

However, the trunks were hauled to the offices of the Fulton County Medical Examiner at 50 Coca Cola Place, and the case fell into the lap of Dr. Randy L. Hanzlick, a bearded 31-year-old pathologist who finished medical school at Ohio State University seven years ago.

Hanzlick recalls today that, despite the mysterious circumstances, the case was a "forensic pathologist's dream" because, if it were to be solved, the necessary clues would have to come from the contents of the trunks.

The case was not only solved and a conviction obtained, but Hanzlick is writing it up in the "unusual cases" section of an upcoming edition of the American Journal of Forensic Medicine and Pathology.

His article is titled, "The Telltale Steamer Chests."

Although the skeletons fell apart into a jumble of loose bones when they were removed from the two trunks, medical testing procedures showed that both of the persons had been black, and that one was a male about 35 years old and the other a female about 30.

Although it was not immediately obvious, a small circular hole was finally discovered in the chest area of the skeletal remains of the male. And after the material in the bottom of "Steamer Chest A" was washed and sifted, two deformed .38-caliber bullets were retrieved.

Hanzlick then went to the contents of "Steamer Chest B." After washing and scrubbing the bones and reassembling the skeleton of the female, a small hole was detected in the ninth rib. A .38-caliber bullet was found in the trunk with the help of an X-ray machine.

A magazine called "Body Forum," with most of the print illegible, was also found in Chest B. There was no legible date of issue or name of the publisher, but the cover bore a picture of actor Gregory Harrison, who plays young Dr. Gonzo on the television series, "Trapper John, M.D."

See FORENSIC 8E

DR. RANDY HANZLICK: Pathologist checks data at microscope.

Forensic FROM 1E

Hanzlick called the Atlanta Public Library, and it was subsequently discovered that the magazine, no longer in business, was published in December 1980 by a local firm.

By then, Hanzlick and his investigator, Don Pike, had determined the probable cause and time of death, but the identities of the victims and killer were still in question.

They sent out news a business address in a matter in the magazine corresponding with a location a short distance from the warehouse where the two steamer chests were found. Further investigation showed that the former owner of the firm once owned the nearby warehouse.

The sheriffs felt they were getting closer to solving the case when the FBI indicated that the warehouse's former owner was among nearly a dozen persons wanted by federal drug authorities, and that the whereabouts of all of the persons was known except for a man named Gilbert Beckham.

Beckham's family and friends identified jewelry found in Chest A, saying the jewelry belonged to him. It was then learned that Beckham had been keeping company with a Josephine Hall, who, according to Beckham's family, had a broken jaw repaired at the University of Pennsylvania Hospital in the early 1970s.

Dental X-rays later confirmed that the wiring in Ms. Hall's jaw was identical to that found in the skull of the dead woman.

By now, the two victims had been identified, and authorities believed that the killer was Peter Edgehill, who was later arrested in Philadelphia on drug charges.

Subsequent investigations revealed that Edgehill had owed Beckham a large sum of money, and that Edgehill had lured Beckham and Ms. Hall to Atlanta under the pretense of allowing them to profit from a big drug deal.

Edgehill was convicted last March in Fulton Superior Court for the two murders. Police testified that they had a taped conversation of Edgehill telling a girlfriend he had committed the double murder.

Hanzlick recalled that solving the case probably would have been much more difficult if the magazine had not been found in Chest B with the skeleton of the woman.

The killer of the man and woman, the pathologist said, apparently shot them while they were in bed, wrapped each of the bodies in a floral-patterned bedsheet, and then deposited them inside the two large steamer chests.

The killer made his fatal mistake, Hanzlick said, when he inadvertently wrapped up the magazine — which apparently had been lying on the bed — with the woman's body.

Atlanta Journal-Constitution newspaper article from the early 1980s when I was about 32 years old. The article gave me more credit than I deserved. Most of the solving was done by the late Don Pike, who was the investigator on the case. My third published journal article concerning forensic pathology was about this case and appeared in the American Journal of Forensic Pathology in 1985. As I re-read that journal article, it reads more like a newspaper article or story than an article in a medical journal. It probably wouldn't be accepted by today's medical journals.



Photo taken in 2011 which shows how things (like me) can change in 30 years. For all you young forensic pathologists out there who think us older folks need to go away, such changes will happen to you sooner than you think, but you will not forget your younger days and the way you thought and behaved when young. I guess that's why us older folks tend to linger. We mainly get old on the outside and it is not until the inside begins to fail when we finally throw in the towel.



Current forensic pathologists at the Fulton County Medical Examiner's Center. From left, Forensic Fellow Rhome Hughes, Randy Hanzlick, Deputy Chief Medical Examiner Michele Stauffenberg (front), Forensic Fellow Anindita Issa (front), and Associate Medical Examiners Geoffrey Smith (behind Issa), Michael Heninger, and Karen Sullivan.

A brief history of the Fulton County Medical Examiner and its staff is available in a separate document prepared for NAME's 45th Annual Meeting on the Alaska Cruise.

Charles Hirsch, MD



3/30/1937-4/8/2016

January 2011

Counting fellowships in forensic neuropathology (7/1/65 to 6/30/66) and forensic pathology (7/1/66 to 6/30 67) and 2 years of active duty service in the U.S. Air Force (7/67 to 6/69), I have done forensic pathology for 45 years, full time since 7/69.

I was the Chief Medical Examiner of Suffolk County, NY from 1/85 to 12/88, and have been the Chief Medical Examiner of New York City since 1/89.

I cannot provide responses to the questions in the outline that you sent without writing a book, and I decline to do that.

John C. Hunsaker, III, M.D., J.D.



NAME President 2006

June 2011

Why did I select forensic pathology as a career?

My anfractuous journey to the practice of forensic pathology began as an undergraduate at Yale College. At that time, many of my classmates planned to go into medicine and, without any deep-seated passion, I enrolled in the premedical courses, over the four-year stint completing biology, inorganic chemistry, calculus, and physics. As a German major, I was recruited during senior year by the National Security Agency, an offer I almost accepted in June, 1964. Deciding I did not want to be a bureaucrat at the time, I declined the offer. Fortuitously during that summer, I applied to and entered the University of Kentucky College of Law. During law school I worked as a clerk for a local attorney in Lexington, KY, whose civil practice included interaction with physicians of many specialties. He assigned me to do research for a paper on pretrial interviews with medical witnesses, which subsequently appeared in the Kentucky Law Journal. From that research I discovered there were MD-JD's, some affiliated with the American College of Legal Medicine (ACLM), who combined the interface of law and medicine in many interesting ways. During law school, I toyed with the notion of ultimately practicing law and medicine in some, at that time undetermined, fashion.

After law school, I served two years (1968-69) in the US Army performing legal work for a military intelligence unit in Germany, then (1970-72) worked several years as a teaching assistant while completing a master's degree in German at the University of Kentucky. I was able to take advantage of GI benefits. During graduate school I familiarized myself with the ACLM, whose fellows then had combined degrees in law and medicine. After refreshing myself through class work in the premedical courses over approximately a year and taking the MCAT, I entered the University of Kentucky College of Medicine in fall, 1973. During medical school the disciplines with formal, established law-medicine interactions were psychiatry and pathology. I did early realize that psychiatry was a discipline that I would have difficulty coming to grips with. In stark contrast, the hands-on approach of pathology, which emphasized concrete observations via various modalities and inference that not infrequently afforded the pathologist

the good fortune to reach a reasonable, intelligible final diagnosis, was compelling. The challenge of solving the puzzle invigorated and engaged me. I was hooked. Accordingly, I started the AP-CP residency at University of Kentucky, then chaired by Dr. Abner Golden, with the idea of learning as much as I could and entering forensic pathology fellowship.

During the 1970's the Commonwealth of Kentucky enacted legislation creating the Medical Examiner program to assist the constitutionally elected officers, i.e. lay coroner's, in investigating delineated types of human death. George R. Nichols, M.D. became the first Chief Medical Examiner based in Louisville, Kentucky, and was assisted early on by his first forensic pathology fellow, Dr. Barbara Weakley-Jones. The program included appointment of an Associate Chief Medical Examiner at the University of Kentucky. Mr. David Jones, then Executive Director of the program, ultimately selected Dr. William Hamilton, who was freshly out of the forensic pathology fellowship at the University of North Carolina, Chapel Hill. Dr. Hamilton was appointed Associate Chief Medical Examiner and faculty member at the University of Kentucky in the late 70's. So, during my regular pathology residency, I had the opportunity to complete several months of forensic pathology under Dr. Hamilton. Although not adopting a complete laissez-faire approach, Bill gave me a lot of freedom in pursuing the cases, which constituted a great learning experience. The differences in approach and goals between "traditional" and forensic pathology became clearer. And in those days, even though I had no board certification, I was called to testify in several cases in criminal court, where the only qualification to be admitted as an expert was to have a medical license.

By 1980 my course to pursue FP was well established. Initially, I had hoped to stay in Central Kentucky area and do a forensic pathology fellowship at the Hamilton County Coroner's Office, then run by Dr. Frank Cleveland and headed up by two outstanding forensic pathologists, Dr. Charles Hirsch and Dr. Ross Zumwalt. Unfortunately, I was in competition with Dr. Carl Parrot for that fellowship position, which he eventually was offered. In due course, he became Coroner of Hamilton County for many years. I had also considered a Fellowship with Dr. Paige Hudson and Dr. John Butts at University of North Carolina, Chapel Hill. There were many attractive features about that program and the individuals in it. In early 1981 I became aware of an opening for Fellow at the Office of the Chief Medical Examiner, Washington, DC. As my wife at that time was an attorney, we elected to pursue the opportunity in D.C., and I became a member of the staff and fellow at that office in July, 1981. (My wife Ann, was appointed to a high position in the Justice Department) The Chief was Dr. Jim Luke, the Deputy Chief, Dr. Brian Blackbourne, and Dr. Rok Woon Kim was one of the staff members together with Dr. Douglas Dixon. At around that time, Dr. Stuart Dawson, who had just completed a fellowship at Hamilton County, OH, became the new member of the staff. In sum, it was a wonderful crew of forensic pathologists with widely different experiences and personalities for a novice like me. D.C. was a great venue. One could easily go to death scenes. The spectrum of cases, including victims brought in to the medical meccas from MD and VA, was large, with special concentration on gunshot wounds and heroin-related deaths. Having access to specialists from federal agencies was a distinct bonus. Another wonderful aspect of that fellowship was regular interaction with a host of celebrities from the Armed Forces Institute of Pathology,

Anthropology at the Smithsonian, and meetings of the Mid Atlantic Forensic Pathology Association [D.C. ME, AFIP, Northern VA ME, MD ME] when Dr. Russell Fisher was still active. I became associated with the D.C. office at a time just before funding and organization issues started to decline, as a result of which most of the staff had left that office by the mid 1980's. Those nineteen months were fulfilling. The approach to official medicolegal death investigation, which was exemplified by members of that office in D.C., made me firmly convinced that forensic pathology was the right career choice for me.

In the meantime, Dr. Hamilton had left the position of Associate Chief Medical Examiner at the University of Kentucky Medical Center, and that position remained open for several years. I was invited to return to Kentucky by officials of the Justice Cabinet and the University of Kentucky Department of Pathology. Accepting that offer, I returned to Kentucky in February of 1983, and since that time (over 28 years!) have served as Associate Chief Medical Examiner and joined the faculty of the Pathology Department, a tenured position with eventual promotion to Professor while heading up the Division of Forensic Pathology.

Places and times I served as Chief Medical Examiner.

As I note above, I have never served as Chief Medical Examiner. I served as a Deputy Medical Examiner in Washington, D.C. for a brief period in the early 80's and as Associate Chief Medical Examiner in the Commonwealth of Kentucky since 1983.

Major accomplishments as Chief Medical Examiner.

Major accomplishments as Chief Medical Examiner *mutatis mutandis* (see # 2) first and foremost relate to opportunities to educate a whole generation of residents in pathology about the practice of forensic pathology. During the course of 4-year residency, the postgraduate trainees typically spend at least several months on the forensic pathology rotation. Some of these residents have chosen to go into Forensic Pathology (see below # 7). Also in the area of education, I and members of the Division of Forensic Pathology provide formal lectures to 2nd year medical students at the University of Kentucky, offer elective rotations for senior medical students from the University of Kentucky and other schools of medicine, and also participate in the training of graduate students in the Graduate School of Toxicology at the University. In addition to the more formal training, there have been many occasions over the last nearly three decades in which trainees in various fields, ranging from nursing and EMS, together with trainees in various arms of law enforcement, regularly visit this office for information about medicolegal death investigation and to observe an autopsy. So a major accomplishment for me has been participation in the education of students and trainees in various areas. Another significant accomplishment has been the provision of expert testimony in a variety of courts, predominantly criminal courts in Kentucky, over the years. As Associate Chief Medical Examiner, I have also participated in the training of coroners of Kentucky, who are lay coroners (i.e., neither physicians nor pathologists), and who initiated the process of death investigation in Kentucky coroner's cases. Even though the process has been slow and occasionally arduous, the education of the coroners has led to significant improvement in medicolegal death

investigation in Kentucky, and I am proud to have participated with the current Chief ME, Dr. Tracey Corey in that accomplishment.

Efforts on behalf of forensic pathology and the forensic sciences.

Above all, I have been an author, mostly in collaboration with others, of peer-reviewed papers, which have appeared in various journals familiar to NAME, certainly including the major forensic journals and in other recognized journals outside the field of forensic pathology. I have also collaborated on book chapters on various topics in forensics, primarily involving aspects of forensic pathology and, to a lesser degree, of forensic toxicology. Like many medical examiners, I participated in various conferences and symposia put together by various medical, legal, and health-field related groups. For example, I lectured before emergency medical physicians and before attorneys (collision dynamics, sponsored by Kentucky Associate of Trial Attorneys), and various coroners' and medical examiners' associations in such places as Indiana and Virginia. I was the co-editor of a chapter on "Autopsies" in the Fourth Edition of the Lawyers' Medical Cyclopedia, and I contributed an article in medicolegal primer of the ACLM. Other contributions in behalf of FP and forensic sciences include service on the editorial board of the **American Journal of Forensic Medicine and Pathology** (thanks to Dr. Vincent DiMaio, known well to this audience and one of the best spokespersons for the field), as North American editor for **Forensic Science, Medicine, and Pathology** (having a gratifying collaboration with Dr. Roger Byard of Australia and Dr. Michael Tsokos of Germany, both indefatigable researchers and writers), and, most recently, as a reviewer for the newly instituted NAME-Sponsored **Academic Forensic Pathology**. I have participated in a variety of professional organizations in both medicine and law, including the Kentucky Bar Association, Kentucky Medical Association, the AMA and ABA, and as a Fellow on the ACLM. In addition, I have been long affiliated with the American Academy of Forensic Sciences, having been selected as a Fellow in the 1980's and served as an Officer of the Pathology/Biology Section (Secretary 2003-04 and Chair 2004-05). Part of that service included the responsibility as program co-chair (with Dr. Donna Stewart), for one of the annual meetings in Atlanta. I have been associated with NAME since 1980's, serving as a member of the Board of Directors and also the Executive Committee in the mid 2000's. I had the honor of being elected Vice President in 2005, President in 2006, and Chair of the Board of NAME in 2007. In all of these positions I have striven to advance the goals, policies, and best practices on the field of pathology. One small contribution to that end was a published editorial in the orange journal on NAME Accreditation and Professional Practice Standards. (**Hunsaker III, J.C.** *A Word from the President* (Editorial). **Am J Forensic Med Pathol** 2006;27: 197-199.)

Recollections of places I have trained and worked.

As noted, my training in pathology was AP/CP at the University of Kentucky and as a Fellow in FP at the Office of the Chief Medical Examiner, Washington, D.C. The experiences as a pathology resident were influenced by highly regarded professionals such as Dr. Golden, Dr. Deborah Powell, Dr. William O'Connor, Dr. Mike Cibull, Dr. Norbert Tietz, Dr. Kosheki Yoneda, all of whom were consummate academicians and teachers with wide recognition and who

offered a thorough, rigorous program of study. All of these mentors were excellent diagnosticians, who advocated the school of thought which held that the autopsy examination needed to be extensive, thorough, and evidence-based and, further, who were meticulous and demanding in making the correct diagnosis in surgical pathology. Laboratory pathology, including clinical chemistry experience under the world renowned Dr. N. Tietz of text book fame, allowed me to appreciate ways to reasonably ensure that the results of any study done was accurate and consistent with established specificity, sensitivity, and positive predictive value.

Comments about people who trained me and from whom I have learned.

Dr. Jim Luke, Chief in Washington, D.C. trained under Dr. Milton Helpern in New York City. He was exemplary in his approach to death investigation, aiming to find out what happened in each individual's death, and adopting the methodology to answer that question in a scientific and reasoned way. Dr. Douglas Dixon, who previously had worked at the AFIP, was a very skilled pathologist, who had written some seminal papers involving various aspects of cutaneous gunshot wounds, in part based upon animal experiments. These have become standard references in the field. He was a meticulous prosector, a very active and articulate teacher, and the epitome of organization. Dr. Brian Blackbourne, having trained at Miami under Dr. Joe Davis, was Deputy in the D.C. office, had great organizational skills, was an outstanding pathologist, and loved to teach. Dr. Stuart Dawson, relatively new and young pathologist at the time we worked together, had an undergraduate degree in physics. His intellect and ingenious ways of dealing with pathological issues were of great value to me as I progressed at that office.

On my return to Kentucky, I was initially a solo practitioner with a secretary and a forensic technician, based at the University of Kentucky. Colleagues in the Department of Pathology, some of whom I have mentioned above, and clinicians in the medical school were indispensable consultants through a wide range of cases. It was my good fortune that there many resources, both in pathology and on the clinical and laboratory services. The clinicians and faculty at that institution are too numerous to count in the terms of thanking them for contributing to my education. Dr. George R. Nichols was the Chief Medical Examiner at the time, based in Louisville, Kentucky. Whenever I had questions or difficult problems, I would arrange to meet with him for sage advice. Since the earlier days, the number of forensic pathologists in KY has increased to more than ten; all have been helpful collaborators in the journey of continuing education. In particular, the current Chief, Dr. Tracey Corey, is a proactive administrator, teacher, and advisor, who has seen the program through tough times with success. I have learned a lot and been humbled occasionally by the astute findings and observations of dedicated forensic autopsy technicians, among whom Ms. Winnie Stanton and Mrs. Annette Carter deserve special recognition.

I have garnered much insight and wisdom from the universe of colleagues, particularly in AAFS and NAME, who have participated and presented in the annual conferences. Dr. Gregory J. Davis has been a reliable colleague for nearly twenty years, and personifies the desirable attributes of dispassionate analysis, intellectual honesty, the education of pathology residents,

an outstanding writer, a proactive public servant, and a source of wisdom and medical knowledge. Dr. Emily Craig, Forensic Anthropologist in KY for nearly twenty-five years, has been an active collaborator and teacher, who has done much to advance the KY program. I also pay homage to her predecessor, Dr. David Wolf. I have enjoyed working from time to time with Dr. Mark Bernstein, Forensic Odontologist, internationally regarded and a fount of knowledge. Choosing the right consultants is a major charge of the medical examiner. I acknowledge Dr. Peter Oeltgen as a valuable contributor as clinical chemist. Many neuropathologists have made invaluable contributions to my education and to the KY system, and to the following I am indebted: Dr. William Markesbery; Dr. Dianne Wilson; Dr. Daron Davis; Dr. Joseph Parker; Dr. M. Gregory Balko; Dr. Richard Reichard; and Dr. Michael Johnson.

Recollections about people I have trained.

Although I have never overseen a forensic pathology fellowship program as a director, several residents in pathology have become active forensic pathologists, including the following: Dr. Karen Chancellor, Dr. Stacy Turner, Dr. Donna Stewart, Dr. Sam Simmons, Dr. Polly Purcell, and Dr. Jen Schott. I served as one of several fellowship directors for Dr. Victoria Graham within the program at the Office of the Associate Chief Medical Examiner. Each resident stands out as an amazing dynamo in undertaking forensic investigations with great initiative at a very early stage in his/her career development. Some now head up offices (Dr. Chancellor), and some are very active in writing and editorship for forensic publications (Dr. Stewart).

Major controversies and frustrations in completing my responsibilities.

With rare exception, budgetary issues have always been in play in Kentucky as a medical examiner in the dual medical-coroner system. In most cases, if one is persuasive in making the appropriate argument, funding would be available to do a specific type of study, as indicated by good forensic pathology practice. Making the argument to the State Legislature and other funding agencies in order to maintain salary and benefits for staff, as well as for professionals in the office, has not always been a successful endeavor. It is difficult to explain to staff lack of any raise over several years. Another general frustration is just dealing with the bureaucrats within the state government, most of whose officials either have no idea about the practice of forensic pathology or have no desire to inform themselves. The short-range cost-saving demands of the bureaucrats range from purchasing the cheapest gloves possible, those which invariably tear, as a cost saving measure as opposed to giving permission to purchase the gloves requested by members of the office, to begging for funding to replace a decrepit, outdated, inefficient dictating system.

One of the frustrations in this particular position has been the wide spectrum of competencies of various officials (the classic bell shaped curve), including lay coroners and law enforcement. Many lay coroners in Kentucky are clearly outstanding investigators who understand the issues in a given case and proactively do what is necessary. At the other extreme there are coroners who believe apparently that their job is to go to a scene of death, put the cadaver in a body bag, and ship it to the medical examiner.

Academic involvement through research, education, and training.

I have participated in training of various officials in Kentucky, ranging from fire officials to coroners, those involved in mass disaster planning, emergency medical technicians, and various specialties in the health care professions ranging from nurses to respiratory therapists. Certainly this office has been actively involved in the training of members of law enforcement, including sheriff officials and local police department as well as the Kentucky State Police. All of these activities constitute a significant component of the academic involvement.

In the earlier half of my career, I have the opportunity to work with a research biochemist, who has special interest in neuropathology, Dr. Larry Sparks. He and I collaborated in academic, bench-driven research in the realm of organic heart disease and relationship to various changes in the central nervous system; and in CNS reviews on deaths once considered to be Sudden Infant Death Syndrome (that classification more recently falling into less acceptable practice or terminology). Early on in my career I was fortunate to receive a small grant having to do with time of death by comparing certain chemicals in the putamen to the vitreous potassium levels (1984-85. Determination of Postmortem Interval by Putaminal Levels of 3-Methoxytyramine, BRSG Principal Investigator. Funded ($4500, 1 yr.). I also was more the research academician, when I participated in a grant as co-investigator: 1990-95. Senile Plaques in Alzheimer's and Heart Diseases. ADRC, NIH, Project 0003. Funded, 1990. ($592,189, 5 yrs.)

As I noted above, I have been regularly and actively involved in the education of residents in pathology and medical students, predominantly in the field of Forensic Pathology and, to a lesser degree, Forensic Toxicology (interpretative toxicology).

Legislative change in which I was involved.

I have not been involved directly in any changes in the legislature, relating to death investigation, coroners and medical examiners laws, elder abuse, or child abuse. I was one of many who supported legislation that became law affecting the training of KY coroners. I was instrumental in having an outmoded definition of SIDS in the statutes abolished.

My contributions to the field of forensic pathology.

My major contributions have consisted of participation as an officer in the pathology/biology section of the AAFS, and as an officer and member of the Board of Directors and Executive committee of NAME. I have also been reasonably active as an individual who has either served as an editor on various forensic journals or author/co-author in various forensic journals and textbooks.

I wrote an editorial while President of NAME on NAME'S 2-pronged approach to improving medicolegal death investigation, namely office accreditation and guidelines for forensic practitioners (see above). I am pleased to have collaborated with many in the organization to have seen the practice standards come to fruition and be approved by the membership during

my presidency. With much gratitude to Dr. Randy Hanzlick, I was an author on guidelines for manner of death, which was approved by NAME some years ago, and, if nothing else, has led to much discussion about that elusive concept known as manner of death.

Perspectives I gained as a medical examiner.

Observation by the senses, primarily but not exclusively visual and tactile, is a starting point for sound conclusions. In a specific investigation, it is prudent to hypothesize different possibilities as to why given individual died, but the hypothesis should not stand in the way of observation. Commonly, thorough and reliable circumstantial investigation and review of history are more important than the findings at necropsy in discovering why the person died. Never venture out beyond the evidence, physical or otherwise. Use language appropriate for the audience, certainly including family members of the deceased and lay members of the jury panel at trial. Don't provide any form of service or advice to attorneys in civil actions until the ground rules are clearly laid out as to the means of payment for professional services is clearly established, i.e., don't get bamboozled or tricked more than once by deceptive or dishonest attorneys. Basic rules for testimony at trial are simple: tell the truth; say I don't know when you don't; say I cannot recall, if you can't; don't answer rhetorical questions; don't answer questions by any attorney if you do not accept the underlying premise (the old "when did you stop beating your wife" question). Don't be condescending to anyone, including courtroom participants and students at various levels. While testifying, answer the question posed by any attorney as briefly as possible, and certainly reply "yes" or "no" if indicated and compatible with your sense of intellectual honesty. Don't hesitate to request guidance from the judge. In recent times, the "CSI" effect is real and requires skill to overcome the misleading notions by attorneys, judges, juries, and the public on what the real world of medicolegal death investigation is in fact about.

Difficult cases I have managed.

In every death investigation of an infant or a young human, and irrespective of whether the cause of death was traumatic or natural, I have considered those cases difficult because the interests of so many are greatly affected by the decisions that the forensic pathologist makes. It requires humility and forthrightness to discuss such cases with all interests, and is particularly trying when dealing with the next of kin. Many cases, which, for whatever reason, gain a lot of attention from the media and the public, are commonly circumstances that require management skills beyond the training as a forensic pathologist attempting to answer the medical and investigative issues. Like many in the practice, I have encountered some "never ending" cases, usually falling into two categories: (a) one in which the conclusion on manner of death was suicide, and vocal, sometimes angry interests of the deceased vigorously opposed that conclusion for various reasons; and (b) the other cases in which family members believe that medical personnel were negligent in diagnosis or treatment, which caused the death, and vigorously oppose the conclusions and findings at autopsy, which run counter to their interests as plaintiffs in a medical malpractice or similar law suit. In more recent times, the growing controversy over trauma in infancy and childhood requires great skills and wisdom in reaching

conclusions based on the state of medical and biomechanical science coupled with findings at autopsy.

Cases that are particularly challenging as well are those in which politics in various contexts plays a role. Performing forensic death investigation on a former governor of Kentucky or state representatives requires especial thoroughness and articulation of the issues to media. Another form of politics occurs when a police officer either kills or is killed by someone. Many of these cases are difficult in the jurisdiction where I work because there is not much separation between the agency of which the individual was a member and the agency investigating. The most outstanding example of a case like this in my experience was that of a trooper who was found with a contact gunshot wound of the forehead and his weapon next to him, as he was seated on an embankment near his parked official vehicle. Firearms residue tests were conducted at least three times, and all of which showed abundant residue on both hands. In the vast majority of cases of this kind, the investigative officers would have had little doubt in deciding that such a case was suicide. However, for whatever reason, investigators of the very same post in which this individual worked concluded immediately that it was a homicide. So when I initially considered the manner to be undetermined pending investigation, hordes of individuals from throughout the organization came to meet with me and to go over my findings. The coroner involved in the case declined to sign the death certificate in the matter, because he opined it was a suicide. In essence, the case was removed from my hands and moved upstairs in the organization. Indicators in the background investigation by an honest detective at that post established that there was much in the deceased's background to support the notion of suicide. Of course, this never came to light since the manner was under investigation and being worked as a homicide. Now, more than two decades later, this individual's name is memorialized in stone as an officer killed in the line of duty, and his family has received considerable compensation from various governments. Until I am convinced otherwise, my belief is that his killer in this "cold case" will never be found.

I have been involved with varying degrees of responsibility in the investigation of mass catastrophes, including the Air Florida crash of 1982 in Washington, D.C., the Air Canada fire in Northern Kentucky in 1983, and more recently the Comair crash in Lexington, Kentucky, in 2006. Such mass fatality events require the expertise and efforts of many individuals and agencies from various governmental levels, and certainly I was not the manager of these but actively involved in the investigations. Investigating multi-fatality casualties in plane crashes in the mountains of Eastern Kentucky is an especially difficult investigation, notably as that there is extensive skeletal and soft tissue trauma and widely dispersed fragmentation coupled with effects of post-crash fire. Again, such investigations are a team effort, and I certainly owe special thanks to Dr. Emily Craig, for many years the forensic anthropologist for Kentucky, and to many coroners of KY, who played indispensable roles in such investigations.

How I dealt with job-related stresses, anxiety, personal performance issues

My particular approach in dealing with the stresses of the job is to focus on the reason for the investigation, namely, to answer critical questions about what happened to the individual and

the cause of the individual's death. Recollection of certain cases always causes my eyes to moisten, and certainly I have had many tear-filled discussions with family members over the years. How one phrases findings certainly is very important to the next of kin. I try to be honest but considerate in answering such questions as "Did my love one suffer?". Those who know me reasonably well likely consider me a workaholic, but when I am not at work my major leisure activity is reading German, both contemporary, political and social issues, as well as literature. I never tire reading Goethe's Faust, but admit that part II is a real humdinger.

Other recollections.

Over the last nearly three decades I do specifically recognize the prosecutors of Kentucky, who have never placed any pressure on me with regard to the findings in the given investigation. Moreover, they have never attempted to discover the results of a conversation with defense attorneys. Members of the public defenders' office are to be congratulated for their yeoman's work in the face of overwhelming workloads and painfully low pay. In current times, most attorneys in civil matters are honest. Some attorneys have "stiffed" me, like so many others, by refusing after the fact to pay for consultation or investigation, with the argument that this is an official, publicly funded state autopsy and investigation.

Advice for forensic pathologists entering the field.

Like the decision for making any career choice, I recommend those interested to learn as much as one can about the field.

Autopsy practice requires an alert observer and an inquisitive mind. What is discovered in a case may, to your joy, rebut the initial hypothesis and lead to insight and create reasonable certainty about a cause of death. Not only is your sense of worth fulfilled, but you have contributed greatly to the commonweal. Although you will in spite of the best intentions occasionally fail if conclusions are drawn too hastily, you will best serve your mission and justice by being excruciatingly cautious and humble. Always be a life-long learner and devote your practice to the scaffold of science.

Realize that every case is unique, and that one can usually learn something of value from that case. Become keenly aware of the wide range of changes that the human body can experience under various natural and traumatic conditions, and develop a strategy personally to cope with such changes; do not fail to attend autopsies with such changes before deciding to become a forensic pathologist. Be aware that your work product will be scrutinized critically and at times unfairly by others in your specialty and by attorneys. Develop a thick skin in the sense that, for example, while testifying you may be subject to personal attacks in addition to fielding questions about your intelligence or experience. A good way to deal with some of those issues is to communicate with the attorney who called you to the court in the first place, so that attorney can take the appropriate steps during trial to counteract such offensive tactics by opposing counsel. Do not fudge findings and conclusions in order to please those who have hired you. Don't personally attack any colleagues who disagree with you for whatever reason.

Irrespective of compensation, do not choose a work environment or location that you, and your family, really don't want to be a part of. Become active and participate in the organizations designed for the specialty.

I have learned that the most successful offices are ones who have leaders that tend to the politics of the office every day and are successful advocates for the cause of death investigation. These leaders are able to explain to the lay politicians the value of funding for various types of operations in order to answer the questions and responsibility mandated by legislation. Even though the forensic pathologist may be considered the "Captain of the Ship" in a given death investigation, reliance on consultants and specialists from a host of fields is indispensable, and going at it alone usually results in no success.

How has forensic pathology changed during my career, for the better and for the worse?

For the most part, I believe there has been an increase in the general competence of forensic pathologists, although, unfortunately, there are people still "practicing" forensic pathology without any or only minimal qualifications, and whose poor performance has resulted in oversight of the specialty by unfriendly, outside interests. The improvements have come in spurts and sporadically over time, most notably via the establishment of accreditation for offices and standards for practitioners individually by NAME. These are certainly great strides forward, but still have yet to have wide application for various reasons. Also and in general, remuneration for many practitioners in certain jurisdictions is extremely low and inappropriate for the degree of training and expertise. It appears to be true that only when crises arise in such jurisdictions do the funding agencies eventually see the wisdom in upgrading salary, working conditions, facilities, and the like. This process has been excruciatingly slow. It is well known that many highly qualified people have chosen to pursue as a primary occupation other fields in pathology because of the question of compensation. Certainly an improvement in the field of forensic pathology is manifested in the digital age where such nearly immediate communication via the "LISTSERV" that provides opportunities for collegial discussion. Another change in the field is that virtually in any criminal case it is necessary for the defense to have an expert evaluate the materials and possibly testify at trial; in that sense there is a lot more work for forensic pathologists and, overall, is certainly a type of quality control over one's work.

Knowing what I do now, would I "do it again" under the same circumstances when I began, or under today's circumstances?

Being a Kentuckian, I probably would, even in hindsight, have chosen to practice in Kentucky, which is a duel coroner/medical examiner system. I certainly had the opportunity to do a fellowship and work as a peer in the medical examiner's office in Washington, D.C. before its collapse. That system, if properly supported and funded, is an ideal setting to practice the profession. Since I began working in Kentucky in the early 80's, there have been vast improvements in death investigation, although, as they say, there is still a long way to go, and it is an evolutionary process in engaging elective coroners in some instances to conduct proper investigations proactively.

Personal information such as family, hobbies and interests.

As I noted above, I have tended to focus too much on work and neglected family life. I have been married three times, I thank my wives for having put with me for as long as they did, and am comforted to know that they have moved on and apparently are doing well. I have one son, John IV, who is now 41 and has two master degrees, just having completed one in management of non-profit organizations at Brandeis University, Waltham, MA. I was a very active athlete in high school and college years, having played baseball at Yale and been chosen the most valuable player in my senior year, 1964. So a hobby, which is diminished over the years, is being a spectator of various sports. As noted, my primary outside interest is reading contemporary German-language books, magazines, newspapers, and journals, and German literature, including re-reading some novels, poems, and dramas first encountered during my undergraduate years.

Jeffrey Jentzen, M.D.



NAME President 2006-07
Chief Medical Examiner, Milwaukee County Wisconsin (1987-2008)

July 2011

Why did I Select Forensic Pathology as a Career?

I entered the anatomic and clinical pathology residency at Hennepin County Medical Center in Minneapolis with the intention of being a general pathologist in the mold of my father-in-law. Dr. John Coe was the chairman of pathology at Hennepin County Medical Center and medical examiner for Hennepin County. I was reluctant, at first, to enter the forensic fellowship; however, I changed my mind after medical reimbursements changed in the early 1980s there were few jobs available in general pathology. Coe accepted me into the forensic fellowship with the simple words, "You're tall enough!" Coe retired as medical examiner the year preceding my fellowship. During my fellowship the assistant medical examiner left the office and I was offered the position by Dr. Garry Peterson, Coe's replacement as medical examiner. I stayed in Minneapolis for six months as Peterson's assistant until I left for Milwaukee in 1987.

Places and Times I Served as Medical Examiner.

I became the Medical Examiner for Milwaukee County in 1987, at age thirty-three, one of the youngest medical examiners of a major American city at the time. I intended to stay in Milwaukee for a short time, but quickly fell in love with the city. I stayed in Milwaukee for twenty-one years as medical examiner before retiring in 2008. I was extremely fortunate to have a supportive district attorney, E. Michael McCann, and a number of physicians in the local Milwaukee community who understood the importance of the position. I relocated to the University of Michigan in Ann Arbor in 2008 as the Director of Autopsy and Forensic Pathology where I also act as deputy medical examiner for Washtenaw County.

Major Accomplishments as Medical Examiner

I arrived in Milwaukee to an office with a deteriorated reputation among the local law enforcement and legal community. My first accomplishment was to recruit Dr. John Teggatz, who also completed his pathology residency and fellowship training with me at Hennepin County, as the Deputy Chief medical examiner. Because we shared the same professional objectives and philosophy such as pathologists at crime scenes, performing only complete autopsies, and investigator education, it was easy to move the office forward. Over the years, we developed child death review teams, a regional medical examiner system with coroners, co-operative relationships with organ and tissue agencies, and public health authorities, and an annual two-day forensic seminar.

Efforts on Behalf of Forensic Pathology and the Forensic Sciences

I believe my most lasting accomplishments to the field have been in the area of education. Certainly the best thing I ever did professionally was to interest Dr. Steve Clark, a Ph.D. in curriculum design, education, and testing in the death investigation field. Steve and I are childhood friends; on vacation in 1995 I expressed my frustration that there were no formal measures of investigator performance and training. Steve's answer was to recruit the best death investigators in the country to Milwaukee to develop the 52 essential skills and practices of death investigators into a training curriculum. The result was a training manual and test, which eventually developed into the American Board of Medico-Legal Death Investigation (ABMDI). Since that early project, Steve has made a number of contributions to NAME and forensic medicine including: National Guidelines for Death Investigation and Crime Scene Investigation, certification examinations for the Board of Forensic Document Examiners (BFDE) and the American Board of Forensic Odontologists (ABFO), NAMUS program for missing and unidentified persons, and computerizing the NAME Inspection and Accreditation process.

The other accomplishment is a two-day seminar in forensic medicine. Patterned after the Hennepin County program, the lectures attracted large audience for over 20 years.
Finally, the many residents and fellows John Teggatz and I successfully taught over the years including: James Henry, Marie Lavin, Michele Catellier, George Mizell, Douglas Kelly, Susan Venuti, Michael Stier, Mary Mainland, Brian Mazrim, Butch Huston, Alex Milanovic, Victor Forlov, Daniel Hess, Dan Carver, Marie Olsen, Robert Stoppacher, many of whom are current chief medical examiners.

Recollections of Places I Have Trained and Worked

During the 1980s, Minneapolis contained one of the best groups of forensic pathologists in the country**.** I was fortunate to train at Hennepin County with some of the real greats in forensic pathology. Dr. John I. Coe was the medical examiner and chair of the department of pathology that gave him a lot of power in the medical center. Coe was active nationally including a past-president of NAME. He was involved in the Kennedy and King Assassination investigations. His annual conference brought the top people in the field to Minneapolis to lecture. Coe was of course known for his work in vitreous fluid analysis helped to a large degree by his access to the

hospital lab and Cal Bandt. Coe published and lectured widely. Coe was especially supportive of lay death investigators and I learned a lot about training and education while at Hennepin County.

Dr. Calvin "Cal" Bandt was the unsung force behind the scenes. He was a board-certified forensic pathologist and supervised and ran the clinical labs at Hennepin County Medical Center. Cal was a great mind. He was the first to recognize the phenomenon of postmortem drug re-distribution and assisted Coe with the investigations of vitreous fluid. Bandt refused to publish academic papers on his findings, leaving the chore and glory for others.

Garry Peterson MD, JD took over as medical examiner in 1984 following Coe. I was Garry's first forensic fellow and we shared interests in college hockey and books. Gary was and still is an incessant reader of fiction. The fellowship training at Hennepin was hands on, with the fellow involved in every aspect of the office. Supervision was at a distance, which allowed fellows to develop decision-making skills. Pete was an excellent teacher and friend. His law degree provided him with superior skills of deduction which he used when dissecting difficult cases. My later success in Milwaukee was to a large degree because of the almost weekly telephone conversations, "sessions" I had with Garry during the early years of my career, right out of training.

John Teggatz MD, obtained his pathology and forensic fellowship training at Hennepin County and joined me in Milwaukee shortly after my arrival. John had been a forensic investigator and autopsy assistant in the Minneapolis office and as a result knew death investigation inside and out. He was very knowledgeable about scene investigation and had seen everything related to forensics. John had a genuine passion for teaching and directed the fellowship program. His patience and understanding for residents and fellows was truly amazing and far exceeded my own. I credit John with the discovery of the "Teggatz Lesion," artefactual hemorrhage in frozen bodies as the result of postmortem trauma. John died too young of lung cancer; he was a special colleague and friend.

I spent the major part of my career in Milwaukee, the most underappreciated city in the country. The office was staffed with hard-working professionals. There was a good mix of cases. The toxicology laboratory was especially prominent. Susan Gock was the toxicologist most responsible for the excellent service and reputation of the lab. Steve Wong, Ph.D, came to Milwaukee in the mid-1990s and provided academic foundation for many of the publications and developed a forensic toxicology fellowship program. Steve developed the first forensic pharmacogenomics laboratory and did extensive work in the field. Warren Hill was a dedicated administrator and public servant with whom I worked for twelve years.

Major Controversies and Frustrations in Completing My Responsibilities

Budgets were a constant source of headache and frustration. In that the office performed 300 referral autopsies for revenue, we had a little flexibility; however, the lack of comfortable funding was always hanging over our heads. Other than budgets, personnel management was

the only other frustration. Pathologists are trained to perform autopsies and diagnose cancer—not deal with the continual people problems that come with managing a large office.

Academic Involvement through Research, Education, and Training

My major areas of interest include pharmacogenomics (the study of genetic influence on drug deaths), medical history and child death investigation. I have written on the field of death investigation and initiated and created the book The *Mediocolegal Death Investigator: A Systematic Training Program for the Professional Death Investigator*. I assisted in the development of national forensic autopsy standards. While a medical examiner I obtained a Ph.D. the history of science from the University of Wisconsin. My most recent publication, Death Investigation in America: Coroners, Medical Examiners, and the Search for Reasonable Medical Certainty is a history of forensic pathology in America published by Harvard University Press (2009).

Legislative Changes in Which I Was Involved

I have been involved in few actual legislative efforts. One was the successful defense of NAME organ and tissue procurement suits in 6th Circuit of Federal Court (2010). I tried to include statutes to require board-certified forensic pathologists as medical examiners in Milwaukee and institute therapeutic accident designation on death certificates —both Failed.

Difficult Cases I Have Managed

The most high profile case I handled was the Jeffrey Dahmer serial killing (1991). Although it received a lot of publicity, it was really more like dismantling a museum. Although Chicago received most of the publicity related to the 1995 Midwest heat wave, Milwaukee saw the same relative number of cases. We had 100 people die overnight of heat-related deaths, which stretched our capacity. Finally, the most difficult case came after the plane carrying six members of the University of Michigan transplant team went down in Lake Michigan, a mile offshore in 50 feet of water. The medical examiner's office was the only agency without a boat, and recovery was tedious and difficult.

Advice for Forensic Pathologists Entering the Field

The autopsy begins at the scene.
No guts; no glory. (Make a decision)
No good deed goes unpunished. (Treat everyone the same.)
Get your butt out of bed. (Go to crime scenes!)
The chief has to spend time in the autopsy room.
You don't know how much authority you have until you try and use it.
The statutes won't save you, use common sense.
Speak to politicians like you visit with your neighbor over the back fence.
Always do a complete autopsy.
Specialize in something.
If you think about it; Do it!

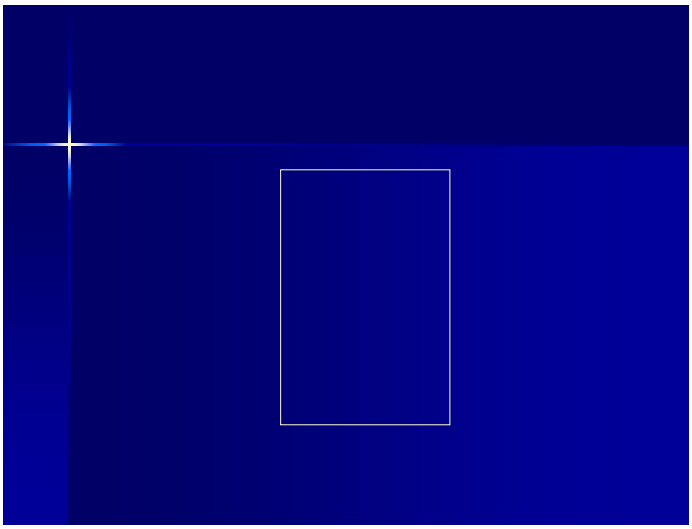
Jeffrey Jentzen, M.D.

Knowing What I Do, "Would I Do It Again?

Looking back on my career, I realize that I was specially wired for the position of medical examiner. Medical examiners need special skills and gifts of patience, suspicion, paranoia, and common sense. They need to be public servants that know how to avoid perceptions of conflicts of interest.

Personal Information: Family, Hobbies, and Interests

I was lucky to have married my wife Dorianne, the daughter of a pathologist! This kept me out of trouble on numerous occasions. I am a sports nut, having played college football. I enjoy reading and writing history and movies.



(The following was provided by the NAME Educational Activities Committee (EAC) August 2020)

Laura D. Knight, MD



Current position: Chief Medical Examiner and Coroner, Washoe County Regional Medical Examiner's Office, Reno, NV
Associate Professor in Pathology and Pediatrics Departments, University of Nevada-Reno School of Medicine

Education history:
BS – Chemistry, Murray State University, Murray KY
MD – University of Louisville, Louisville KY
AP/CP Pathology Residency – Medical University of South Carolina, Charleston SC
Forensic Pathology Fellowship – Office of the Medical Investigator/University of New Mexico, Albuquerque NM

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

I read too many interesting books at an impressionable age, essentially. Tom Noguchi's "Coroner" for example, obtained from my high school library, left me with a fascination for the field. I read everything I could get my hands-on regarding coroners and medical examiners, and I found the topics of anatomy and physiology the most interesting of my high school education. I also had a level of curiosity and inquisitiveness that impressed some of my instructors and annoyed others; I have found this trait to serve me well to this day. I attended medical school knowing I had a strong interest in forensic pathology but kept my mind open to other specialties. I was nearly equally interested in High-Risk OB and Maternal-Fetal Medicine, and briefly considered choosing that field. But, when I finally was able to complete my elective in Forensic Pathology at the KY Office of the State Medical Examiner in Louisville, I was hooked! Working with Drs. Tracey Corey, Donna Stewart, Barbara Weakley-Jones, Amy Burrows-Beckham, and their team was the highlight of my medical school career, and I also completed a research project (regarding infant deaths and bed sharing) with the office that I was able to present at the NAME meeting. These experiences were key in solidifying my commitment to FP, such that I knew throughout residency that I would be completing an FP fellowship and practicing FP for my career. I maintain special interest in maternal-fetal issues, obstetrical deaths, and sudden infant deaths to this day, which I credit to my medical school rotations and research project.

WHAT ADVICE DO YOU HAVE FOR ASPIRING FORENSIC PATHOLOGISTS, INCLUDING RECOMMENDATIONS TO MATCH INTO A PATHOLOGY RESIDENCY PROGRAM AND ACCEPTANCE INTO A FORENSIC PATHOLOGY FELLOWSHIP?

Seek out mentors in forensic pathology. As early as the first year of medical school, I wrote letters to prominent Chiefs asking their advice on choosing a pathology residency and entering the field of

forensic pathology. Connect with your local Medical Examiner/Coroner office and take advantage of any lectures in the medical school pathology course given by forensic pathologists as an opportunity to meet them and ask for shadowing opportunities. Observe autopsies whenever you have the opportunity in medical school, whether by shadowing at the ME Office, attending hospital autopsies with residents or hospital pathologists during a pathology elective, and especially, attending the autopsy of any patient who dies during your clinical rotations as this is a critical learning opportunity. During medical school and residency, seek out opportunities for research or publishing a case report relevant to forensic pathology; present your work at the annual meeting of the National Association of Medical Examiners, a fantastic opportunity for networking. Attend the NAME meeting and AAFS meetings and become a member of both organizations. Apply to residency programs that have good availability of a large number of hospital and forensic autopsies for your education, and that have a forensic pathology elective rotation. Choosing a residency program that has an affiliated forensic pathology fellowship is not necessary but could be beneficial if you have a family and would wish to stay in the same geographic location for the duration of training. Look for a residency program that has a solid reputation for both AP and CP, with excellent boards pass rates, and happy residents with a good esprit-de-corps. During residency, consider completing “away” rotations if available at potential fellowship programs to get a feel for what type and size of office might best suit you; every program has something to offer, it is just a matter of finding a match for your interests. For me, a larger number of cases for broad exposure, in a Medical Examiner (as opposed to coroner) setting was important, while not wishing to live in the largest cities.

WHAT IS THE MOST REWARDING ASPECT OF BEING A FORENSIC PATHOLOGIST?

Being able to provide answers to grieving families, and bringing science to bear in important legal matters, I find to be the most rewarding aspects of being a forensic pathologist. Solving a puzzle with highly refined skills and knowledge is also extremely satisfying.

WHAT IS THE GREATEST CHALLENGE OF BEING A FORENSIC PATHOLOGIST?

We are constantly in the public eye with high profile cases, and our opinions may be challenged publicly. We live in a time where even the most scientifically proven concepts are routinely questioned, and even more so, scientific opinions. We are coming full circle from the “CSI Effect” in which juries thought forensic evidence nearly infallible, to a new era
in which medical science is being scoffed at by some during a pandemic. It is my hope that as a society we may end up somewhere in the middle: with a healthy skepticism and intellectual curiosity but continuing to value what science has to offer us.

WHAT DO YOU THINK ARE THE MOST IMPORTANT ISSUES/CHALLENGES OF FORENSIC PATHOLOGY TODAY?

The forensic pathologist workforce shortage, combined with increasing workloads, represents an unprecedented challenge to our specialty. We must retain those already in the workforce and recruit more students and residents to the field. A multi-pronged approach that addresses compensation, educational paths, incentivization, and the culture of our specialty is likely necessary to accomplish this.

Emerging toxicologic threats, such as illicit fentanyl and fentanyl analogs, and the opioid epidemic in general, have driven caseloads for the past decade in many locales. We can anticipate continuing evolution of synthetic opioids and other types of drugs, and must find ways to deal with waxing and waning caseloads; approaches include being flexible in our working models (full time vs. part time vs. locum tenens), and advocating for greater public funding for ME/Coroners and toxicology labs developing new testing.

Finally, vicarious trauma and burnout related to high caseloads, emotionally charged incidents, mass fatality, and the otherwise sometimes stressful nature of this career are challenges that have not been much addressed until recently. I am heartened to see this unspoken truth being talked about, in presentations at the NAME meeting, and committees formed (including in NAME) to address these issues, prevent burnout, and keep our colleagues well and working rather than experiencing negative effects silently, retiring early or changing career paths.

WHAT HAS BEEN YOUR MOST MEMORABLE CASE AND WHY?

I have always had a hard time choosing a "favorite" of anything, whether it be favorite food, book, or movie. I feel the same way about my cases—many are memorable, for different reasons. In some it is the circumstances—the naked man found trussed in ropes around his torso and neck and hanging from the corner of the garage, a broken plastic chair just to the side of him, with a bloody great toe. He had not intended to die during his activity, and closer inspection of the scene revealed a strategically cut hole in the shrubs that allowed him to see into a neighboring home. In others, it is a unique and rarely seen medical finding or toxicological agent—like the two men who died of hydrogen sulfide toxicity after opening a manhole while surveying. One opened a manhole, yelled, and fell in; his work partner ran over to rescue him, and was also overcome and immediately fell in. Both died as they could not be quickly removed from the toxic environment. In others, it is the challenging nature of the case—decomposed or charred bodies, which may turn out to have evidence of homicidal trauma, and in which I am still able to determine cause of death despite the condition of the body. A fire rapidly devoured a tent in a homeless encampment; the charred body of a man found inside came to my autopsy table, where I discovered depressed occipital skull fractures unrelated to the thermal damage on the skull, and a subsequent search of the scene yielded a weapon bearing apparent hair and blood.

WHAT DO YOU ENJOY MOST ABOUT WORKING WITH YOUR TEAM?

Being able to rely on talented, qualified colleagues is one of the great joys of a professional career. Having forensic pathologist peers to discuss cases with and obtain different perspectives is extremely valuable. Locum tenens pathologists also bring practical experience from other offices across the U.S., and often suggest new and interesting ways to look at things or to complete mission-critical tasks. There is also a certain camaraderie amongst pathologists and investigators in our office; all of us know the realities of death investigation and have a common experience to draw from. It makes for a very special peer group.

WHO IS YOUR ROLE MODEL AND WHY?

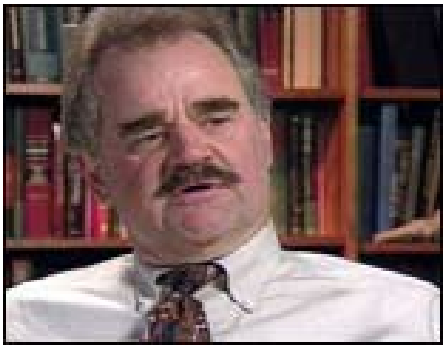
I have had many excellent mentors over the years, but specifically Tracey Corey, Kim Collins, and Erin Presnell are strong women forensic pathologists who helped shape who I am today as they guided my education and training. They each exemplify a way of being and professional demeanor

that I admire. One of Kim Collins' best pieces of advice to me was to get involved in professional organizations as soon as possible, which I did as a resident; I now am a member of the Board of Directors and Executive Committee of NAME. Marcus Nashelsky, Jonathan Arden, and Sally Aiken have also been mentors and models to me in NAME, and helped to guide me to serve in committee chair roles and the Executive Committee; they have each demonstrated that leading is not ruling but rather serving, by their selfless dedication to NAME.

WHAT ARE YOUR HOBBIES AND HOW DO YOU MAINTAIN A WORK-LIFE BALANCE?

I enjoy being outdoors, whether in the forest or by a lake or ocean; I find a camping trip, beach vacation, or just a long hike restorative. I am an avid swimmer and enjoy swimming laps in quiet solitude. I am an intermittent exerciser in other modes—walking, jogging, yoga, cycling—going in phases as the mood strikes me, but always finding it mood-enhancing and balance-restoring. I recently tried stand-up paddleboarding for the first time and loved it. I listen to audiobooks and podcasts and read voraciously, enjoy cooking and entertaining, love Halloween and all things associated, collect (and enjoy) wines, play hand drums and other percussion, and am a singer and was in a small band (before the pandemic).

Larry V. Lewman, M. D.



Chief Medical Examiner for the State of Oregon 1987-1999

June 2102

Places and Times I Served as Chief Medical Examiner

I have been with the Office of the Oregon State Medical Examiner for almost 41 years, starting in April 1971. I served as Deputy State Medical Examiner from 1971 to 1985 and a short stint as "Acting" Chief Medical Examiner for several months. I was appointed Chief Medical Examiner for the State of Oregon in 1987 and remained in that capacity until 1999 when I retired from the position. I currently work as a Deputy State Medical Examiner on a contract basis and have since my retirement.

Major Accomplishments and Frustration as Chief Medical Examiner

The major accomplishment by far was the legislative transfer of the Oregon Medical Examiner program from the State Health Division to the Oregon State Police. I realize some of my forensic pathology colleagues disapprove of medical examiner programs falling under the administrative umbrella of a police department but it has worked well for us. For over 20 years, the medical examiner program was poorly supported by the Health Division. Funding for the program was viewed as "stealing from the living to serve the dead," and there were frequent efforts to either cut budgetary support or try to get the dollars from elsewhere.

Equally frustrating was the difficulty in trying to find and fund a suitable facility in which to work. The medical examiner program was housed in a small funeral home originally built in 1924. In the early 1980s, a multi-agency investigative committee unanimously recommended that a new facility be built. Several committees were appointed and numerous recommendations were made that a modern facility be built for the medical examiner but, suffice to say, it never happened until the entire program was transferred to the Oregon State Police.

In 1994, with the help of our Medical Examiner Advisory Board, a high-powered committee including the state attorney general, chief justice of the Oregon Supreme Court, trauma

physicians, district attorneys, defense attorneys, and health officials was appointed to act upon my recommendation to transfer the program from the health authorities to the Oregon State Police. This was accomplished by a change in the law in the 1995 legislative session. The medical examiner program has prospered and improved dramatically since the transfer to the Oregon State Police. They provide us heat, lights, water and administrative and budgetary support when we need it. They do not interfere in our day-to-day work and we have had no problem maintaining our medical independence. This relationship has not been a problem in the political arena and has not been a problem in the courtroom. A defense attorney appointed by the governor has always been a member of the Oregon Medical Examiner Advisory Board which recommends policy for the office.

The state medical examiner has now occupied a new state-of-the-art medical examiner facility since October of 2004. A full-time state forensic administrator has been funded to aid the state medical examiner in administration of the program and is the liaison between the ME program and the State Police for administrative matters, leaving the state medical examiner to concentrate on medical direction of the program. The concept of regionalizing forensic pathology services throughout the state is now a realistic one.

I have my doubts if any of these changes would have ever been accomplished under the previous administrative setup. Much of the credit should go to my colleague, Dr. Karen Gunson, who replaced me as State Medical Examiner following my retirement and has championed improvements in the program.

Recollections of Places I Have Trained and Worked

I completed my anatomic and forensic pathology training at The Institute of Pathology at Case-Western Reserve University in Cleveland, OH. I finished my training in 1971 and moved to Oregon. Since I have only worked in one place during my entire forensic pathology career, there is not much more to say here except that I do not move around much.

Comments about People Who Trained Me and From Whom I Learned

Like most of us in this field, I find forensic pathology challenging and fascinating and were I given another chance to choose a career, I would do it all over again. I am indebted to two people who encouraged me in this direction and were responsible for my training in the early years.

<u>Lester Adelson, M. D.</u>

As you know, Doctor Adelson (recently deceased at age 92) was one of the true grandfathers and heroes in the forensic pathology field. Doctor Adelson received his medical/legal training at Harvard many years ago and served in the Cuyahoga County (Cleveland) Coroner's Office for some 40 years prior to his retirement. Doctor Adelson was not only a pioneer in forensic pathology but was one of the smartest, wittiest and yet one of the most humble figures whom I

encountered along the way. He was a consummate master of the English language authoring everything from the largest tome ever written on the pathology of homicide to turning Shakespeare literature into medical/legal stories. He was an enthusiastic teacher in both pathology and life and I remember many of his "witticisms" to this day. Among them:

"Lewman, there will be many times in your life when you will be confronted with the choice between time and money. I suggest to you that when confronted with this alternative, always choose the time. You can always get more money. You can never get more time."

"Lewman, so you are leaving Cleveland to move out to OREEGUN, huh. That should elevate the standard of practice in forensic pathology in both places."

For many years I have deluded myself into believing the latter was an example of his exceptional wit and not his observation skill.

Charles Hirsch, M. D.

The individual who probably had the most profound influence on my career was Dr. Charles Hirsch, current Chief Medical Examiner for the City of New York. Chuck is the individual who really opened my eyes to a career in forensic pathology. Pathology residents at the Institute of Pathology routinely rotated through the coroner's office as part of their training. Doctor Hirsch, at the time, was a new member of the staff having received his training in forensic pathology and neuropathology in Baltimore. Though only a few years my senior, Doctor Hirsch was one of the most enthusiastic and excellent teachers that I encountered in any field. I learned more from Doctor Hirsch about neuropathology in a few brain cuttings at the coroner's office than I ever did from the more academic programs at the University. Charles Hirsch is a highly intelligent organized professional and that is why he occupies the lofty position he does today.

Recollections about People You Trained

All pathology residents at Oregon Health Sciences University rotate through the Medical Examiner's Office during their pathology training. Some spent one month; many choose to spend more. The Oregon State Medical Examiner Office has not had a formal forensic pathology fellowship program primarily because of an inadequate facility and lack of a funding source. This may well change in the near future. Though I was only partially responsible for teaching the following pathologists some forensic pathology, I would like to think that I played a role in their decision to pursue forensic pathology as a career path.

Karen Gunson, M. D.

Karen is the one individual who received her forensic pathology training in the Oregon Medical Examiner program. She joined this office in 1985. At that time, two years of full-time forensic pathology practice in this office qualified one for forensic board examination. Karen took and passed the boards the first time. She has been a member of the staff since 1985 and assumed

the position as Chief Medical Examiner upon my retirement in 1999. She is nationally respected and served on the N.A.M.E. Board of Directors and on the forensic pathology test writing committee.

Clifford Nelson, M. D.

Cliff's initial exposure to forensic pathology was during his residency rotation through this office. He completed his forensic pathology fellowship in Atlanta and has been a member of our staff in Oregon for the last 15 years.

Christopher Young, M. D.

Chris received his initial exposure to forensic pathology in this office, took his fellowship training in the Dallas, Texas office and has been on the staff here now for almost eight years.

Steve Shapiro, M. D.

Steve spent several months learning forensic pathology here during his pathology residency training, did his forensic pathology fellowship with Dr. Hirsch in New York City, and now directs the Vermont medical examiner program.

Alane Olson, M. D.

Alane rotated through the office as a pathology resident, did her fellowship in Milwaukee, and is practicing in Reno, Nevada.

Tracy Dyer, M. D.

Tracy spent several months here during her pathology residency, completed her forensic pathology fellowship in Dallas, Texas, and is currently on the staff of the Dallas County Medical Examiner.

Major Controversies

An Oregon Attorney General investigation of the office ended with the termination of the State Medical Examiner in 1985 and my appointment to that position.

Legislative Changes

There were two major legislation issues:

Transfer of the State Medical Examiner program from the Oregon State Health Division to the Department of State Police discussed above.

The Oregon Medical Examiner's investigation of deaths of children in a religious cult that rejected medical care ultimately led to legislation which criminalized this behavior.

Activities and Committees

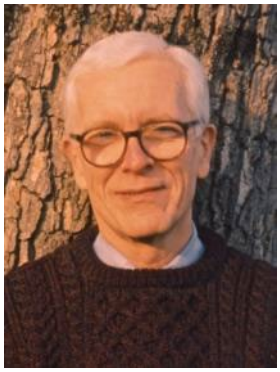
There have been many committees over the years. I served as co-chair of the State Child Death Review Team for many years until my retirement in 1999.

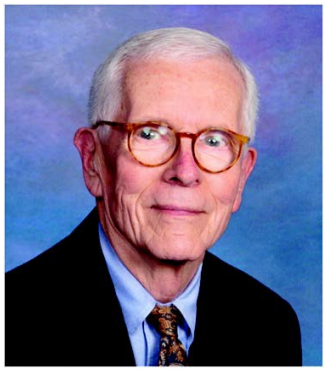
I testified before subcommittees of both Houses of the U. S. Congress in Washington, D.C., twice on Oregon's statewide approach to investigation of sudden infant death syndrome and once on investigation of deaths from propoxyphene (Darvon).

Personal/Family Information

Wife, child, two stepdaughters, five grandchildren, two dogs and three mini-donkeys.

James L. Luke, MD





Chief Medical Examiner of Oklahoma, 1967-1971
The District of Columbia, 1971-1983
Connecticut, 1987-1989

August 2013

Perspectives Gained as a Medical Examiner

Why Forensic Pathology?

During my third year in medical school I had decided on pathology as a specialty and a career in basic research. This interest was stimulated by investigative opportunities available to students in the then-newly revised medical school curriculum at Western Reserve University (now Case-Western Reserve). In this curriculum, basic science was combined with clinical medicine, and course material was taught by organ system, not as individual scientific disciplines.

As part of those innovative changes, forensic pathology was a required course for second year students. In a series of Saturday morning lectures, Dr. Lester Adelson, Cuyahoga County Chief Deputy Coroner, presented a systematic overview of forensic pathology and explained its relevance to the community, and to us. The forensic pathologist was depicted as having public health and public safety responsibilities, and, in the proper setting, an opportunity to pursue an academic commitment. It was also an introduction to Dr. Adelson, the person.

When I was a medical student (1956-1960), Dr. Alan R. Moritz, the pathology department chairman, gave a number of the course lectures on cardiovascular pathology. He participated regularly in clinical pathology conferences and medical and surgical grand rounds, particularly those related to cases involving sudden cardiac death and trauma.

I had a pathology internship at Yale and finished my residency training at Western Reserve. From 1963-1965, I satisfied my military obligation in the USPHS and was assigned to the Laboratory of Experimental Pathology, NIAMD, NIH. I first worked in Building 10 with Dr. Joe

Hin Tjio, the cytogeneticist of 46-chromosome fame, and then in Building 4 with Dr. Samuel Spicer. I published a paper with Dr. Spicer on the histochemistry of surface epithelium and pleural mucins in mammalian lung and was the pathologist part of a project comparing nuclear and mitochondrial uptake of tritiated thymidine (into DNA) in a flagellate by EM autoradiography.

In the fall of 1964, my wife and I were in San Francisco at a meeting, and I recall waking up in the middle of the night wondering what I was going to do with the rest of my career in pathology. By then, fulltime research seemed a bit artificial. Forensic pathology came to mind as a way to combine academic pathology with the pathology of the streets.

I spent the next two years at the New York City medical examiner's office.

Mentors

Dr. Adelson was a mentor and colleague. When I would send him reprints, annual reports and other materials, he never failed to reply with a warm letter of acknowledgement and thanks. He rarely attended annual specialty meetings or traveled for speaking engagements, preferring, as I was told, to concentrate on his professional responsibilities and academic interests. So it was a pleasant surprise when he agreed to participate in a death investigation symposium the office helped organize at the University of Oklahoma in the spring of 1971.

His scholarly pursuits were as broad and articulately documented as we have seen in our specialty. His bibliography consists of over 100 publications and titles such as "The Anatomy of Justice", a forensic pathologist's virtual dialogue with the victim, and "The Coroner of Elsinor", his discussion of the medical-legal aspects of Hamlet.

He will be remembered for increasing our understanding of fatal child abuse and the sudden infant death syndrome. His textbook, The Pathology of Homicide, remains a classic in the field nearly 40 years after its publication.

What I kept rediscovering about Dr. Adelson over the years was his preternatural (his word, and a good one) lack of pretentiousness, and his ability to capsulize a concept in a very few words, an effective and arresting teaching method. I doubt there are many who spent time with him who didn't come away with an appreciation for the well-crafted aphorisms he introduced into his conversations and lectures, and richer by far for the experience.

The legacy he leaves is a generation of medical students, pathology residents and justice system participants fortunate enough to have been introduced by him to the specialty. I would have known practically nothing about forensic pathology without his course. I don't think I would have considered the field as a career without his personal example.

In 1937, Dr. Moritz was asked to establish the department of legal medicine at the Harvard Medical School, the first such university-based department in the country. He returned to Cleveland in 1949 to become chairman of the pathology department at Western Reserve.

Research, much of it before my time, was a long-standing commitment of his that included experimental initiatives on the pathogenesis of thermal injury, for example, and a range of other projects, such as his study on the sudden deaths of young soldiers during World War II. His paper, Classical Mistakes in Forensic Pathology (Am J Clin Pathol 1956;26:1383-1397), is as timely now as it was when it was written.

Dr. Moritz was an early advocate for medical examiner systems nationally. He was the 1970 recipient of the Gold Headed Cane, academic pathology's highest honor. As Dr. Adelson states in his tribute to him (Adelson L. Alan Richards Moritz, MD: An Appreciation. Am J Forensic Med Pathol 1981;2:297-298), Dr. Moritz's most important contribution to our specialty is to have given it academic respectability.

It was not by chance that a seemingly disproportionate number of students and pathology residents at Western Reserve during the Adelson, Moritz era chose forensic pathology as a career.

By the late 1960's, Dr. Milton Helpern had worked for thirty-five years in one of the busiest medical examiner's offices in the world. He loved the challenge of the case material and the camaraderie of his staff. The door to his office was always open. It was not uncommon for discussions to carry over into dinner, on his dime, and for the professional staff to be included at gatherings for visiting colleagues at his apartment. He had a wonderful sense of humor. When something struck his funny bone, his stomach shook like Santa Claus. We knew his family. He knew ours.

His job was his life. He was in the office seven days a week, save for the rare occasion when he might be otherwise occupied. He was a superb teacher. I recall one day having struggled to find the last bullet in a multiple small caliber gunshot wound death. Retracing my steps, he picked up and turned over the breastplate. Embedded in the posterior sternum, without a trace of associated hemorrhage, was the missing bullet. Obviously, he had been there before.

However, it was Dr. Helpern's philosophy of the specialty and its place in the public health and justice system communities that stood him apart for me and made the New York City experience unique. Just as significant, under his guidance, our cases were ours to investigate, including media interaction, regardless of their notoriety. There is no better way to learn.

After two years in New York, I had developed a sense of how investigations should be conducted relative to the victim, the victim's family and the community at large.

Medical Examiner's Offices

I helped establish medical examiner's offices for the State of Oklahoma and the District of Columbia and served as Chief Medical Examiner (CME) in those jurisdictions from 1967-1971 and 1971-1983, respectively, and in Connecticut from 1987-1989.

Oklahoma

When we stepped off the plane in Oklahoma City, the wind was blowing about 20 mph. It kept on much the same way for the four years we were there, amidst tornado warnings (one touched down a mile from our house), dust storms and the most incredible line squalls I have ever seen. The kids and I would sometimes drive to Oklahoma City's man-made Lake Hefner in the evening to watch the fronts come through. Year around, the weather got our attention.

Oklahoma celebrated its 60th anniversary as a state the year we arrived. A number of people we met had lived there before statehood, lived through the dustbowl and helped weave the fabric of the state. Just like in the musical by the same name, there was a CAN DO feeling about the place.

The state covers 70,000 square miles. In 1967, the population was 2.5 million. My office was in the pathology department at the University of Oklahoma Medical Center, in Oklahoma City. The medical examiner's office budget was $100,000. My staff consisted of a secretary. My salary was $25,000. The county medical examiners for our 77 counties were local physicians, who investigated approximately 2000 deaths per year. Five hundred medical examiner autopsies were performed statewide.

I handled the majority of the cases reported in the central part of the state, including about 150 autopsies per year. Dr. Leo Lowbeer, our only other forensic pathologist, was responsible for most of the Tulsa cases. Pathologists in local hospitals performed the other medical examiner autopsies regionally. Needless to say, control of our outside cases was uneven and, not infrequently, left something to be desired. But it was a beginning, and there was remarkable participation on the part of county medical examiners and pathologists alike.

There were other blessings. Dr. Kurt Dubowski, professor of toxicology at the medical center, was our toxicology consultant. Dr. Clyde Snow, the staff anthropologist at the FAA Civil Aeromedical Institute, in Oklahoma City, was our forensic anthropology consultant for skeletonized remains and for the dozens of unidentified bone fragments delivered to our office each year. Both were invaluable contributors to the mission of the office. In 1970, Dr. John Pless came from Indiana as our first and only forensic pathology fellow during what turned out to be my final year in Oklahoma.

Looking back, I well remember the challenge Oklahoma represented. There was organizing death investigation and communicating investigative policies and procedures statewide (prior to PCs, cell phones and the Internet). There was perpetual on-call. There were numerous half-

day drives to give talks and other half-day drives to provide courtroom testimony. A credible in-house toxicology capability was needed. Some complicated cases were reported. Other complicated cases were not reported. An automated system for case management and data retrieval needed to be developed. There were papers and reports to write. Application for a forensic pathology residency-training program was a priority. There were the requisite administrative responsibilities, with budgetary and other hearings. Medical student lectures and clerkships were part of the mix. There was the Sunday morning radio call-in show where I had to explain that Snippy-the-horse's decomposed internal organs had not been carried off by aliens from outer space. Each day was a new adventure.

We had every administrative and operational problem known to man. Nevertheless, Oklahoma was a once in a lifetime experience that I treasure as much for the time in my life that made anything possible as for the opportunity to try it on my own.

Shortly after starting in Oklahoma, a reporter called, at Dr. Helpern's suggestion, for information on the pathology of berry aneurysm-related versus traumatic subarachnoid hemorrhage. Dr. Helpern had testified several years previously in Oklahoma City as an expert witness in such a death, and I understand it was that case and the public controversy surrounding it that prompted the drafting of the Oklahoma medical examiner statutes.

Three years later, the same reporter requested input about the statutory changes passed by Congress as part of the 1970 Court Reform and Criminal Procedure Act for the District of Columbia establishing, among other changes, a medical examiner system for the city. I knew virtually nothing about the office. Nevertheless, it sounded like a good opportunity in an interesting location. I decided to apply.

<u>The District of Columbia</u>

The DC appointment began in July 1971 and involved a changeover from a Coroner system. As in Oklahoma, my sense was to evaluate existing policies and procedures before making changes, even though changes might eventually be needed. In that regard, I kept a yellow legal pad with running lists of items for review. One I thought would be easy was to cover up "DC Morgue", chiseled in stone over the front door of the Coroner's Office facility, where I would work, with a sign that said Medical Examiner. The thrust, after all, was for a new departure. Notwithstanding that symbolism, the police and press continued to refer to the office as The Morgue in public commentary, just as they had referred to the New York City office as the Bellevue Morgue. We spent the first five years in that venerable but workable building.

I was in the office and autopsy room nearly every day for the first year. Our physician staff consisted of one other pathologist, Dr. Rak W. Kim, two surgeons, Drs. William J. Brownlee and Lynwood L. Rayford, and Dr. Richard L. Whelton, a general practitioner and the previous Coroner, who had lobbied for the medical examiner changes that would put him out of a job. It is unfortunate that Dr. Whelton's selflessness never received the credit it deserved.

Dr. Brian Blackbourne came on staff as Deputy Chief in July 1972. He and I alternated weekends for the next ten years and shared on-call, weekend and autopsy duty with our three deputy medical examiners. In addition, Brian handled most of the medical student, pathology resident and law enforcement lectures. I did the administrating.

Five staff pathologists, plus a forensic pathology fellow added in 1974, handled approximately 3000 death investigations and 1000 medical-legal autopsies per year. Full service toxicology and histology laboratories were available on-site. Weekly sign-out conferences controlled the numbers of pending and incomplete cases. Forensic pathologists who served as deputy medical examiners during my time in the office included (sequentially) Drs. Michael J. Dunne, LeRoy Riddick, Douglas S. Dixon, Stuart L. Dawson and John C. Hunsaker, III.

After a budgetary false start that cost us a year, the design and construction of our new 30,000 square foot facility, which included administrative, office, autopsy, laboratory and teaching space, encompassed the next two years. As the construction site was nearby, monitoring its progress became a daily ritual. The building was finished in 1976 and more than lived up to our expectations, in terms of appearance, public access and case management. It was magnificent. [I understand the DC office relocated to a new building last fall as a component of the District's Consolidated Forensic Laboratory.]

The Homicide Branch of the Metropolitan Police Department (MPD) handled death investigations, as in the Coroner program. Together, we developed operating procedures for medical examiner consultation, on-scene medical examiner investigation and other administrative parameters. On-going teaching and training initiatives were implemented. Because of the manageable size of the jurisdiction and the relatively few individuals involved, communication and consultation were never an issue.

When I began in DC, the office had 36 authorized positions. During my twelve years, we added two clerical staff, two custodial staff (for the new facility) and a resident-fellow slot, for a grand total of 41 authorized positions. Our FY 1982 office budget was approximately $1.2 million.

It was during the 18-hour days of the January 1982 Air Florida crash investigation that the Commissioner of Health, to whom I reported (we were originally in the Office of the Director of the mega-Department of Human Services), called to say he was cutting our authorized staff to 35 positions for the current year and to 32 positions for the following year. I don't recall any prior discussion of the matter and thought when I picked up the phone that he was calling to thank our staff for the good job they were doing with the Air Florida cases. It was subsequently suggested I might be able to have the proposed budget cuts restored if I hosted a neighborhood political fundraiser prior to the upcoming fall elections. For better or worse, there was no fundraiser.

The Health Commissioner was subsequently quoted as saying his fundraiser comment was meant in the abstract, that I should have become more involved politically if I wanted to defend our budget.

The administrative transfer of the office to the Department of Health (DOH) in the late 1970's made running it more problematic. We had formerly been spared government-wide budget cuts but were now required to participate equally with other DOH agencies. There are ways to accommodate reductions in agencies where budget and staffing are sufficiently robust, but for an office the size of ours with a mandated caseload and 24/7 coverage, it's not long before job performance is impacted. In addition, medical examiner salaries, stuck under a government-wide salary cap, had become increasingly uncompetitive. When Brian Blackbourne left in January 1983 to head the Massachusetts medical examiner's office, his salary jumped by 66 percent. A further complication was a DC residency requirement that had been recently imposed. Replacing employees at all levels was somewhere between difficult and impossible, depending on whether a hiring freeze was in effect.

After more than a year of trying to change our trajectory and amidst an already shrinking budget, I resigned as CME. I had no intention of presiding over the dismantling of what we had built.

It was a first rate office. I loved my job. Driving to and from work every day past our national monuments is something I never got used to, never took for granted and will never forget.

One of the issues I failed to consider when I began as a medical examiner is the transitory nature of "progress". I should have known better. Once in motion, doesn't the train just keep rolling down the track, building on what came before? The short answer is no. The District office was a painful lesson in that regard.

<u>The Armed Forces Institute of Pathology (AFIP)</u>

The AFIP played an unexpected role for me on several occasions. Among its educational offerings was the one-week course in Basic Forensic Pathology, which I attended when I was at the NIH. It was an excellent follow up to Dr. Adelson's course in medical school. After coming to the District, I gave the Basic course lecture on deaths by asphyxia for many years and participated in the Advanced Forensic Pathology course, which was given periodically at the FBI Academy.

I was appointed a Distinguished Scientist at the AFIP after leaving the District. In addition to assisting with case consultation reviews, I completed a prospective study with Dr. Donald Reay, the King County (Seattle) medical examiner, on the correlation of postmortem findings with the circumstances of the fatal event in suicidal deaths by hanging. The intent was to lend understanding to the origin of petechial hemorrhages and certain other findings commonly attributed to asphyxia (see Asphyxia).

Reviewing case files submitted after the fact to the AFIP for consultation prompted discussions with Dr. Jerry Spencer, the Department of Forensic Sciences chairman, Dr. Mike Clark and others to find a better way. I ended up writing a memorandum to the Director, Dr. Robert McMeekin, with a narrative outline for establishing an Armed Forces Medical Examiner System.

I had no further input in the process and learned sometime later that the medical examiner concept had been discussed in a paper published in 1973 in U.S. Navy Medicine by Drs. Charlie Stahl, Dick Froede and Jim Zimmerly. Dick Froede became the first Armed Forces Medical Examiner in 1988, almost two years after I had left the department. Charlie Stahl succeeded him in 1992.

A coincidental benefit of my appointment was having the use of the AFIP Wang computer system to write and type the Seattle paper. It was my introduction to the rapidly developing world of computer technology, a resource I have used and marveled at every day since.

My second tour was from 1993-1997 in the Department of Environmental and Toxicologic Pathology. I directed a research study to define the tissue response to silicone (breast implant) implantation. It was an interesting project and one that could only have been accomplished in a multidiscipline institution such as the AFIP represented. The results of the study are described in our paper (Luke JL, Kalasinsky VF, Turnicky RP, Centeno JA, Johnson FB, Mullick FG. Pathological and biophysical findings associated with silicone breast implants: a study of capsular tissues from 86 cases. Plastic and Reconstructive Surgery 1997;100(6):1558-1565).

Connecticut

I became CME for Connecticut in 1987. One would have thought the appointment a ready-made opportunity to continue and expand upon my DC experience. It certainly was, with a beautiful new facility, a first-rate staff, an adequate budget and an enlightened community. In spite of all that, I could not find a way to detach myself from the Washington area, which felt like home for us and where our three children lived, one still in high school.

I decided to leave after the first year, then reconsidered at the last minute and stayed for an additional year, during which time my wife continued to shuttle back and forth on roughly a six-week basis. My ambivalent commitment and our difficult commuting arrangement made the job untenable. Had it become available before or after it did, it might have worked. Unfortunately, that was not an option.

[I've thought a lot about and am perplexed to this day by my Connecticut ambivalence. It was remarkably out of character. It's not how I have ever responded to responsibility, particularly with one of the best jobs in the specialty staring me in the face. I have since wondered how much of it may have represented burnout from 16 consecutive years setting up and running the offices in Oklahoma and the District. There may be a price to pay for that sort of effort.]

Consulting

The Behavioral Science Investigative Support Unit, FBI Academy, Quantico, Virginia (part-time and intermittent, 1984-1999).

The Mayor's Special Counsel Investigation of the Office of the Chief Medical Examiner of the City of New York (1985).

The US General Accounting Office Review of the Human Remains Identification Process at the US Army Central Identification Laboratory in Hawaii (CILHI) (1992).

The Independent Counsel Investigation of the death of Vincent W. Foster, Jr., Deputy White House Counsel, (1994).

Academic Involvement and Research

Data Systems

One of the projects I had in mind coming to Oklahoma in 1967 was the development of an automated data retrieval system. Information systems during that period primarily consisted of IBM cards and other manual collating methods. Using the Maryland office's IBM card data-points as a template, I established criteria for victim demographics, time, place and circumstances of death and injury, and pathology and toxicology findings. The computer facility at the University of Oklahoma Medical Center was responsible for programming and data management.

The data system was completed in time to write and publish our annual reports for 1968 and beyond and other information pieces of various types.

An expanded version was implemented in the District of Columbia. As with the Oklahoma program, it ran off a mainframe computer and permitted case tracking and correlation of victim information and circumstances of death with postmortem findings. Here again, few of our collaborative research activities and publications from the office would have been possible without it.

Epidemiology, CDC Collaboration

In 1971, several months after coming to the District, our new data system was installed. During the first six months of its use, we recognized what appeared to be epidemiological clustering of narcotic-related overdose deaths, with the primary drug recovered in these cases changing over time from heroin to the combination of heroin and methadone, then disproportionately to methadone.

During the 1972 American Academy of Forensic Sciences meeting in Atlanta, I brought a series of graphs demonstrating our DC experience to Dr. Philip S. Brachman, head of epidemiology at the Centers for Disease Control, for his review. He assigned Dr. Mark Greene, an Epidemic

Intelligence Service (EIS) officer, to work with our office and the DC Narcotics Treatment Administration to study the epidemiology of drug abuse in the District. Twelve papers were published in this collaboration, including two that pertained to our overdose fatalities.

Dr. Ed Zimney, a fellow with the office, and I conducted an additional study of the DC narcotic-related deaths investigated from 1971-1979, 287 cases, in which heroin fatalities were correlated over time with the percent purity of street heroin and with blood morphine levels, among other parameters. A subsequent project with Dr. Jim Ruttenber, an EIS officer, addressed the substantial increase in heroin deaths that occurred in the District from 1979 through 1982.

Much was learned about the circumstantial and toxicological dynamics of narcotic fatalities and their relationship to the concentration and price of street narcotics, injected adulterants and coincident alcohol usage. One practical result was the marked reduction of methadone deaths in the early 1970s when DC narcotic treatment facilities restricted methadone take-home privileges, thereby reducing its illicit availability.

Other CDC-related publications using our office data system consisted of an MMWR report on heroin abuse and another on hypothermia.

Collaborative projects of these types are good examples of the benefits of involving researchers from other specialties in problem issues that cross discipline lines.

Asphyxia

Deaths from asphyxia have been an interest of mine since I started in the field, in terms of correlating postmortem findings with the estimated force involved and with the circumstances of the fatal event. In New York, I published a study of homicides by strangulation and another on suicidal hanging fatalities. A paper from Oklahoma dealt with smothering.

It seemed apparent that cases of manual strangulation were associated with laryngeal and hyoid bone trauma, and that hanging deaths where the body is found supported below the ligature demonstrated the largest numbers of petechial hemorrhages. However, most of the available information on the subject was anecdotal or derived from retrospective studies.

The paper that Dr. Don Reay and I, and others, published in the Journal of Forensic Sciences in 1985 discussed a prospective series of 61 hanging deaths from Seattle, where the positional circumstance of how each body was found was known, i.e., the body was completely suspended, partially supported (by knees or feet) or largely supported (seated).

Our findings indicated that internal trauma to the airway structures was associated with swift application of force (hanging cases found completely suspended, for example), and with advancing age regardless of body position, presumably due to age-related increased brittleness

of bone. Numbers of petechiae of the face and conjuctival surfaces correlated directly with extent of body support.

Theoretically, with increasing body support, the venous pressure outflow under the ligature would tend to be more readily compromised while the higher pressure arterial inflow would continue, allowing the buildup of intracapillary pressure and prompting petechial hemorrhage formation. Our findings support this hypothesis.

Other projects and papers were also published.

Complicated Cases/Events

Air Florida Flight 90

On January 13, 1982, Air Florida Flight 90, a Boeing 737 bound for Tampa, crashed on takeoff from Washington National Airport onto the 14th street Bridge and into the Potomac River. A major snowstorm was in progress. Four fatalities resulted from vehicles struck on the bridge by the plane, and 74 deaths occurred among passengers and flight crew.

Circumstances that made the investigation of this incident more manageable than it otherwise might have been included the long-term working relationship between MPD investigators and medical examiner staff; the cases were recovered over an 11-day period; it was a low speed, low altitude crash; the bodies were mostly intact; and there was no fire.

Before any of the aircraft victims were recovered or examined, the specifics of the case investigation parameters were decided. These included case numbering and charting, methods of identification, documenting and securing of personal effects, external and internal autopsy examination requirements, pertinent positive and negative findings to be included in the autopsy report, toxicology to be performed and family and media contact procedures.

Because we anticipated that the issue of crash survivability would be an important aspect of the investigation, given the circumstances, directly following autopsy, each case was given a trauma index score. Each body region (arbitrarily designated head, neck, chest, abdomen and pelvis) was graded from 1 to 3, with 3 being immediately fatal injury, 2 being life threatening injury and 1 representing non-fatal injury. Extremity fractures and airway/pulmonary changes consistent with drowning were also documented.

As it turned out, 55 of the plane's 74 occupants had grade 3 trauma in one or more regions, 10 had two or more regions of grade 2 trauma, and 7 had grade 2 trauma of the head or chest. One passenger was not autopsied per family request. In only one passenger were there no injuries, presumably the Good Samaritan who passed the US Park Police helicopter life ring to others for rescue before he succumbed to hypothermia and drowned.

Dr. Michael Bray, a pathology resident from the Washington Hospital Center rotating through the office, helped us with documentation and subsequently published a study of vitreous fluid chemistries from certain of the crash victims.

Teaching and Training

I gave a series of forensic pathology lectures for medical students in Oklahoma and, in DC, for medical students and pathology residents at Georgetown. Brian Blackbourne gave most of the talks at George Washington University, the FBI National Academy in Quantico, Virginia, and the Metropolitan Police Department training academy. Other staff members participated depending on availability. The office averaged approximately 100 lecture hours per year.

In DC, our monthly conferences on cardiovascular pathology with Dr. Bill Roberts (NHLBI/NIH) and on neuropathology with Dr. Vern Armbrustmacher (AFIP) well illustrated the educational value of medical examiner case material.

A forensic pathology residency-training program was approved for Oklahoma in 1970 and for the District in 1973. Forensic pathology fellows included Dr. John Pless, in Oklahoma, and Drs. Doug Dixon, Tom Henry, Ed Zimney and John Hunsaker in DC. Each added greatly to the operational and academic depth of the office. A number of pathologists from the AFIP also spent time with us, in a relationship that spanned the duration of my time in DC.

Medical students and pathology residents rotated through the offices in Oklahoma, the District and Connecticut on a part-time basis.

Efforts on behalf of Forensic Pathology

I served as Chairman of an Ad Hoc Committee on Forensic Pathology for the National Research Council, National Academy of Sciences, in 1968 and as a member of the Committee on Training in Forensic Pathology for the National Institute of General Medical Sciences, NIH, in 1969. In both instances, the obvious conclusions were reached, and the expected recommendations were made. Unfortunately, nothing happened. It was as if the meetings had never taken place.

In 1972, after coming to Washington, I put together what came to be called the Forensic Science Consortium Proposal for the District of Columbia. The project was a request for federal funding through the Law Enforcement Assistance Administration (LEAA), part of the US Department of Justice at the time. The coordinating agency for the proposal was the DC Office of Criminal Justice Plans and Analysis, under Blair G. Ewing, the director of the office and an articulate and informed supporter of the proposal. Participants committed to the project included local and federal law enforcement, the offices of the U.S. Attorney, the DC Public Defender and the Corporation Counsel and the Washington area legal and medical academic communities.

The intent was to provide a multi-disciplinary teaching, training and research resource in the forensic sciences, as stated in the program summary, "drawing upon the insights and personnel of the educational and criminal justice agencies of the nation's capital". The Consortium of Universities submitted the proposal at the end of 1973. At what turned out to be our final meeting with LEAA staff, we were told in response to an inquiry regarding potential funding that there were questions at LEAA about the role of the forensic sciences in the justice system. The project was not funded.

Granted, those were early days for things forensic, but it seemed an opportunity missed.

Editorial Responsibilities

Editorial Board, Journal of Forensic Sciences: 1979-1994, Associate Editor: 1992-2006
Board of Editors, American Journal of Forensic Medicine and Pathology: 1992-2004

Professional Organizations

NAME Board of Directors: 1970-1972, 1982-1985, 1994-2000 Executive Committee 1999-2000
Milton Helpern Award (AAFS, Pathology/Biology Section): 1998
Outstanding Service Award (NAME): 2001
Milton Helpern Laureate Award (NAME): 2002

The Toll

I have learned much more about life than death being a medical examiner. It doesn't take many investigations to make the point that one of the fundamental attributes of the specialty is the humanity inherent in our caseload. It is present in the history and the circumstances of the reality we share, and it provides depth and meaning to the experience of serving as a forensic pathologist and medical examiner. I have found it a priceless gift.

Life is fragile. No one knows that better than we do.

Being a medical examiner has been a journey with unexpected turns.

Early in my time at the New York office, I was on routine call and went to a scene to investigate a presumably uncomplicated natural death of a man approximately my own age. When I happened to see a copy of my high school class yearbook on the deceased's bookshelf, I knew right away who he was. His name hadn't registered, and, because of postmortem changes, he was not easily recognizable.

On another occasion in New York, I was on call and responded in the evening to my aunt's apartment (my mother's older sister) to find her dead from an apparent suicidal barbiturate overdose. Dr. Helpern did the autopsy, which confirmed the diagnosis.

In Washington, we investigated the deaths of two other acquaintances. In the first, an accidental choking death, the decedent had lived in the same apartment building we did in New York when I worked at the medical examiner's office. In the other, the victim was killed with his wife in the middle of the night in a head on collision caused by an intoxicated driver driving down the wrong side of a divided highway within several hundred yards of where we lived. We were awakened by the crash.

Two years after leaving the DC office, I was running at American University and saw a man with whom I often ran collapsed and pulseless on the grass bordering the track. I initiated the CPR. When the DC fire department transport finally arrived, he was taken to a nearby hospital where he was pronounced dead. He was Francis ("Mac") McAdams, a member of the National Transportation Safety Board that was responsible for the Air Florida Flight 90 crash investigation. The photo he had given me of the snow-shrouded plane at the gate prior to takeoff still hangs in my office.

Acknowledgements

I am grateful to the many people who, by example, insight or plain old-fashioned common sense, guided me along the way. Some are the colleagues and mentors with whom I trained. Others helped in establishing and operating the medical examiner systems that were my responsibility. Their willingness to take a chance on a new adventure is a tribute to the concept that we, together, were trying to implement. I couldn't write this narrative without acknowledging them as the partners and friends they became. I am very much in their debt.

Family

I met my wife, Marcia, at a nursing school mixer during the fall of my first year in medical school. We were married the following October, the day after the launch of Sputnik. Since then, we've been through eight interstate moves and the joys and tribulations of raising three daughters. We have four grandchildren. Marcia has brought kindness and a positive outlook with her every day since we met.

Other Interests

Music

I've never heard a musical instrument I didn't want to play. In DC, it was the bagpipes. I took lessons for the better part of a year and then played with the Washington Scottish Pipe Band for the next 27 years, from 1977-2004. Annual venues included Washington National Cathedral, multiple parades, university commencements, concerts, the Kemper Open and a variety of other functions. The band became, by virtue of the practice commitment required and the camaraderie involved, a virtual second family. In 2004, hand problems in the form of Dupuytren's contracture and related surgeries compromised my ability to continue to play.

Writing

I spent considerable time thinking about how best to introduce forensic pathology to medical students and residents and to the public in the medical examiner jurisdictions where I worked. This, and job-related wordsmithing (project proposals, budget justifications, writing papers, journal manuscript editing) which I grew perversely to enjoy, drew me to poetry.

I've had a couple of dozen poems published and, in 2010, published a book of my poems, Images, for family and friends.

Running, and Similar Diversions

I involved myself in things aerobic after residency as time permitted. Beginning in the mid 1970's and for thirty years, I ran three miles before work. I've since substituted more user-friendly activities.

Changes in the Specialty

Changes for the Better

1. NAME coming of age as a responsive organization
2. NAME inspection and accreditation of offices
3. The digital revolution in communication, data management and imaging
4. DNA identification

Changes for the Worse

The media scramble for news, speculating on cases, and the potential to compromise victim/family privacy, all are signs of the times.

Would I Do It Again?

Under the Same Circumstances: Yes.

Under Today's Circumstances: I would like to think so.

Focus on James Luke, MD - Foundation Newsletter June 2015

Jim Luke was born in Cleveland, Ohio and grew up in New York City. He returned to Cleveland in 1956 for medical school at Case Western Reserve University, where the school had recently initiated a revised curriculum, integrating the basic sciences with clinical medicine. As part of those changes, forensic pathology was made a required course for second year students. Dr. Lester Adelson, the Chief Deputy Coroner, taught the course. During that time, Dr. Alan Moritz, who had previously established the department of legal medicine at the Harvard Medical School, was the chairman of the department of pathology and gave the second-year lectures on

cardiovascular pathology. Dr. Luke graduated from the medical school in 1960. He had an internship in pathology at Yale and returned to Case Western Reserve for his pathology residency, which he completed in 1963. He satisfied his military service commitment in the U. S. Public Health Service as a staff researcher in the Laboratory of Experimental Pathology at the National Institutes of Health in Bethesda, Maryland. It was toward the end of his research time that he decided he would pursue a career in forensic pathology as a way to "combine academic pathology with the pathology of the streets". He spent the next two years, from 1965-1967, as an associate medical examiner at the New York City medical examiner's office, where Dr. Milton Helpern was the chief medical examiner.

In 1967, it was time to try it on his own, and Jim was offered the position as the first chief medical examiner for the State of Oklahoma and professor of forensic pathology at the University of Oklahoma School of Medicine. He held these positions for four years, where, as he says, "We had every problem known to man, but it was a real-time learning experience I wouldn't trade for anything." In 1971, when the DC Court Reform and Criminal Procedure Act converted the District of Columbia coroner's office to a medical examiner system, Dr. Luke became the District's first chief medical examiner, with appointments as clinical professor of pathology at the medical schools of Georgetown, George Washington and Howard Universities. He held these positions for twelve years. A new facility was constructed, and educational, training and research programs were started. With the aid of a newly designed data system, epidemiological clustering of narcotic related overdose deaths was identified. After consulting with the Centers for Disease Control, a project was initiated between the CDC, the DC Narcotics Treatment Administration and the medical examiner's office to study the epidemiology of drug abuse in the District. Other similar projects spanned the duration of Dr. Luke's tenure as chief medical examiner. In 1983, Jim was offered a position at the Armed Forces Institute of Pathology (AFIP) as a Distinguished Scientist, where he participated in the forensic pathology related activities of the Department of Forensic Sciences. In 1987, he was appointed chief medical examiner for Connecticut and professor of pathology and laboratory medicine at the University of Connecticut School of Medicine. With a daughter still in high school, Jim indicates, "Commuting proved more difficult than we had previously anticipated." For family reasons, he resigned and returned to the Washington area after his second year in the position.

From 1984-2000, Dr. Luke served as a forensic pathology consultant to the Behavioral Science Investigative Support Unit at the FBI Academy in Quantico, Virginia. From 1993-1997, he directed an interdisciplinary research project to study the pathology of implanted silicone in the Department of Environmental and Toxicologic Pathology at the AFIP.

Dr. Luke is certified by the American Board of Pathology in anatomic and forensic pathology. He has served on the NAME Board of Directors for four terms and as a member of the NAME Foundation Board of Trustees from 2007-2014. He was a member of the Board of Editors of the American Journal of Forensic Medicine and Pathology from 1992-2004 and a member of the Editorial Board of the Journal of Forensic Sciences from 1979-2000.

Over the course of his career, Dr. Luke has published numerous papers in various medical, scientific and forensic journals. He has been an invited speaker for forensic pathology related meetings and conferences in the Washington area. Among the awards that Jim has received that have particular meaning to the forensic pathology community are the Milton Helpern Award from the Pathology/Biology Section of the American Academy of Forensic Sciences (1998), the Outstanding Service Award of NAME (2001) and the Milton Helpern Laureate Award of NAME (2002). Many of us in the world of FP have had the privilege of being mentored by individuals who have, in one way or another, played a prominent role in the evolution of the specialty. Regarding Dr. Adelson, Jim says, "I would have known very little about forensic pathology had it not been for his course. The lectures were also an introduction to Dr. Adelson, the person, who became a role model for many of us fortunate enough to have known him." Regarding Dr. Moritz, Dr. Luke recalls, "Dr. Moritz was an early advocate for medical examiner systems nationally. Research was a longstanding commitment of his. His paper, Classical Mistakes in Forensic Pathology is as timely now as it was when it was written in 1956." In reference to Dr. Helpern, he says, "Dr. Helpern loved the challenge of the case material and the camaraderie of his staff. The door to his office was always open. His job was his life. He was in the office seven days a week. However, it was his philosophy of the specialty and its place in the public health and justice systems that stood him apart for me and made the New York City experience unique." Dr. Luke was asked to describe his view of forensic pathology as a career choice for a newly trained FP. "I would say forensic pathology is a demanding, always interesting specialty, with a 24/7 commitment and where no two days are the same. The rewards, to me, are in explaining to families and in court what happened, to the extent that can be determined. They are in identifying public health and safety risks. They are in recognizing and stimulating collaborative projects for research purposes. They are in teaching and training." As Jim puts it, "It doesn't take many investigations to make the point that one of the fundamental attributes of the specialty is in the humanity inherent in our caseload. It is present in the circumstances of the cases, and it provides depth and meaning to the experience of serving as a forensic pathologist and medical examiner."

Jim met his future wife at a CWRU nursing school mixer in 1956, when he was in his first year of medical school. He and Marcia were married the next fall. They have three grown daughters, four grandchildren and one "four-legged son", Simon, their French bulldog. Jim spent a year learning the how-to-walk-and-chew-gum-at-the-same-time specifics of the bagpipes, then played with a local DC pipe band for the next 25 years before having to give it up because of hand issues (Dupuytren's). He currently enjoys photography, writing occasional poems and taking piano lessons.



Dr. Luke with his dog, Simon.



Jim (2nd from L in front row) in the DC pipe band.

The NAME Foundation Board of Trustees is honored to have served with Jim for many years. During his tenure on the BoT, the foundation has undergone the beginnings of a transformation from a newly formed entity with limited resources to an institution with demonstrated dedication to education, research and history preservation within the world of forensic pathology and death investigation. We know that Dr. Luke will continue to support NAME and the NAME Foundation, and we look forward to many more years of working with him.

A medical examiner's office requires participation on the part of individuals both from within and outside the specialty of forensic pathology. In this regard, Jim indicates "I am grateful to the many people who guided me along the way. Some are the colleagues and mentors with whom I trained. Others helped in establishing and operating the offices that were my responsibility. I treasure their friendship and am very much in their debt."

Joni L. McClain, M.D.



NAME President 2002

July 2011

I was planning on becoming a pediatrician when I first entered medical school at the University of Oklahoma in 1979. As fate would have it, I was assigned to module 129a the small study group that was taught by Dr. Fred Jordan. At that time Dr. Jordan was Deputy Chief Medical Examiner of the State of Oklahoma. He would come into the module telling us about these interesting cases. Pathology was becoming much more interesting for me because I really didn't like pharmacology. It was the year 1980.

As I began my clinical rotations, I decided to take the Forensic Pathology rotation as the first rotation of my senior year of medical school. The rotation was interesting and I learned how to perform my first autopsy from Dr. A. Jay Chapman who was Chief Medical Examiner of the state of Oklahoma at that time. He would always talk about getting all "the decomps." Whenever I do an autopsy on a decomposed individual, I remember Dr. Chapman. While at the medical examiner's office, I met individuals such as Clyde Snow, PhD. He is a renowned forensic anthropologist and was studying artifacts from Geronimo during this time. He let me help photograph these artifacts and he showed me a lot of forensic anthropology. I also met Betty Pat Gatliff who used clay to reconstruct the faces on unidentified skulls.

After medical school, I did a four-year residency in anatomic and clinical pathology at the University of Oklahoma Health Sciences Center in Oklahoma City. After completing my residency, it was time to find a forensic pathology fellowship. The Oklahoma Medical Examiner's Office did not have funding for their fellowship at that time. I asked Dr. Jordan for

advice on what programs I should apply for. I applied for several programs; however, I was impressed with the first program that I interviewed at and accepted their offer.

I began my fellowship in Forensic Pathology at the IUPUI campus in Indianapolis under the direction of Dr. John Pless. The other staff pathologists were Dr. Dean Hawley and Dr. Michael Clark. Dr. Pless did his fellowship in Oklahoma under Dr. Jim Luke who was the first chief medical examiner of Oklahoma. I thought it was only fitting that I was from Oklahoma and did my fellowship in Indianapolis. The year in Indianapolis was wonderful. The staff treated me like family. Dr. Pless would give me tickets to the symphony and other cultural events. I met Dr. Neal Haskell who was getting his PhD in forensic entomology at that time. That was where I learned how to make "maggot motels".

After my forensic pathology fellowship, it was time to pay back the United States Air Force for my scholarship to medical school. Initially, the Air Force was planning on sending me to the Philippines to do surgical pathology. Fortunately, Dr. Michael Clark had been Chief of Forensic Pathology at the AFIP and he was able to intervene and get me stationed at the Armed Forces Institute of Pathology (AFIP) in the Forensic Pathology Division.

When I arrived at the AFIP, the Armed Forces Medical Examiner was becoming a reality. I worked under Dr. Richard Froede who was the first Armed Forces Medical Examiner. Additional colleagues included the following forensic pathologists: Dr. William Gormley, Dr. Glenn Wagner, Dr. Donald Wright, Dr William Rodriguez, Dr. Victor Weedn, Dr. Charles Springate, Dr. Jerry Spencer, Dr. Joye Carter, Dr. Carl Stacy, Dr. Jack Daniels, Dr. Deborah Kay, Dr. Art Burns and many other residents, forensic odontologists, and support personnel. Some of the major operations included "Just Cause" in Panama, the USS Iowa explosion, Desert Storm/Desert Shield, and identification of key executives of Conoco in Borneo. I was also involved in investigating numerous aircraft accidents. The Air Force also sent me to flight surgeon school at Brooks AFB, San Antonio, TX. I was glad that I had attended survival training during medical school. It is a big difference in being 23 years-old vs 35 years-old when I was in flight surgeon school. Dr. Joye Carter and I were the course directors for the Forensic Pathology Course at the AFIP. While at the AFIP, I was involved in setting up the DMORT program. I worked on the Oklahoma City bombing case through DMORT.

During Desert Storm, the Deputy Chief Medical Examiner in Dallas was called to active duty at Dover AFB. He worked under me at that time. Dallas had just appointed Dr. Jeffrey Barnard as chief medical examiner. The deputy chief told me that there would be three new openings at Dallas if I was interested. I applied and Dr. Barnard hired me. He held the position for one year until I had completed my Air Force obligations. I started my work in Dallas in June of 1992 as a medical examiner and became Deputy Chief Medical Examiner in October 2004.

During my tenure in Dallas, there have been many outstanding fellows. Among those are Dr. Karen Ross, Dr. Mark Fischione, Dr. Joe Prahlow, Dr. Susan Comfort, Dr. Nick Batalis, Dr. Leon Kelly, Dr. Frank Miller, Dr. Evan Matshes, Dr. Meredith Lann, Dr. Reade Quinton, Dr. Jill Urban,

Dr. Tracy Dyer, Dr. Mary Anzalone, Dr. Darshan Phatak, Dr. Morna Gonsoulin, Dr. Kathy Haden and others whom I apologize if their names are not listed.

I became a member of NAME in 1988. The meetings are intellectually informative as well as entertaining. The group trips, scientific field trips and other social events are important ways to network among colleagues. This is what separates NAME from the AAFS. I have served on numerous committees of NAME. I have also had the honor of being Vice-President of NAME, President of NAME, and Chairman of the Board of Directors of NAME. I served 6 years as a member of the Board of Directors. NAME has become like family. Mary Fran Ernest and Denise McNally have become friends. Both have been dedicated to NAME for many years. Mary Fran will be missed as our meeting manager.

As a medical examiner, I realize that every day is a gift. Life is short. My advice to new forensic pathologists is to tell the truth. If you don't know the answer to a question, tell the individual that you don't know. Use common sense. Remember that we speak for the dead. Never compromise your principles for money.

I have enjoyed my career as a forensic pathologist. I have traveled the world and seen things that I never would have imagined. Being a forensic pathologist is an interesting and exciting career. You will meet all kinds of people and see amazing cases. Each case is unique and I continue to learn something new every day. Forensic pathology is never boring.

When asked if I would choose this career again, the answer is definitely YES! I continue to enjoy every day at SWIFS. It makes it especially nice to have a new building and a new office after waiting 18 ½ years.

I would also like to thank Dr. Jeffrey J. Barnard for being a great boss and friend during my 19 years at SWIFS. I would like to acknowledge the current staff at SWIFS: Dr. Jeffrey J. Barnard, Chief Medical Examiner, Dr. Janis Townsend-Parchman, Dr. Lynn Salzberger, Dr. Jill Urban, Dr. Keith Pinckard, Dr. Reade Quinton, Dr. Che Gwin, and Dr. Tracy Dyer. We are a good team and we get the most unusual and interesting cases every day.

Eleanor Nicolai McQuillen M.D.



First female NAME President 1985-86

August 2013

The Office of Chief Medical Examiner grew out of a liaison of the State of Vermont and the University of Vermont, College of Medicine when Joseph Spelman M.D., a graduate of the Harvard School of Legal Medicine, came to the Department of Pathology in 1948. Four months later the state, learning of his skills, hired him to the part-time to the part-time position as the State Pathologist. Remuneration was always unequal – the university paying the lion's share. Initially this was not inappropriate since the caseload was small, around 50 cases per year.

In 1953 a law was passed establishing a state-wide medical examiner system. By this time Dr. Spelman had acquired an associate to help him with the slowly growing caseload.

In 1955 the City of Philadelphia attracted Dr. Spelman to become its Chief Medical Examiner, leaving his colleague, Dr. Woodruff, to maintain the Vermont system.

In 1969 Lawrence S. Harris M.D. was hired by the Department of Pathology to gradually replace the ill and aging Dr. Woodruff. He was a board certified forensic pathologist trained in Cuyahoga County Medical Examiner's Office, Cleveland. His salary was provided by the department following a pass through of his state check to them. This created a serious IRS tangle that required expensive legal "fixing." One wonders if this was not the beginning of the unraveling of the relationship. Other insults to the relationship occurred in the practice of excessive use of residents for medical examiner work without the approval of the staff. At any rate an imperceptible deterioration of the forensic-academic relationship had begun.

It was into this environment that I applied in the summer of 1976, three months after becoming a board- certified forensic pathologist. There were built in stressors but they were almost invisible during the interview process.

My first clue to the stress between Stan, my boss and the Chief Medical Examiner, and his boss and the department chairman (JC), was their understanding of my time schedule. JC expected a 20/80 split of my time between forensic and microbiology and Stan expected a 50/50 split. This stressed me in the earliest days of employment. I "avoided" letting them work it out. I covered the OCME 50% of the time and microbiology laboratory 50+% of the time (as a matter of fact Stan would have liked me to cover every "fishing and hunting day" and JC expected and still expects 150% from everyone, a management style which, while arduous, has netted him an excellent department). The stress of good hard work was stimulating. The disorganization was not, but I was not in a position to do anything but accept. I gained experience by accepting and adjusting. Little did I know how skilled I would become at adjusting. Symptoms of "butterflies in my stomach" began to appear.

In the summer of 1977 Stan made his resignation known. It was effective in the October just after the fall forensic seminar for which I was responsible. This seminar proved to be "stressor-lytic" – it was a huge success and I was meeting for the first time many of the 75 regional medical examiners. These doctors had been referring cases to me for a year and we had never met except by telephone! You can see that this was not the warmest, most supportive system in the world! They were to prove to be my reason "to be" in the future.

Stan's desk was no sooner clear then I was being summoned to meetings with JC. He made it clear that he would be the Chief Medical Examiner (without credentials) and delegate the tasks. I would guess to whom, since I was the only forensic pathologist on staff and since the other staff members had made it eminently clear that the caseload was not their "cup of tea". For once in my life, I remained silent to let him explore it further. I did advise him that I certainly could not be expected to be on call every weekend when my colleagues were on only once every 4-6 weeks and secondly, I would be acting CME for 6 months while they recruited another forensic pathologist (maybe there was a forensic pathologist who would accept these conditions, but I doubted it. I decided to let him find out for himself). Staff colleagues were reluctantly drafted to "cover" me, then fellows, then residents. Nobody liked it unless there was significant reward!! JC covered and proved to all who observed that he didn't have the skills or common sense to do the tasks. The constantly shifting scenario was very stressful. I accepted but the stomach queasiness was almost daily, sleep patterns were altered, occasional shortness of breath was experienced, and tightness in upper chest and arms was beginning. Despite stress, I was proud that I was becoming more flexible. My husband and children were supportive of this hectic schedule treating my unexpected absences with humor.

In May, 1978 at a meeting of the department chairman (JC) and the acting commissioner of health, I announced my candidacy for the position of Chief Medical Examiner. There was no viable candidate in sight and seven months of experience told me I could bring some order to this chaos. Before JC could voice his obvious objections I was then and there appointed by the acting commissioner, with all the authority under law to do so! It was also agreed that I would receive the CME's salary retroactive to April (my 6 month deadline). I never got it. I decided it

was to small an issue to fight about…..and I had bigger anxieties. Could I do the job??? If I knew then what I know now, I would have said, "Definitely, NO!"

Retribution was swift. The dean announced that since the forensic section had no funded research there was no longer space in the medical college. We were to move out July 1, 1978. The move was delayed by the slowness of the state to respond. In mid-July we moved to 2 small, cramped rooms on the top floor of the Burgess Residence. This space was occupied by others whose skids had been greased!

From July, 1978 to 1980 the office environment was an acute source of stress. We were isolated, cramped, and nobody cared!! The state, whose budget financed us, barely recognized us, since we had been allied with the med school so long. It took time to get their attention. I would have left if it weren't for my reluctance to uproot home and family so soon after getting settled.

By early 1979 it became known that the department of pathology would no longer contract with the state to provide any services to the state medical examiner system, thus terminating a long-standing tradition. We began to recruit hastily for a forensic pathologist to fulfill the caseload and coverage requirements. Most interested parties turned the job down without interview for inadequate salary. A candidate with less than sterling qualifications accepted the position. If I worried about him, it was only for a short while, since he abruptly withdrew his acceptance 2 weeks before his scheduled arrival! The situation and the stress were unbelievable! I decided to draft a plan before sharing this news with the newly appointed Commissioner of Health, LN.

In late June, 1979, with the ready willingness of a few hospital pathologists, I developed a regional pathology system in which hospital pathologists throughout the state would do medical-legal autopsies for a fee. Not all pathologists were interested but enough were to make it work. There was a drawback – each had the option to refer complicated cases to me. They decided what was complicated. On July 1, 1979 my employment shifted from the University of Vermont to the State of Vermont with all of its retirement ramifications. I began two years of being on call all the time. Wearing a beeper is stressful! Gradually, I made contacts for occasional weekend and limited vacation coverage. Ultimately, it was less stressful than the prior two years because of several factors. First, It was my system and I had the authority (if not the budget) to manage it. Secondly, I won the support of the new commissioner (LN) for my innovative regional pathology plan in the face of an impending crisis. Third, LN was a draft administrator who taught me much by example. Next, I learned to take each day at a time and learned that hard work doesn't kill. Finally, I received feedback from regional medical examiners and regional pathologists that they 'liked my style.' Problem solving became the best stress management device (and there were lots of problems). Problem related stress manifested itself physiologically, as tightness in the chest and elevated blood pressure.

During 1980, I recruited a first class forensic pathologist due to complete his training in June, 1981. He took the summer off and reported for duty in September, 1981. For the first time since my arrival in Vermont, I began to like it and I began to relax. Stress symptoms decreased and the OCME began to function actively, not reactively.

Our relationship with the department of pathology became more remote though we continued to use the MCHV autopsy laboratory to do our autopsies. Periodically, just to make sure we maintained a proper level of insecurity; JC would threaten to ask us to leave. He needed the space. The state has never to this day realized its responsibility to provide its forensic professionals with an acceptable laboratory so that threat is periodically continued to present—a problem yet to be solved!

In 1981 the Committee on Residency Training (in pathology) published new guide- lines (subsequently to become requirements) that all residents must have training in forensic pathology. We provided training informally by an "open door" policy in which residents were free to enter the lab during a med-legal autopsy and learn the nature of the case and findings briefly. This was not enough to satisfy the requirements. JC therefore needed us (and it was only two years since he "kicked us out"). Never could he or would he negotiate with me. He went to the Commissioner. The Commissioner invited me to participate. After my preliminary input, he told JC that he could not justify to the citizens of Vermont the expenditure of state resources being proposed in the forensic training program without proper remuneration. It surprised JC to learn that I devised a program and a fee of $10,000. All the self-esteem that had been attacked from 1976 to 1981 was restored in that one meeting, and it did wonders for my stress level. Suddenly we had worth. We are still occasionally the second class citizens of pathology as far as the department is concerned but we have the courage to confront this issue and have on several occasions.

In 1981 an important case occurred at an important time to cement our position in the health department and with the health commissioner. I was out of state for legitimate reasons and the Commissioner was covering me when two young Essex girls were assaulted, one was dead. I received an anguished call from an anguished Commissioner for help. A capable medical examiner was dispatched and together they investigated the scene to the satisfaction of the State's Attorney. The Commissioner attended my autopsy two days later. I learned then that personal experience is valuable to influence authorities about the job and its stressors. Even I took for granted the stress of death investigation! LN not only demonstrated that there was stress but recognized the expertise needed to handle it to do the job effectively. We both benefited from the experience. We each knew ourselves and each other better. The OCME benefited while he remained Commissioner of Health and later when he became Secretary of the Agency of Human Services.

In the first five years I focused on the most immediate stressors. That is, those related to my employers. They masked stressors that began to surface and continue to be present, namely, the poor police investigator who expects all the answers from the autopsy, demanding,

arrogant attorneys, unreasonable judges and disinterested, but powerful, political authorities. The frequency of call (every other week) and the constancy of a backlog are the "things" that stress.

Stress management was disorganized and haphazard. Surprisingly, it was not unconventional and it was effective. Deep breathing, dialoging with my staff and a particularly good personnel officer, good humor, assertiveness training, problem solving, developing pride in my work aided by feedback from a variety of people were the most frequent methods used.

Now that I'm aware of the possibilities, my plan is to:
Try time management techniques
Get away from the job by taking coursework
Continue personal and professional development
Develop a new death investigative plan to serve the state's interests and give the forensic professionals more freedom to consult
Practicing avoid, alter, and accept
Learn to say "NO" to meaningless committee work
Take mini-mind trips when all of the above fail I have limited success with meditation, progressive relaxation, and guided imagery.

(The following was provided by the NAME Educational Activities Committee (EAC) July 2020)

Roger A. Mitchell Jr., MD



Current position: Chief Medical Examiner, Washington, DC
Education history:
MD – New Jersey Medical School, Newark NJ
Post-Sophomore Fellowship – NYU – Dept. of Pathology
Anatomic and Clinical Pathology Residency – The George Washington Hospital, Dept. of Pathology
Chief Resident – 2005-2006
Forensic Pathology Fellowship – NYC OCME
Masters of Divinity (candidate) – Fuller Theological Seminary

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

My interest in forensic pathology began at the Federal Bureau of Investigation. I was a forensic biologist when I did a tour of the DC Medical Examiner, where I was first exposed. I wanted to study violence prevention, and I thought the best way was to learn from the cases found within the Medical Examiner System. So I left the FBI to pursue a career in medicine.

WHAT ADVICE DO YOU HAVE FOR ASPIRING FORENSIC PATHOLOGISTS, INCLUDING RECOMMENDATIONS TO MATCH INTO A PATHOLOGY RESIDENCY PROGRAM AND ACCEPTANCE INTO A FORENSIC PATHOLOGY FELLOWSHIP?

My advice would be to make sure that you become not only a student of medicine and pathology but also a student of common sense. A good forensic pathologist can see things with a lens capable of articulating his/her findings with a common tongue. In other words, become well-rounded. As far as pathology programs, focus on both AP and CP. Find a residency program that gives you access to both didactic and practical experience. The program should have access to a busy medical examiner's office. As it relates to the forensic pathology fellowship, find a program that is busy but also has a culture compatible with you personality. Make sure you rotate 1 month at the FP Program that you are interested in.

WHAT IS THE MOST REWARDING ASPECT OF BEING A FORENSIC PATHOLOGIST?

The most rewarding aspect has been being part of larger community that is interested in the prevention of disease and injury. In addition, I have thoroughly enjoyed helping to build and improve the OCME in Washington DC.

WHAT IS THE GREATEST CHALLENGE OF BEING A FORENSIC PATHOLOGIST?

The greatest challenge has been developing support from the larger local government to ensure proper funding.

WHAT DO YOU THINK ARE THE MOST IMPORTANT ISSUES/CHALLENGES OF FORENSIC PATHOLOGY TODAY?

The most important issue facing forensic pathology is recruitment. We are in great need to bring more pathologists into the sub-specialty.

WHAT HAS BEEN YOUR MOST MEMORABLE CASE AND WHY?

I have several memorable cases. I think the most memorable case was a young woman who was found in an oil drum, wrapped in plastic bag, and covered in cement. She was moderately decomposed, but had no injuries to speak of. This was one of the rare cases that was certified as COD: Homicidal Violence, MOD: Homicide.

WHAT HAS BEEN THE MOST UNEXPECTED FINDING YOU HAVE ENCOUNTERED DURING A CASE?

Recently I had a case of a man who had a perforated small bowel secondary to his purposeful ingestion of cigarette butts. A complex of pica.

WHAT DO YOU ENJOY MOST ABOUT WORKING WITH YOUR TEAM?

My team is diverse and comes from different forensic pathology fellowship programs. I appreciate the hark work, professionalism and dedication of my team.

WHO IS YOUR ROLE MODEL AND WHY?

I have many role models but I would say my Pastor, Dexter U Nutall, is one of my biggest role models. Largely because of his selflessness and his dedication to serving people with humility and courage.

WHAT ARE YOUR HOBBIES AND HOW DO YOU MAINTAIN A WORK-LIFE BALANCE?

I am a minister in the Christian Church. I play Golf and spend time with my family. Lastly, I enjoy cooking on the grill.

WHAT IS YOUR FAVORITE WORK SOUNDTRACK AND WHY?

I am a big fan of gospel music. Make Room by Jonathan McReynolds is fantastic. I like to keep my mind focused on what is important. Gospel music does that for me. I am listening to Frank Sinatra and PJ Morton right now as well.

WHAT IS YOUR MOST-LIKED MEAL AT YOUR FAVORITE LOCAL RESTAURANT?

My favorite meal is a bone-in filet mignon with fingerling potatoes and broccolini. Any good Steak House.

Thomas T. Noguchi, M.D.



Born 1/4/1927 Japan
M.D. from Tokyo's Nippon Medical School in 1951
Los Angeles County Deputy Coroner 1961-1967
Los Angeles County Chief Medical Examiner-Coroner 1967-1982
NAME President 1982-1983

July 2011

Introduction

The NAME Past Presidents Committee selected "MEMOIRS" as the Theme for their 45th Anniversary Meeting. We hope to continue this project as a means of documenting the development of American Medical Legal Investigative System from the viewpoints of those of us who were "there". My personal career and some of the cases that I have handled have been widely publicized, due to the public images of the deceased, and I have, myself, written non-fiction books, *Coroner* (1983) and *Coroner at Large* (1985) published by Simon and Shuster, about these cases of public interest.

Why I selected Forensic Pathology as a career

My father was an otolaryngologist, practicing in Yokosuka, Japan. He had an otolaryngology clinic next door to our home. As the eldest son, I was expected to follow in his footsteps and time to time showed up at his clinic. One day, there was commotion in the Office, and I saw my father giving CPR to a young patient. Apparently, the patient had complained about a sore throat and my father had swabbed his throat with iodine, a common standard treatment then, and the patient had a seizure and expired. Japan did not have then and still do not have an ME

system. My father was accused of making a medical error by the local prosecutor's office. My father requested an autopsy on the patient. Investigation revealed that the patient had an idiosyncratic reaction to the iodine. That case directed my interest in the legal aspects of medicine.

My Educational Background

My basic education was obtained in Japan. When I entered my pre-med studies it was 1944, towards the end of World War II. We had been at war with the U.S. and Japan was devastated. Much of Tokyo had been destroyed by the saturation bombing by waves of hundreds of U.S. Air force B29's and by the resulting massive fires. After the war ended, I continued through Nippon Medical School in temporary quarters, since the school had been severely damaged by the U.S. bombs. I received my medical degree in 1951. While in medical school, I also studied law at the nearby Chuo University. While serving an internship at the University of Tokyo Hospital, 1951-52, I spent time at the US Naval Hospital Medical Library researching the possibility of going to the U.S. for further training. On the advice of some U.S. Naval medical officers, I applied for internship training to about 200 hospitals in the U.S. I had a few positive responses, and I chose to go to the then Orange County General Hospital, now a part of the University of California San Diego Medical School, for internship. My dream of going to the U.S. thus materialized in 1952.

Specialty Training in Forensic Pathology

After serving my internship, I took residencies in anatomic and clinical pathology at Loma Linda University Medical School campus in Los Angeles and after passing the examinations for these specialty diplomas, I looked for a place to obtain residency training in Forensic Pathology. Forensic Pathology as a Certified Medical Specialty was just beginning and there were no organized training program. In 1962, I obtained appointment as Deputy Medical Examiner at the Los Angeles County Medical Examiner's Office and organized my own training program. A year later, I took and passed the examination for Certification in Forensic Pathology.

In December 1967, I was appointed Chief Medical Examiner – Coroner of the Los Angeles County Medical Examiner's Office on the retirement of Dr. Curphey. I served in this Office until 1982. I then served on the teaching staff as Professor of Forensic Pathology at the University of Southern California Keck School of Medicine until my retirement in 1999. Currently, I am continuing my professional activity as Volunteer Attending Staff at the LA County - USC Medical Center and as consultant to the LA County Medical Examiner's Office.

Major Accomplishments as CME

1972, the New Medical Examiner's Facility opened, located on the grounds of the Los Angeles County General Hospital, next door to the University of Southern California Medical Center.

Since 1926, the Office of Coroner had been located on the first floor of the old Hall of Justice in downtown Los Angeles. Prior to 1926, from around 1880, the Administrative Office of the Coroner had been located at the old Hall of Records, across the street from the old Hall of

Justice. The old Hall of Records was demolished in the 1970's and the Criminal Court Building now stands on the site. The old Hall of Justice, empty, still stands.

History of the Los Angeles County Department of Chief Medical Examiner-Coroner

The Los Angeles County ME Office evolved from a lay coroner's system. The current ME system was established in 1957. The people of Los Angeles County had voted in 1955 to amend the County Charter to specify that the Head of the Coroner's Office must be a Forensic Pathologist. Dr. Lester Adelson was invited by the LA medical community leaders to handle the transition from the Coroner to the ME system as Chief Deputy Coroner. He came, but after several months of trying, he declared it was impossible to work in the prevailing atmosphere at the LA Coroner's Office, and advised me that this was not a good place to work and left.

Then in 1957, Dr. Theodore Curphey, who had retired as Chief Medical Examiner of New York, was appointed as LA County's first Chief Medical Examiner. He was selected by a Committee made up of Professors of Pathology at the three local medical schools, Loma Linda University, University of Southern California, and the University of California at Los Angeles, which opened its medical school just two years earlier.

Psychological Autopsy

We now accept this term as a designation for an investigative technique for clarifying equivocal cases, whether the death was due to accident or suicide or otherwise. The term was originally used in a USC NIH Research Grant study by the USC Suicide Prevention Center. Dr. Curphey worked with the group using equivocal cases for study from among the deaths handled by the LA Medical Examiner's Office. After I became Chief Medical Examiner, we began applying the technique routinely to all cases of equivocal suicide deaths.

In the 1970's we also began looking into application of psychological autopsy of non-suicide cases. In particular, we became interested in applying this investigative technique to the multiple deaths scene of Sharon Tate and several house guests. I asked forensic psychiatrist Frederick Hacker to analyze the scene and give us his opinion on the characters of the assailants. The scene had indicated that a gang of assailants was involved. The LAPD detectives were focusing on a drug connection in their search for the assailants. In the end, Dr. Hacker's analysis and prediction of the character of the assailants as a group of fanatics, more likely on drugs, fit the actual facts perfectly on target. This was the beginning of the FBI profiling of assailants.

We now accept the term psychological autopsy and apply the procedure to solving other types of cases, and to identify and assist in suicide prevention programs, especially in juvenile cases.

Another notable case handled by the Los Angeles County ME Office where psychological autopsy was applied concerned the kidnapping of Patricia Hearst, heir to the San Francisco Hearst Newspaper family. She was kidnapped by members of the Symbionese Liberation Army

and joined in the criminal activities of the group. The group ended in a final confrontation with the LAPD in a house in south Los Angeles, where the members perished in a confrontation with the police when the house caught fire and they refused to leave when given the chance. The bodies were charred beyond recognition. Tests indicated that Patricia Hearst was not among them. This year (2011) marks the 50th anniversary of our first use of psychological autopsy as an investigative tool in the medical examiner's office.

Another area of my interest is safety on the roads, prevention of traffic accidents. In the early 1970's, USC received a U.S. Department of Transportation (DOT) contract on Helmet Safety Assessment Program and our Department participated in this project. Our part in this project was to provide detailed autopsy reports on these cases, whether the deceased was or was not wearing a helmet.

Promoting Professionalism of the Entire Department Personnel

I was interested in raising the standards of the entire ME Department staff when I became the Chief in 1967. We began by setting up regularly scheduled in-service training program for the coroner-investigators. I felt, all Department field investigators should be qualified by taking and passing the California State Peace Officer Standard and Training (POST) examination. In the early 1970s, in collaboration with Rio Hondo College in Whittier, special classes were set up and selected personnel were enrolled. We now maintain the POST program and convene annual educational seminars. The West Coast Seminar is accredited by the CME as well as by POST.

Forensic Pathology Training Program

Los Angeles County was the first County in California to authorize (1955) and convert (1957) to the Medical Examiner's System and in 1962, I was the first Forensic Pathology trainee. The CME Office is currently authorized to train six (6) forensic pathologists annually. However, we currently train only one or two annually.

State Legislative Changes I was involved in

I was of the opinion that ineffective laws should be amended. Laws concerning Medical Examiners should be current and progressive. When I became Chief Medical Examiner of Los Angeles County, the Office was still in transition from the traditional Coroner's system to the Medical Examiners system.

First Attempt to Establish State Wide ME System

As CME of LA County, I involved myself in State legislative matters of interest to the medical community. I was Chairman of the CAP Forensic Pathology. Dr. Dutra of Castro Valley, California was interested in pushing a State legislation to create a State-wide Medical Examiner's System. In support of that, I promoted setting up three regional ME Offices with laboratories – in Sacramento and San Francisco to serve the Central area and in LA for Southern California. Opposition to the plan came from groups of pathologists servicing the current coroner's offices

in rural areas. The State of California Department of Justice had established its crime laboratories in several regional offices.

Heart Transplant and Bioethics

In 1969, Dr. Norman Shumway, Stanford heart surgeon, pioneered the first heart transplants in the United States. The transplants were done at the Stanford Medical Center, where donor patients were brought in, their deaths pronounced, and the transplantations were conducted. In the beginning patients were declared dead twice, first time in the original hospital and again at the Santa Clara County hospital where the transplant was done. In order to assist in clarifying the situation, professional experts were called by the State Attorney General to define "brain death". California law clarifying the definition of death for transplant purposes was chaptered into the Health and Safety Code in 1972. Time of death and withdrawal of the cardiopulmonary resuscitation were a major medical and legal issue in the early 1970s.

Medical Law and Bioethics

We had a case of death following withdrawal of the cardiopulmonary resuscitation device at the request of the family of a child who had been hit by a car and had sustained injury to the upper cervical spine. Despite earlier hopes and diligent medical efforts, after several months in a hospital, the family had lost hope and requested the medical doctors to remove the life support system. The doctors in this 1970 case were reluctant to withdraw the apparatus with the EEG still registering activity. Finally, the family took the matter to court and following a hearing, the judge ordered the removal of the resuscitating cardiopulmonary device.

The District Attorney's Office was of the opinion that removing the resuscitating device would cause death, thus the doctors and the hospital may be accused of aiding in killing. The public, as well as the medical community, was uncertain. But the Court order was carried out and the child expired a few minutes later.

As the Chief Medical Examiner, in the midst of the controversy, as required by law, I conducted an autopsy, convened a Coroner's Inquest on the case, and signed the death as due to an accident, the cause due to the fatal injuries.

I set up a meeting with the Deputy District Attorney in charge of medical liaison and, with the Chief of Forensic Medicine and the Public Information Officer along, I informed him of my final decision. I felt death of this child had been simply suspended by the use of modern equipment, and when death occurred on its removal, it is due to the fatal injury sustained at the time of the traffic accident several months ago.

Some people appear to be hung up on the idea that a doctor kills a patient when a medical device is removed and the patient dies. No consensus existed on this controversy in the 1970's, so I arranged to have the Los Angeles Medical Association help us and set up a two-day hearing on the current assessment of community standards. Over 15 experts testified at the Medical

Examiner's hearing on the prolonged use of resuscitation procedures. The hearing officers, aside from myself, were ethicist Leslie Rosenberg from ULCA and other experts on this matter. The decision was made to have guidelines drafted by a newly created Bioethics Committee. I was appointed Vice Chair of the Committee. At that time, there was considerable reluctance to take a clear and much needed stand on this controversy. The Los Angeles County Medical Association established Bioethics Committee came up with the guideline,

"Guidelines for forgo of the cardiopulmonary resuscitation apparatus" was published in 1973. This guideline was the first of its kind and has assisted in the healthcare decision leading to the Durable Power of Attorney on areas of self-determination by patients.

I feel there are many important health and healthcare issues that a Chief Medical Examiner can help clarify by participating and leading discussions on relevant topics of current public interest. This should be the extended work of the forensic medical specialists. In that way, I am still active in organizations dealing with bioethics and medical law.

I am currently, the President of the international organization, the World Association for Medical Law (WAML).

Peace Officer status for the Coroner's Deputies

As Chief Medical Examiner, I pushed for Peace Officer status for the Coroner's Deputies, subject to the Peace Officer Standards, with Training and Certification for all the CME staff, thus upgrading the qualification of our staff.

In 1974, I was elected President of the California State Coroners Association and was active in legislative matters. In this case it did not matter whether I was Coroner or Medical Examiner; the official title of my Department was Office of Chief Medical Examiner-Coroner and we needed to take a united stand on the issues. We were often in Sacramento, meeting with legislators and testifying before the Health and Safety or the Judiciary Committee. We were effective. The legislators listened to us. Nationally, through the LA County Washington DC Office, I was able to meet with FBI Directors and Congressional Legislators.

Efforts to Improve Public Image of the Coroner and Medical Examiner

I often blamed the movie industry for not projecting the Coroner or Medical Examiner in a more realistic and positive way. In old black and white movies involving deaths, the police will be there but seldom the Coroner. The police seemed to handle everything. If the coroner does appear, it was usually in a minor role. I then realized it may not be Hollywood's fault. We may not be letting the public know what kind of work we do, the essential public service we provide. I decided it is our duty to communicate and educate the public. Several programs were implemented.

Close Top-level Communication with the Law Enforcement Agencies

To increase awareness of our work by members of the Justice Department, I set up a monthly lunch program of department heads.

Now realizing that it was our fault for not informing public what we do. Due to the subject of death, we were suppressed from talking in public. I decided to include others. I also felt it is important to have an equal level of communication and felt that we need to regularly meet with the County elected officers and other enforcement agencies. I regularly had lunch with the Sheriff, District Attorney, Chief of Police and FBI Assistant Director at the Los Angeles office which has increased awareness in the education of our partners in the Justice system.

Public Affairs and Public Information Officer

I established the public affairs deputy. This was often borrowed from the Office of Chief Administrative Office, but they assisted us in press relationships. In Los Angeles, City News was the central contact agency, and there was automatic notification to the entire written, radio and television companies. The Office directly dealt with the media through the administrative office. Our jurisdiction included Hollywood and international entertainment community. I was very much interested in the public education and strengthening the active participation of the investigative agencies.

I encouraged our staff to be involved in public speaking and teaching colleagues. I was interested in presenting our staff and our profession is for the public as we were the agency which was interested in looking after the prevention of the sudden and unexpected deaths, etc. Not so much as detectives, but also the prevention of alcohol related traffic accidents. A Speaker's Bureau was established in the Department, and all DME as well as investigators were participating in public speaking, emphasizing the role of the Medical Examiner. Scientists were encouraged to report findings and publish scientific papers. I too regularly received invitations to talk to public service clubs and association's annual meetings. I accepted such invitation. The merchandising department, which is a county function that supports the County drunk driving prevention program, is a current success, but about 40 years ago, I started T-shirts sale. Popular T shirts with a seal of the Department and "Tell like it is" on the front became best sellers. It shows my belief of the Office of Medical Examiner. Later it developed into the present day, famous LA Coroner merchandising Skeleton in the Closet shop.

Collaboration with Television Industry

In 1972 a TV Production group from Universal Studio with plans to produce "Quincy", a series starring Jack Klugman based on the work of a medical examiner, approached us. I responded with enthusiasm. Although I did not directly get involved in the production, two deputies were assigned in their spare time to assist in the production. Dr. Rosen, a UCLA scholar, became a consultant on the details. The six (6) advance tapings were taken at our newly built Forensic Science Center. Unlike taping the film in a movie studio with its wide open working space, where production can set up 3-4 cameras at different positions to capture the same scene from

different angles simultaneously, here the actors must repeat the same scenario and same pose for different takes for the camera to capture the front view, side view and close up view. We set aside space for the filming in the actual working area from 4 p.m. to 2 a.m., and we began our autopsies by 6 a.m. and worked until 3 p.m. The TV shootings took place every day as scheduled and lasted for several weeks. Eventually, the studio built and set up a duplicate facility for their filming. The Quincy TV series lasted seven (7) years and have been re-shown many times here in the US. The series has also been shown internationally. It also became a powerful positive image builder for promoting forensic pathology as a profession as well as providing excellent entertainment and public education. Many of my European and Japanese colleagues have also given us credit for providing the public with positive information on forensic pathology and legal medicine.

Public education in the work of the ME

The LA Office has been actively involved in the orientation of deputy district attorneys, sheriff and police cadets of LA County cities. In the past 2-3 decades, some judges have sentenced traffic violators to spend time at the ME Office. It takes manpower to organize such educational projects. One incident involved a high-ranking university official, who was involved in traffic accident with fatality. He was assigned to the office and was assigned to research traffic statistics as a part of sentence term. The Office has always been interested in prevention of alcohol related fatalities, and the revenue from the souvenir department actually goes to the County alcohol prevention program. The Office has long participated in bringing high school students into the office, with a one-hour presentation and lecture how the office contributes to society in the prevention of unexpected and violent deaths. A part of the public awareness program, during my time, was a reserve deputy program. In order to maintain their duty status, they are required to spend the one weekend a month in the office for orientation, education, and learning how to work with the office. In case of mass disaster, we had manpower to cover the acute shortage. In addition, reserve deputies were proud to work with the department, and as such they are our ambassadors and provide a linkage between the communities and the office.

International scholarship program

Being from Japan, I have an interest in a close working relationship with the Japanese Society of Legal Medicine and been invited to attend their meetings. Many Japanese forensic pathologists have come to the US and have attended the NAME Annual Meeting. The Office has traditionally received requests to attend short, sometimes one year, training programs for international forensic pathologists. There are eight French professors who have rotated with the LA Office.

Books for public awareness

Following some controversy, I decided to write my story and wrote the book *Coroner* in 1983, which quickly became a New York Times bestseller. Over a million copies were sold. It is rewarding to know that many students and residents who have read my books, *Coroner* and *Coroner at Large*, chose the field of forensic pathology as life career or have shown much

interest in forensic pathology and work of medical examiners. *Coroner at large* is a book of cases that I did not originally handle, but offers my opinions based on available information. The Investigator program, a pilot project which was stated in 1965, later became established. Female investigators were not even thought possible in 1970. I appointed Ms. Butler as investigator. She was qualified and had BA degree in Psychology. She served the department until her retirement. She reminded me of this and gave me a news clipping when I saw her in retirement.

Improvement of Public image of the Office and community activities

I was the first Japanese American to be appointed as a County Department Head. So, I was actively sought after for appearances, and in in the Los Angeles Nisei Week parade in August was invited to ride in the parade car. I have received invitations to ride with the Chicano Parade and Black community parades such as the Watts parade. This was all for the benefit of the role of Medical Examiner.

In 1972, I established the Scanning electron microscopic laboratory, the first in the Medical Examiner's Office in Los Angeles.

Recollections of places I have trained and worked

My pathology residency was in Loma Linda University School of Medicine. The teaching hospital for LLU was in Los Angeles. It began in 1953 and continued from 1956 to 1960. In 1960, I was appointed as Assistant Professor in charge of Autopsy Service. Oren B. Pratt, MD, Professor and Chairman of Pathology of the Loma Linda University and neuropathologist Abraham T. Lu, MD were my instructors for the autopsy.

Following visits to many forensic pathology-training programs, I finally decided to do a forensic pathology fellowship at the LA Office. I was very active in the NAME and AAFS meetings. My Chief, Ted Curphey, Past President of the American Society of Clinical Pathologists, had remained active in the AAFS in 1960s. Impressive and an academician, he was interested in upgrading the LA Office to be an educational institution working with USC, UCLA, and Loma Linda University. These three medical schools and the LA County Medical Association supported Dr. Curphey. He was a graduate of University of McGill, Canada and was Chief Medical Examiner of the Nassau County NY office. His chief deputy was Dr. Leslie Lukash who later became the Chief Medical Examiner in 1957, when he accepted an invitation to be Chief Medical Examiner – Coroner, County of Los Angeles. He was a tall and impressive stature who loved his cigars. I was proud to be his resident and when we attended the AAFS meetings, he introduced me to his colleagues. In early 1960s, I regularly saw Dr. Helpern, Dr. Lukash, Dr. Spelman, Dr. Russell Fisher, and other pioneers. He took me the first NAME meeting which was held at the Knickerbocker Hotel in Chicago during the AAFS Meeting. The NAME originally began with Dr. Helpern's strong urging to have an organization that looks after the chief medical examiners' specific needs. The membership was originally limited to only Chief Medical Examiners. The first

NAME meeting was more or less an organizational meeting and about 15 or no more than 20 members were attending. At that time, the expansion of NAME membership was discussed.

Recollections about people I have trained

I am proud to mention that my Chief at the ME Office was Dr. Theodore J. Curphey, the First Chief Medical Examiner of LA County. He was interested in teaching the general pathology residents as well as forensic pathology residents and regularly gave lectures at the three local University Medical Schools, Loma Linda, UCLA and USC. As the Second LA County CME, I worked to maintain this tradition of teaching our younger colleagues to be leading Medical Examiners. The LA Office began its training program in Forensic Pathology in 1962 and the program continues to present day. The Third Chief Medical Examiner was the late Dr. Ronald Kornblum. The fourth and current Chief Medical Examiner is Dr. Lakshmanan Sathyavagiswaran, who trained under me as a Resident. He joined the Department in 1976 with interim time off to complete a residency in internal medicine and became CME in 1992. He is now the longest serving CME in LA history. Dr. Christopher Rogers, now the second in command as Chief of Forensic Medicine at the LA Office also took his residency under me. I was already at the LA County + USC Medical Center, and head of the LA County Medical Examiner's Office at the Medical Center Satellite Office in the mid-1980s, where I was teaching Forensic Pathology course for general pathology residents. Many of the forensic pathologists currently still working at the Office are my trainees. All LA County staff members, working as MEs, must be Board Certified as Forensic Pathologists.

Many current staff members at the LA Office were trained by me or taught by my trainees, who became the teachers.

My Hobbies, Interests and Current Activities

Aside from serving as volunteer attending staff at LA County-USC Medical Center, I serve on the NAME Past Presidents and International Relations Committees. I also actively run the World Association for Medical Law and am currently its President. My main "hobby" may be described as Traveling Internationally. Hisako and I together almost always attend the scientific meetings of the several national and international professional associations in which I maintain active membership. Hisako is a retired professor at the California State University at Los Angeles, following a long career of scientific research at UCLA, so she too is very much interested in the scientific presentations. We still enjoy visiting many old-time friends as well as making new friends on our travels in various cities in the US and in different countries to attend major international and national meetings.

I am never a passive attendee. Whenever and wherever I attend meetings, I am actively involved in reporting, making presentations, and chairing and running selected special sessions. Looking back, we have also organized worldwide tours together. In 1996, we took almost 100 AAFS and NAME members to Japan to attend the Meetings of the International Association of Forensic Sciences (IAFS) in Tokyo, International Symposium on Advances in Legal Medicine

(ISALM) Meeting in Osaka, and World Association of Police Medical Officers (WPMO) Meeting held in Kumamoto on Kyushu Island.

In 2005, I organized a meeting of groups of AAFS and NAME members with our Turkish forensic colleagues in Istanbul. With the World Association for Medical Law (WAML) Congress Board meeting almost yearly, in the past we met somewhere in the globe for these special sessions. Today, by use of advanced technology, we hold these meetings more frequently, electronically, sitting in our own home offices.

Pressure and Stress release

I feel tremendous pressures at times, but I also feel very rewarded by the resulting accomplishments. I have often said, if I have a worried look, I am busy working and accomplishing my goals. Continuous activity, I feel, is the key to good health. I usually arise early and establish a list of things to do that day. I realize, sometimes, I try to do too much, not allow myself time for relaxation. I regularly do volunteer work at the USC Medical Center as a member of the Executive Peer Review Committee at the LA County + USC Medical Center, and Chair of the Trauma Center Combined Trauma Death Review Committee that issues the final quality assessment of our service based on the autopsy reports from the ME Office. Currently, I serve as President of the World Association for Medical Law (WAML) founded in 1967 by the late Prof. Raf Dierkens of Brussels, Belgium, whom I first met when he came to Los Angeles in 1965. I have been a Board Member of the WAML for a long time. The WAML Board Members come from all over the world.

I found the key to accomplishment is effective time management, balancing work you need to do, with time for things you would like to do, relaxing and sightseeing in the areas around the host cities where the meetings are held.

Time with Hisako is our quality time. She has taken care of all the domestic work, shopping, cooking, washing, and cleaning, even while she was working full time at UCLA doing biomedical research or teaching at California State University. I have never heard her complain. She had taken care of her aging parents and younger sisters, and then me. Now, she has taken a fall, suffered an undetected hairline hip fracture. This developed into a painful major fracture, necessitating a need for hip replacement operation. Another fall caused a fracture of her wrist.

On her last birthday, a medical checkup revealed that her heart was about to give up. The next day, she received a cardiac pacemaker implant.

I feel it is now my turn to take care of our basic needs and the household chores as much as possible and I am doing as much I can and as much as she will let me. But I still need her to go over my writings, to make sure my use of prepositions and expressions are understandable. Even though she has her own computer, she rarely uses it except to edit my writings, transferred from my computer.

Family

We do not have our own children, but we are blessed to have looked after two girls of high school age, who came from Japan and stayed with us at different times in the late 1960s to 1970s to go to school here, whom we consider as our daughters. Masako Easton, *nee* Kumamoto, the first one, married Patrick Easton here in LA, whose family is of Chinese ancestry but came from South Africa. She is now a grandmother to two grandchildren. For Father's Day this year, Masako organized a lunch together with all the members of the family, including her two grandchildren, who would be great grandchildren to us.

The other one we refer to as our daughter, Takako Ono, is now an MD otolaryngologist practicing in the Tokyo area. Whenever we visit Japan, we meet with her and her son Ken. Takako became very attached to Hisako and called her "Mom". Every night while she stayed with us, she wanted Hisako to "tuck her in". It seems both her real mother and father, as well as her paternal grandfather, were very busy physicians and Takako felt neglected at home.

Prevention may not be possible, but as part of my program to slow down the process of aging, I think we need to maintain our activities, both physically and mentally. So far, I have continued to enjoy my work, do not intend nor want to retire. At this age (84), I am beginning to experience minor aches and pains, but I remain active. Professionally, I have been very satisfied with the work I am doing and plan to continue my volunteer Attending Staff work at the Los Angeles County + USC Medical Center Department of Pathology, as well as in Emergency Medicine and Surgery. I also attend the weekly Conference at the LA County ME Office. LA County-USC Medical Center, for the first time recently funded the position and appointed a resident in Clinical Forensic Medicine to provide forensic services in clinical cases involving medical legal and bioethics issues.

As Chair of the Combined Trauma Review Committee, I keep myself busy. I enjoy being useful, helping people, and being involve with the NAME Past Presidents Committee work. I keep active, getting up early in the morning, but also take naps, usually in early afternoon. Last year, the USC started an International Medical Student Exchange Program with Nippon Medical School, my Alma Mater. Three medical students from Nippon Medical School came, and two students from USC went to Japan.

Artistic Pursuits

My father had artistic interests and did oil painting before he decided to enter Medical School at age 36. He became an otolaryngologist but continued to paint in his spare between taking care of his patients. He retired from his medical practice at age 88 but continued to paint until his death at age of 92 years old.

I think I inherited his interest in artistic work. Each year I sketch a landscape, a scene we encountered on our travels to attend professional meetings, whenever we go, and select one to use for our Christmas card for that year. I add a short explanation of the scene with a note

related to forensic pathology, legal medicine, medical law or bioethics. This is another way in which I have integrated my profession with my artistic hobby. One year when the NAME met in San Francisco, I choose the San Francisco cable car as the central subject for my card. For 2010 Christmas card I chose landscape in Zagrab, Croatia where we attended the World Congress in Medical Law. For 2011 card, I may choose a scene of Alaska, where the planned meeting on board a cruise will make a stop.

In 1995, at the Annual Meeting of the NAME hosted by Dr. Brian Blackbourne in San Diego, our Past Presidents Committee hosted a Hobby Show, where members and/or spouses displayed examples of their arts and crafts, or pictures of their hobbies and paintings. I exhibited my watercolors and oil paintings, and Hisako's art crafts, hook rugs and Japanese art works. Brian, now retired, has become a full-time successful artist. I was happy to see that his paintings are selling and he is enjoying his second profession.

At this point in my life, I wish I could spend more time for painting, oil and watercolor, but for the time being I am happy to produce my annual Christmas – New Year greeting cards with my own art work.

Garden

Since I no longer need to be in my office from 8 a.m. to 5 p.m., I spend much time in my home office located in the back of my house set in large garden. Whenever I need a break, I just walk out from the office and take care of the large vegetable garden where I grow tomatoes, cucumbers, varieties of peppers, and potatoes. We also have a variety of fruit trees. In the fall, we have three trees of persimmons, tangerines, and California navel oranges to harvest. Our lemons seem to grow year around. Working in my garden is my way of releasing the stress of meeting deadline after deadline of work-related projects.

Computer and Internet

In order for me to be up to date in current Internet technology, I have been enrolled in weekly lessons at Apple School in the Farmer's Market complex. The one to one instruction begins at 7 A.M. and currently I am studying movie editing and special effects and placing a video onto the iDisk. I learned I no longer need to send a big file by burning a CD or DVD. I love my McBook and iPhone.

As President of the World Association, I often need to be at many places at the same time. Now I can record my message on video, place it on an iDisk and send it by link. Sometimes, I use power point presentation with automatic advancing and voice, so I can give my presentation without being there in person. What a great advance in technology!! There is more that I can write about; but for now, I want to try to limit my memoir to ten pages. There will be more to come in the near future.

Thomas T. Noguchi, MD

Professor Emeritus of Forensic Pathology,
University of Southern California Keck School of Medicine,
Attending Staff, Los Angeles County + USC Medical Center
Consultant, Department of Coroner, County of Los Angeles,
Chief Medical Examiner-Coroner (Ret),
President, World Association for Medical Law

[Editor's note April 2016 – Hisako Noguchi passed away in 2014. The following is a remembrance by her husband written for the NAME Foundation Newsletter in February 2016)



Hisako Noguchi 1922-2014

Hisako Noguchi Remembered – By Tom Noguchi

Hisako Nishihara Noguchi passed away on August 27, 2014. She was born in the San Pedro district of Los Angeles, California, on November 11, 1922, to Mr. Moriso and Asako Nishihara of Hiroshima Prefecture, Japan, and was the eldest of three daughters. She is survived by one of her two sisters, Toshiko (married to Dr. Richard Morita). Her other sister, Mutsuko, passed away in 1985. Hisako's maternal grandfather was the second son of a ruling Samurai family, but the family fortune changed by the end of Shogun era in 1868, when all Samurais lost their jobs as a new government was established. In 1890, in order to support a large family, her grandfather traveled to America and began to send money back to Japan to save the starving family. Hisako's father (Moriso), at the age of 16, realized that his father had been away for a very long time, and that his younger brother and sister had not seen and hardly knew their father, so Moriso decided to come to America and send his father back to Japan to take care of his family.

Hisako was very responsible and acted as caretaker for her two young sisters, while her father worked in a fish cannery and later within the fruit and vegetable industry in Los Angeles, and her mother worked in a garment factory. After finishing junior high, Hisako specifically chose Los Angeles High School because it had a scholastic achievement program that was highly regarded by many universities. In school, Hisako excelled in chemistry and math, and wanted to pursue a career in medicine. She studied hard but continued to be responsible for looking after her sisters. Her parents were excluded from becoming US citizens, and therefore were not allowed to own a house, so Hisako, as a U.S. citizen, bought a house.

After high school, Hisako began to attend her first year of college at UCLA; however, in December 1941, World War II began, and the entire population of 110,000 Japanese Americans who resided on the Pacific coast was forcefully moved to 10 relocation camps in the most remote areas of the US. She and her family were among the people who were taken to the Southern California Assembly Center in the Santa Anita Racetrack facility in May 1942. Hisako's

family members were sent to Amachi Relocation Camp, which was complete with barbwire and watch towers. Despite the terrible situation, Japanese American internees were very innovative, and by the next summer, the residents had created a beautiful vegetable farm, and built schools and hospitals. By the second year, flower and vegetable gardens were everywhere within the camp. There were 10,000 internees in Amachi, Colorado.

Hisako learned that a Quaker group was working with internees, helping them to attend college. This group assisted Hisako and arranged a scholarship so that she was able to leave the camp by 1943, resuming her undergraduate studies at Boston University. She worked as a live-in student taking care of a household while attending school in Boston. Later, her father secured a job at the New Jersey Birds Eye frozen food plant. Although she enjoyed her studies in Boston, Hisako said that Boston winters were very cold, so she returned to UCLA and finished the premed curriculum, graduating with a BS degree in 1947. She then completed her Master's degree in Biochemistry in 1949, while conducting research at the Barlow Sanatorium, Chavez-Ravine, Los Angeles. She continued her studies and earned her Ph.D. in Biochemistry in 1953, all the while working at the Pathology Laboratory of the Barlow Sanatorium. Hisako and I met in the Barlow Sanatorium while I was a patient in the outer cottage facility; I had worked very hard during my internship at the Orange County General Hospital and had contracted tuberculosis. As my condition improved, I was soon busy preparing for obtaining my medical license and starting my Pathology residency. I completed my residency in 1960, the same year in which Hisako and I were married. Without excessive funds, we drove to Las Vegas and were married on New Year's Eve, December 31, at the Small White Chapel. Upon returning home, Hisako's mother convinced her daughter to have a reception in Los Angeles where her parents could attend, so we had a reception at home, where she cooked. Although we had a reception, we never had a traditional honeymoon, because we were too busy, and I was appointed as Deputy Medical Examiner in Los Angeles, starting July 10.

After we were married, Hisako continued to work professionally, usually leaving home as early as 5 AM, so that she could return early to take care of her other duties, which included apartment management, caring for her elderly mother, and performing other household duties, such as buying groceries and cooking for her mother and me. Later, Hisako also took care of her younger sister, when she was dying from breast cancer; she passed away in May 1985. 1985 was a difficult year, as her mother contracted lymphoma and passed away the same year. During her career, Hisako taught at UCLA and USC and conducted research in microbiology and biochemistry, when grants were often sporadic. She also taught at California State University at Los Angeles and West Los Angeles Community College. Throughout her academic career, she maintained her maiden name at work; many publications bear her maiden name as senior author. In addition, she has a few articles together with me, specifically related to Scanning Microscope in Forensic Investigation. In 1985, because of her younger sister, Mutsuko's, grave illness, Hisako decided to retire from a long research and teaching career. Hisako regrets having to tell her mother about her sister's death, as she knew that the news would cause her mother to give-up: "if she is gone, she does not want to live." After her mother and sister passed away,

Hisako spent considerable time with her hobbies, including hook rag making, cardigan knitting, writing her life story, and the history of her Nishihara ancestry.

There were many turning points in our lives together. She guided me continually, always turning me toward my best course.

1. Hisako had determination and a strong sense of justice. When I was very depressed with all of the political attacks directed against me at one point in my career, Hisako was incensed and became involved in writing letters to the general population, politicians, and newspapers editors. She also organized the Japanese American community to rise-up and support me. As a result, I was ultimately appointed as the Los Angeles CME-Coroner, the first Asian American to be appointed into a key county government position.

2. In the 1970s, Hisako was conducting her research regarding the use of electron microscopy on microbiology at the UCLA. I was busy planning to build the new Medical Examiner's Facility and Forensic Science Center, when she strongly advised me to include an electron microscope in the newly constructed Forensic Science Center of the Medical Examiner's Office. Because of this foresight, LA was the first Medical Examiner's Office to have such an instrument for investigation of forensic cases.

3. Hisako was very skillful in money management, and during her lifetime was instrumental in endowing funds to support the Art Museum, the Japanese American National Museum and the Japanese Culture and Community Center in Los Angeles. She was also the person who advised me to start an endowment program which later became the NAME Foundation. We are very grateful for the NAME leadership in supporting me in this endeavor.

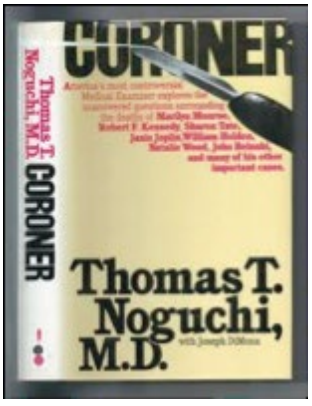
After her retirement, Hisako also had more time available so that she could accompany me to the meetings that I attend. Eventually, Hisako came with me to every meeting that I attended, as she said she did not want to be alone at home.

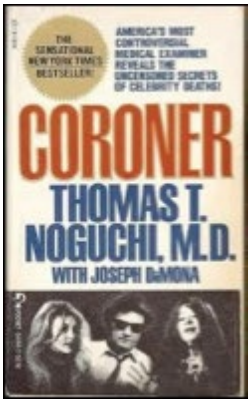
As the years progressed, due to advancing age, Hisako began to experience the inevitable effects of various natural diseases. She developed osteoporosis and fractured her hip and wrists. She suffered a heart attack and required a pacemaker. Later, Hisako suffered Parkinson's disease, which caused considerable weakening in walking ability, requiring subsequent use of a cane, a walker and a wheelchair. As she was at risk for easily falling, I bought her a pink bicycle helmet that she would happily wear at home. In fact, when she passed away, she was wearing that helmet. I brought her to many NAME meetings, but for the last two years, she had to wear her favorite pink helmet. Finally, she became weaker and weaker, and was unable to eat well. She passed away peacefully on August 27, 2014, with me by her side. I now miss her very much, but I am very happy and proud that her memory lives on through the NAME Foundation, which would not be in existence had it not been for the idea given to me by my wife, Hisako. I am extremely grateful for establishment of the Hisako Noguchi Memorial Fund within the auspices of the NAME Foundation.

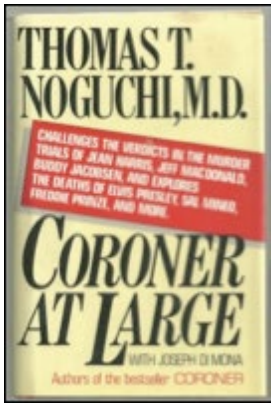
Focus on Thomas T. Noguchi, M.D. - Foundation Newsletter April 2014

Thomas T. Noguchi (Tom) was born in 1927, in Fukuoka City, Japan. He graduated from Nippon Medical School, Tokyo, in 1951. After completing a rotating internship at the Tokyo University Hospital in 1952, Tom did another internship year at the Orange County General Hospital (now known as the University of California-Irvine). He completed his pathology residency at the Loma Linda University School of Medicine/White Memorial Medical Center in 1960 and then stayed on faculty as an Assistant Professor of Pathology in charge of the Autopsy service. He is Board certified by the American Board of Pathology in Anatomic Pathology (1960), Clinical Pathology (1962), and Forensic Pathology (1963). In 1961, he began to serve as Deputy Medical Examiner at the Los Angeles County Department of Chief Medical Examiner-Coroner's Office, and in 1967 was appointed as the Chief Medical Examiner-Coroner, a position which he held until 1982. Following his tenure as Chief, Tom continued his forensic pathology career as the Attending Physician at the Department of Pathology, Los Angeles County & University of Southern California (USC) Medical Center.

During his distinguished career, Dr. Noguchi has been (and continues to be) actively involved in teaching, including roles at many institutions of higher learning, such as USC, UCLA, and Loma Linda University. He became Professor of Pathology in 1987, and since 1999, has been Professor Emeritus of Forensic Pathology at USC's Keck School of Medicine. During his teaching tenure, he has been the recipient of many teaching honors, including an honorary doctorate degree and several international visiting professorships. A quick check of Medline shows Dr. Noguchi's acumen for research and publishing; he is listed as having authored well over 50 scientific manuscripts within the medical literature. Regarding Tom's publications, he is probably best-known for his popular non-fiction New York Times Bestseller Coroner (Simon & Schuster, 1983), and its sequel, Coroner-at-Large (Simon & Schuster, 1985).









Dr. Noguchi has served the forensic science and law enforcement communities through many channels during his career, including membership on a number of Boards of Editors for forensic journals, and membership and leadership within many national and international professional organizations. Most notably, Tom is a Past President of the National Association of Medical

Examiners (1982), a Past President of the California State Coroners Association (1974), a past member of the Board of Governors of the American College of Legal Medicine, and is currently the President of the World Association for Medical Law. He serves many organizations via his active participation on various committees. Particularly of note is his dedicated work for international relations within both the NAME and the American Academy of Forensic Sciences. He has received numerous awards and citations from law enforcement agencies and medical societies, including a Police Medal of Outstanding Contribution to Police and Forensic Medicine by the Japanese National Police Agency (1999), the Imperial Medal of Sacred Treasure by the Emperor of Japan (1999), the NAME Milton Helpern Laureate Award (2005), and the AAFS Distinguished Fellow Award (2007).



Dr. Noguchi's interest in forensic pathology actually began at a relatively young age. His father was an otolaryngologist in Japan. One day, as a 12 or 13-year-old boy, Tom walked into his father's clinic, and he saw his father performing CPR on a patient. Apparently, his father had been performing an iodine throat swabbing (prior to the days of antibiotics) on the patient, who had a severe sore throat, when the patient collapsed, experiencing an anaphylactic- type reaction. The patient died. The district attorney suspected that something mechanical had gone wrong with the swabbing procedure, suggesting that cotton from the swabs had somehow occluded the airway.



A subsequent autopsy performed on the unfortunate patient revealed that there was, in fact, no cotton occluding the airway, and Tom's father was exonerated. It was at this point that young Tom began to have an interest in legal medicine. Tom went on to become a physician, and eventually, in the early 1960s, as the specialty of forensic pathology was in its infancy, studied pathology, with a focused emphasis on autopsy and forensic medicine.

Asked about the most important mentors that he has had during his career, Tom provides the following names: for basic autopsy training, Abraham Lu at Loma Linda University-White Memorial Hospital; for forensic pathology, Dr. Theodore J. Curphey; for international forensic scientists, Dr. Kazuo Suzuki of Tokyo Dental College, a pioneer in the field of forensic odontology in Japan. Dr. Noguchi was also asked about some of the "giants" within FP. Specifically with regards to which of them younger FPs should learn more about and attempt to emulate, Tom mentioned Milton Helpern, Leslie Lukash, Joe Davis from the United States, as well as Keith Simpson (UK), Frederic Thomas (Belgium), and Klaus Pueschel (Germany). Although many of us know about much of Tom's professional achievements, there's also a more personal side to this esteemed gentleman. For many years, NAME members have observed the love and dedication Tom has for his wife, Hisako, who accompanies her husband to many, if not most NAME and AAFS meetings. The two of them met in 1953. Hisako attended UCLA, but as a freshman there in 1941, and despite the fact that she was born in Los Angeles, she was interred at an American "concentration camp" for the Japanese during World War II. Despite this tragic set-back, she went on to earn a Ph.D. in biochemistry and was a well-established researcher and teacher at UCLA and USC, among other institutions. As an electron microscopist, she was also instrumental in pushing the incorporation of EM into the LA County

Medical Examiner's Office new (in 1972) Forensic Science Center. She retired in 1986 to care for ailing family members. Although Tom and Hisako were not blessed with children of their own, they did have two visiting students who lived with them during high school/college in the 1970s, whom they consider their "children." Each has a family of their own today, one in Los Angeles, the other, an ENT, in Urawa, Japan.



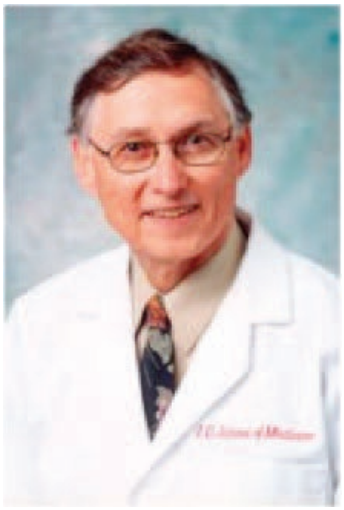
Tom and Hisako with one of their "children," Masako Easton, who lived with them during college.

Throughout his career, Dr. Noguchi has envisioned what was eventually to become the NAME Foundation. From the earliest days of the NAME organization, Tom has been attending its annual meetings. In fact, he is one of the few active NAME members remaining who attended NAME's first meeting. Through the years, Dr. Noguchi has witnessed tremendous success and progress within the NAME organization. Despite this, he has also noted, on far too many occasions, a continuous "financial struggle." Over time, Tom came to envision a day when NAME would become financially stable and sufficiently endowed to support research and education within forensic pathology. His initial idea of establishing something along the lines of the NAME Foundation actually occurred in 1982. At that time, Dr. Noguchi was the NAME Vice President, as well as the Program Chair for the annual meeting in Newport Beach, CA. It just so happened that several high-profile cases, including Natalie Wood, were investigated by the LA Coroner's Office in late 1981. The ensuing media frenzy and all-out attack on the office by the Hollywood entertainment industry resulted in a response by politicians that resulted in the removal of Dr. Noguchi from his position. Despite these work-place hardships, the NAME leadership, particularly Joe Davis, remained totally supportive of Tom, and he was unanimously elected to become the next NAME President at the 1982 annual meeting. Tom was so touched by the support and encouragement of the NAME leadership and membership that he made a pledge at that moment, that as long as he lived, he would support NAME and work toward its future success. Ultimately, according to Tom, it was his wife, Hisako, to whom he gives credit for encouraging him to form the NAME Foundation. So, in 1999, as a direct result of Tom's initiative and under the oversight of the Past Presidents Committee, the "NAME Endowment Fund" was established. The official title for the entity evolved to become the "NAME Foundation," and, in 2006, the Foundation was officially incorporated as a nonprofit charitable 501(c)(3) corporation. At the time of incorporation, and according to the bylaws, a Board of

Trustees (BoT) was elected by the membership (donors) of the Foundation. A Chair, Vice Chair, Secretary, and Treasurer were then elected by the BoT. In keeping with Tom's character, humility, and sense of inclusiveness, he politely and humbly declined to serve as Chair of the Foundation, preferring to serve as a Board member. As the number of years that a BoT may serve is limited by the bylaws, it recently became evident to the BoT that Tom's activity as a Board member might have to cease, as a result of term limits. Consequently, at the last meeting of the NAME Foundation BoT, and at the recommendation of the Officers, the Board unanimously agreed to create a new Officer position, entitled "Founding Director." Dr. Noguchi was therefore named the first (and only) Founding Director of the NAME Foundation and will serve in that position as long as he is able to do so. Moving forward, Tom hopes to remain active within the NAME Foundation, working with the BoT and members to significantly increase the fund, with the ultimate goals of supporting education, research, and the archiving of history within forensic pathology and death investigation. As discussed elsewhere in this edition of the NAME Foundation Newsletter, the Foundation is actively pursuing these goals along with our Founding Director. Please join the NAME Foundation Officers, BoT, and members in thanking Dr. Tom Noguchi, for his vision in establishing the NAME Foundation. In the years ahead, may his vision continue, expand, and come to fruition through the ongoing work of the NAME Foundation.

John E. Pless, M.D.





1938-2014

Born in Bedford, IN, in 1938, John E. Pless completed most of his formal education in his home-state of Indiana, receiving an undergraduate and medical degree from Indiana University, and completing an internship and residency in South Bend, IN. His residency training years included service within the U.S. Army Reserve (Captain), where he spent a dedicated year as a research investigator in clinical pharmacology and toxicology at Edgewood Arsenal Maryland – Army Chemical Center. Following his military service and formal pathology residency training, in 1970, John came to the Oklahoma state medical examiner's office, where he spent a year as a forensic pathology fellow. That same year, he was certified as a Diplomat in Anatomic and Clinical Pathology by the American Board of Pathology (ABP). The following July, he returned to Indiana and entered the private practice of pathology in Bloomington.



John was certified in Forensic Pathology by the ABP in 1972. He was elected coroner, twice, and performed forensic autopsies for the southern part of the state. In 1983, he joined the department of pathology at Indiana University School of Medicine (IUSM) as a tenured

professor and director of forensic pathology. In short order, he was given the added responsibility of the sophomore pathology course and the pathology residency program. He was appointed associate chairman for education in 1986. His primary service responsibilities at the time included the jurisdiction of Indianapolis and Marion County. In 1988, because of his interest and talent in teaching, he was awarded the newly established Clyde G. Culbertson Professorship of Pathology and Laboratory Medicine, an endowed chair. Education and training were at the forefront of his commitment to our specialty.

He was the author of over 30 peer-reviewed manuscripts and several book chapters, oversaw the training of 14 forensic pathology fellows at IUSM, and was instrumental in mentoring numerous medical students, many of whom hold fond memories of the training they received from John. John was actively involved in many professional societies, including the American Society for Clinical Pathology, the College of American Pathologists, the Indiana State Medical Association, the American Academy of Forensic Sciences (AAFS), and the National Association of Medical Examiners (NAME). He was president of NAME from 1997-1998 and chair of the board of the NAME Foundation from 2006-2011. Among the numerous awards that John received during his career, he was the 2005 recipient of the AAFS Pathology/Biology Section Milton Helpern Award, and the 2010 recipient of the NAME George Gantner Award.

Among a range of public service interests, he was a founding member and Chair of the Board of The Villages of Indiana, group and specialized foster homes caring for children. He was a board member of the Friends of Music at the IU School of Music as well as its president, and chair of its emeritus board. He served for ten years on the dean's council of the IU School of Medicine and as its president from 2000-2002. Another facet of John involved the traditional jazz group, "The Residue", with whom he played piano for 41 years. Some of us had the pleasure of hearing the group when the NAME annual meeting was held in Indianapolis in 2000.





John Pless was the consummate professional. He was gentle, yet strong and confident. He was a true gentleman, and he was a positive role-model for all who came into contact with him, whether professionally, socially, or personally. He was a man of faith, and a wonderful husband, father, and grandfather. He is survived by his wife, Lois, their children and their families, including seven grandchildren. John was also a role model for the courage he demonstrated for 15 years under the very difficult circumstances of metastatic prostate cancer.

John E. Pless, M.D.

As the years passed, and he continued to have the same optimistic spirit and vitality, it seemed possible that his illness might resolve into something more manageable. Unfortunately, that was not to be. John died on March 17, 2014, at the age of 75 years. John was a strong supporter of NAME and the NAME Foundation, and a valued colleague. He will be greatly missed.

Joseph A. Prahlow, MD
and **James L. Luke, MD**

Garry F. Peterson, M.D., J.D.



NAME President 2000

May 2011

A Career in Forensic Pathology

In 1965, I entered medical school at the University of Minnesota, intending at the time to become a "general practitioner", as most primary care physicians were then called. I graduated, in 1969 and began a "rotating internship" at St. Paul-Ramsey Hospital, the city/county hospital in St. Paul. By that time I had come to the conclusion that "general practice, the field that had attracted me, either no longer really existed or was quickly becoming a thing of the past.

Early in my internship, I applied for, was accepted into, and scheduled to begin St. Paul-Ramsey's OB/Gyn residency program. I had decided that the breadth of that specialty was the closest thing to general practice that then existed. However, I was unable to obtain a specialty training deferment from military service via the "Berry Plan", a lottery used in those years which matched prospective residents entering medical specialty programs with the Armed Services' future anticipated needs for medical specialists. I was instead given a one-year deferment, prior to what appeared to be certain induction into the Armed Services. Next, I would most likely be deployed to Southeast Asia where the Viet Nam War was in full swing.

So in July 1970, I decided strike out in a new direction and to begin a pathology residency at St. Paul-Ramsey Hospital. With even a single year of pathology training, I was told that I'd likely be assigned to work as a pathologist when I was drafted. I would furthermore become eligible for one year of training credit from the American Board of Pathology in recognition of my anticipated two years of service obligation. If I should subsequently develop an interest in

some other specialty, many of the other specialty boards allowed credit of varying durations for prior residency training time in pathology.

St. Paul-Ramsey's pathology program was new, and the staff comprised a dynamic young group of colleagues who had recently taken their training together at the University of Minnesota. All were outstanding pathologists, but none of them had any special forensic pathology expertise. Their own training program had been situated in Minneapolis (in Hennepin County) where Dr. John Coe was the medical examiner. Any forensic cases at the U of M program were routinely transferred over to the Hennepin County Morgue where Dr. Coe and his staff would perform those autopsies. In those years, there was no provision for a required forensic pathology component as a part of either anatomic or clinical pathology training, as there is today.

My first rotation at St. Paul-Ramsey was a six-month assignment on the autopsy service, where there was a broad range of case material. Many were "Ramsey County Coroner's Cases". The staff pathologists in my program performed essentially no autopsies themselves, but supervised me, as well as a continuous steam of surgery residents who rotated on our autopsy service as part of their own training requirements. After completing their autopsy rotations, many of these surgery residents "moonlighted" at the local Ramsey County Coroner's Office where the coroner, a general practice physician with no forensic training, delegated the autopsies to residents and to a few general pathologists from some of the private hospitals who were willing to do them for the thirty-five dollars that his office paid for them.

At St. Paul-Ramsey, I had at least *some* supervision when I performed autopsies on difficult cases. Amazingly, I even autopsied a few homicides while I was yet a beginning resident, and would then be called to testify in the resulting trials. For a first-year resident, it was nerve-wracking. On one of my early cases (I think it was my first stabbing), my staff pathologist suggested that I call John Coe, outline the case to him and ask for any suggestions he might have. Dr. Coe had given a couple of (optional) lectures to my medical school class, and I'd found him to be a most engaging teacher. I assumed that he'd be very busy and probably not very enthusiastic about receiving a phone call from me. How wrong I was. He was cordial and extremely helpful. Furthermore, he invited me to call him whenever I had any questions or difficult cases.

This first contact with "The Professor" as Dr. Coe was called, developed into an important opportunity. Over the next few weeks, I helped initiate a monthly "Forensic Pathology Conference" at St. Paul-Ramsey. Dr. Coe, often accompanied by Dr. Calvin Bandt (the only other board-certified forensic pathologist in our part of the country) would come to SPRH. They would bring slides, both photographic and microscopic, of their recent cases. I reciprocated by showing some of the cases we'd encountered at St. Paul-Ramsey. This was the beginning of my close friendship with John Coe, a friendship that lasted until his death earlier this year.

Not long after this, the pathologists at SPRH agreed to permit me to moonlight at the Ramsey County Coroner's Office. That opportunity only deepened my resolve to take further training in forensic pathology as part of my education. It also taught me how to perform autopsies without a "diener" to assist me. Assisting with autopsies was "not in the job descriptions" of the staff of the RCCO, and the coroner himself only came to the office a few times a month to sign death certificates. In fact, I worked on a part-time basis there for three years or so and never met the man. He never once called me for clarification of any details of any of the autopsies I'd performed for him, and I was never informed how any of my cases were signed out.

Ironically, at the end of my first year of pathology residency, I was not drafted (as I had anticipated), and instead was informed that it was unlikely that I would ever be.

During the second year, I was invited by my undergraduate mentor, Professor William McDonald, to spend six weeks with him the following summer, excavating Bronze Age skeletal material at Nichoria in Southwestern Greece. As an undergraduate at the University of Minnesota, I had majored in Classical Greek, and Bill McDonald, a noted Aegean archeologist, had been my advisor. In fact, before I finally decided to attend medical school, I had planned to enter graduate school in "The Classics" under Professor McDonald. My pathology program director was very supportive of my opportunity to do archeology, and deemed the experience to be "part of (my) autopsy rotation"!

Therefore, I spent part of the summer of 1972 at Nichoria, assisting an anthropologist from the University of Manitoba. We slowly and painstakingly excavated about a dozen skeletons that had been buried in a small "stone circle grave" during the *Late Helladic Period*, sometime around 1400 B.C. My companion was not, however, a physical anthropologist, and my only reference was William Bass's small paperback handbook. That intense course of self-instruction very effectively taught me an immense amount of physical anthropology and osteology. Years later, an attorney cross-examining me about an exhumed body snidely asked, "So, Doctor, what's been the *longest* interval after death where *you've* been asked to examine a human body?" Thinking back to my summer at Nichoria, I answered, "About thirty-four hundred years".

Another event that year brought about a change of direction that was pivotal in my career. It had been determined that a national shortage of forensic pathologists was hampering the criminal justice system. The Law Enforcement Assistance Administration, a federal program founded in 1968, offered grants which were to be overseen by the College of American Pathologists. Those grants offered full funding for practicing pathologists, and for pathologists in training, to receive a year of forensic pathology training in any approved program. I applied for and received one of the grants.

One of the conditions was that an applicant had to have already been accepted into a training program. Before I applied, I called Dr. Coe. He had just recently received approval for a forensic pathology fellowship, but he had not yet received any applications. At that time, in

order to be eligible for approval as an FP training program, a jurisdiction was required to have a homicide rate of thirty-five cases per year. Hennepin County just barely qualified. I did briefly consider applying to a program in one of the larger jurisdictions, one with a much larger volume of cases, but I decided to stay in the Twin Cities and to train under Dr. Coe. I reasoned that the quality of the teaching I'd receive would easily compensate for any disparity in case volume.

How times have changed! Without any complicated paper work or formalities and in the course of a simple phone call, Dr. Coe accepted me as his first fellow. He then merely sent me a brief letter of acceptance to append to my grant application.

So in July 1973, I began my year of forensic pathology fellowship, even though at that time I had only completed my third of the required four years of AP/CP training. I spent that year working with Dr. Coe and Dr. Bandt and interacting with the pathology staff doctors and residents at Hennepin County General Hospital, as it was then called. By then, the Medical Examiner's Office had moved out of the old county morgue building and shared autopsy facilities with the hospital. All of the hospital's staff pathologists participated to some extent in the teaching I received.

All of them were superb pathologists, and because of their interest in both autopsy pathology and FP, it was a great place to train. Dr. Kenneth Osterberg was especially interested in physical anthropology and in the identification of human remains. He eventually qualified for FP certification on the basis of experience, and he and I both took our board examinations at the same time in 1976.

Dr. Coe took me along with him to my first national forensic pathology gathering, the joint meeting of the American Academy of Forensic Sciences and the National Association of Medical Examiners in 1974. While we were there, he kept me close by him and took every opportunity to introduce me to many of the pioneering members of our sub-specialty, Milton Helpern, George Gantner, Charles Petty, Marvin Aronson, Joe Davis, Thomas Noguchi, Michael Baden, Ali Hameli, David Wieking, Irving Sopher, Bill Sturner, Charles Hirsch, John Smialek, James Weston, Werner Spitz, Russell Fisher, and many others. The list could go on and on. All of them seemed pleased to meet me and made me feel as if I belonged along with them as part of this small but special alliance, in this tiny corner of the medical profession.

Just a few weeks into my FP fellowship, I realized that I wanted to take my final year of AP/CP training at Hennepin County General Hospital ("The Old General" as everyone called it), instead of returning to St. Paul-Ramsey Hospital, where I'd either have to endure the unsupervised world of the Ramsey County Coroner's Office or temporarily stop doing forensic cases. The pathology staffs at both hospitals agreed to the change, and I finished my AP/CP training at Hennepin County Medical Center, the hospital's new name, the following year, 1975.

I had hoped to join Dr. Coe at the Hennepin County Medical Examiner's Office, but no funding was available. I was approached by William Randall, the Ramsey County Attorney (co-

incidentally one of John Coe's football teammates at Carlton College), and asked to apply for the position of Ramsey County Coroner, since the term of the current coroner was about to expire. I assumed that the Ramsey County Board would be happy to appoint me. I lived in St. Paul, and was the only person anywhere nearby with formal training in death investigation. The pathology staff at St. Paul-Ramsey Hospital were very supportive and hoped that I could gain the position and also join that department.

The Chief Investigator at the Coroner's Office, a man with deep political connections was violently opposed to my candidacy, apparently fearing that I'd update and modernize the office, and perhaps ease him out of his position of power. Perhaps he assumed that I'd require the staff to assist in the autopsy room. He assured his friends and acquaintances among the local funeral directors that I'd most likely perform an autopsy in virtually every case that fell under my jurisdiction, and urged them to intervene with members of the County Board. He was especially close to one board member, an attorney who later became a district court judge. The future judge had no understanding of the issue. I remember sitting through a meeting where, in expressing his opposition to my appointment, he said, "Well, it may be fine for Hennepin County, but we don't need a *forsenic* (sic) pathologist here in Ramsey County."

I lost four votes to three and the old coroner was reappointed—not bad, though, for an "out-of-towner" who'd grown up in rival Minneapolis. As a concession to the board members who had supported me, a resolution was passed to "study" the issue for the next four years, at which time, the old coroner had indicated that he planned to step down.

I was still interested in the position, so I accepted a half-time position on the St. Paul-Ramsey staff, worked on a part-time basis for The Hennepin County ME Office, and entered night law school at William Mitchell College of Law in St. Paul while I waited.

I thought the additional credential of a J.D. degree might be of benefit in a career in forensic pathology. When I asked my wife Mary Ann what *she* thought of the idea, she had replied, "I worked you through medical school, but one professional school is my absolute limit. I'll help you in every other way I can, but you're going to have to work while you do it and still find enough time to be a father to our (three) boys." With her support and understanding, the four years at "Mitchell" flew by.

The following year, 1976, one of my residency mates at St. Paul-Ramsey Hospital secured the pathology contract for two St. Paul hospitals, Midway Hospital and its smaller sister institution, Mound Park Hospital. He and another pathologist staffed Midway, and he recruited me to be the pathologist at Mounds Park. I left St. Paul-Ramsey to take the new position, but kept my part-time position at the Hennepin County ME Office, and plodded on in law school. Those two and a half years at Mounds Park gave me a chance to practice conventional hospital pathology, and I found that I rather enjoyed it. However, that all changed in August of 1978, as I began my final year of law school, when I received a call from John Coe.

Dr. Osterberg, an ostensibly healthy man in his forties had suffered a tragic and debilitating stroke, and Dr. Coe asked me to replace him. Half of my time was to be in the ME Office, and half to be in clinical chemistry at the Hennepin County Medical Center. I accepted immediately, and took the new position in January 1979. I became Dr. Coe's "Assistant Medical Examiner". I never pursued the position of Ramsey County Coroner when it later became vacant. Dr. Coe and I worked closely together, and I stayed on as his assistant until 1984, when he retired and I was named to replace him.

I was appointed to five consecutive terms and spent the next twenty years as Hennepin County's Medical Examiner, until I retired in 2004. Over those years, I worked with so many fine colleagues, including Kathryn Berg, Jim Wahe, Mitch Morey, and Calvin Bandt. I was involved in the training of many other forensic pathologists including Susan Roe, Ruth Viste, John Teggatz, Karen Kelly, Dan Davis, Michael Heninger, Shannon Mackey-Bojack, Jerome Bond, Kenneth Gallagher, and Ray Rivera. Some of them went on to become Chief Medical Examiners themselves, including Jeff Jentzen, Lindsey Thomas, Brian Hunter, Quinn Strobl, Thambirajah Balachandra, and Andy Baker, the person who succeeded me as Hennepin County's Medical Examiner when I retired.

I consider all of those students and colleagues to be the most enduring aspect of my career. I hope that through them and the students that they in turn teach and inspire, I might gain at least some small measure of (at least temporary) immortality. And of course, all of them taught me so much in return.

Joseph A. Prahlow, M.D.



NAME President 2007

May 2011

Why did I select forensic pathology as a career?

Ultimately, I chose forensic pathology as a career based on my exposure to and interactions with various forensic pathologists during my formal medical school education at Indiana University School of Medicine and my pathology residency training at Wake Forest; however, prior to that, I sort-of "backed into" pathology as a career. During the summer between my first and second years of medical school, I participated in an externship program, operated via the medical school, in which I rotated with various physicians in order to become exposed to the "real world" of medicine. It was a very eye-opening experience for me. In fact, I was advised by a majority of the physicians with whom I rotated to "get out of medicine while you can." Many of these physicians were very unhappy with their work. They had experienced medicine in the "golden age," without much of the bureaucracy and government intervention that now exists. As they dealt with this intrusion, many of them became quite frustrated. Ultimately, I stuck with it, based on some excellent advice by several individuals. As I looked back on that summer, I realized that the pathologists with whom I worked seemed to be some of the most happy in their work. As I rotated through my 3rd year rotations, I quickly began eliminating career choices. Medicine and surgery were given the "nix" almost immediately. I wasn't too keen on pathology because of a very unfortunate second year pathology course experience (the course was "taught" by a pathologist who had never taught anything…very unorganized…very frustrating for all students). Eventually, after recognizing that "pathology the course" was not equivalent to "pathology the career," I settled on pathology, because of my love of the basic sciences and my love for "problem-solving." I did a one-month rotation in forensic pathology with Dr. John Pless, Mike Clark, and Dean Hawley early in my 4th year, and I was hooked. I had the great fortune of doing my pathology residency at Wake Forest, with Pat

Lantz, Greg Davis, and Don Jason, where my love of forensics was confirmed and grew tremendously.

Places and times served as chief medical examiner.

Although the term "chief medical examiner" does not exist where I am currently employed, I can be considered the "chief forensic pathologist" here at the South Bend Medical Foundation, where I have been employed since July of 1999. The South Bend Medical Foundation is a large, not-for-profit pathology laboratory in South Bend, IN, which serves many of the area hospitals and clinics, including offices/hospitals in numerous Midwestern states. We have approximately 20 pathologists. I perform a bulk of the forensic (coroner) and hospital autopsies for the local community. I also am a professor of pathology, responsible for teaching the second year pathology course, at Indiana University School of Medicine-South Bend at the University of Notre Dame.

Major accomplishments as chief.

I think that providing solid, consistent, and professional forensic pathology service to the local community has been one of two major accomplishments in my time here in South Bend. The other has been developing and providing a solid foundational basic science pathology course for the second year medical students.

Efforts on behalf of forensic pathology and the forensic sciences.

I believe that many of my efforts with regard to FP and forensic sciences peaked during my year as NAME President (2007). I believe that these efforts can best be divided into two areas: education and organization. I have always been a strong advocate for teaching. Throughout my career I have devoted much of my time and energy to pathology training and forensic pathology training. While in Winston-Salem and Dallas, I thoroughly enjoyed teaching pathology residents. In my present position, I likewise enjoy teaching medical students. I have served (and still serve) on various educational committees for numerous organizations, including NAME, AAFS, CAP and ASCP. I was an associate editor for the 2nd edition of the CAP's *Handbook of Forensic Pathology*, the editor of the NAME/CAP publication *Basic Competencies in Forensic Pathology*, and the author of Forensic Pathology for Police, Death Investigators, Attorneys, and Forensic Scientists. Regarding efforts toward organization within the field of forensic pathology, I have been a strong advocate for ensuring appropriate FP training within pathology residency programs. I have served as the AAFS Pathology/Biology section Program Chair, section Secretary, and section Chair, as well as the NAME Board of Directors, Executive Committee, Vice President, President, and Chairman of the Board. During my time within the NAME leadership, I attempted to strengthen the role of forensic pathology within and outside of the organization, and I made efforts to respond as an organization, in tangible ways, to the needs of forensic pathologists.

Recollections of places I have trained and worked.

Indiana University School of Medicine-Northwest – Where I grew to love the basic sciences (as much as that is possible).
Indiana University School of Medicine-Indianapolis – Where I discovered pathology as a career-choice, and where I first was exposed to forensic pathology.
Wake Forest University – Where my love of forensics was confirmed and grew.
University of Texas-Southwestern, Dallas – Where I completed my formal education and gained a tremendous amount of valuable experience within a very busy office, as I remained on staff for 3 additional years following my fellowship.
South Bend Medical Foundation and Indiana University School of Medicine-South Bend – Where I have been able to continue doing what I love to do, forensic pathology and teaching.

Comments about people who trained me and from whom I have learned.

I've already mentioned my mentors at IUSM (Drs. Pless, Clark, and Hawley) and Wake Forest (Drs. Lantz, G Davis, and Jason). Mentors at UTSW include Dr. Jody Barnard, Joni McClain, and Joe Guileyardo. A current mentor, colleague, and fellow forensic pathologist here in South Bend is Rick Hoover. I have many fond memories of each place. I am indebted, not only to those I've mentioned above, but also to other teachers and colleagues, including, but not limited to: Robert Prichard, Kim Collins, Karen Ross, Sheila Spotswood, Janis Townsend-Parchman, Charlie Odom, and Juan Zamora, with whom I worked during my training. Of course, there is an extremely long list of individuals with whom I have worked and learned from within NAME and other organizations. They are spread-out all over the USA and the entire globe. I count each of them as friends and colleagues, and I am honored to know them.

Recollections about people I have trained.

I have played at least a small part in the education of numerous physicians and pathologists through my roles as instructor/resident at Wake Forest, assistant professor at UTSW, and associate and full professor at IUSM. The following is a partial list of FPs of whose training I am honored to claim at least a small part: F Miller, J Oeberst, A Lopez, M Gonsoulin, L Salzberger, W Kemp, S Turner, K Haden-Pinneri, N Batalis, J Clouse.

Major controversies and frustrations in completing my responsibilities as NAME President.

My year as President was not a very calm year. Among other issues of importance were the following four relatively major events within the world of FP and/or NAME: Charlie Siebert's ordeal in Florida, a major effort by tissue procurement agencies to insert language into state laws that would essentially make tissue procurement equivalent to organ procurement with regard to interaction with the death investigation community, the conversion of the NAME administrative offices into a "virtual office" setting, and a major updating of membership categories within the organization (via bylaws changes), advocated for and implemented in order to ensure that NAME is truly (as now stated in the bylaws) a medical/physician organization for forensic pathologists, while maintaining (and hopefully clarifying) the

acceptance of various affiliate members which had become commonplace (although somewhat haphazard) over the previous decades.

Academic involvement through research, education, and training.

As mentioned above, I consider education to be a very important aspect of my work. I also enjoy presenting and publishing forensic research, most typically in the form of case reports. I also am a strong advocate of "teaching the next generation" through experience. As such, I have long been an advocate for providing publishing and presenting opportunities to those in training. When I was in Texas, pathology residents were the focus of such advocacy. Now that I am in an environment where pathology residents are few and far between, medical students are my focus. During my career, I have published 75 articles in peer-reviewed medical journals, of which 28 have included either residents or medical students as co-authors (usually as first author). Not all of the students become pathologists, let alone forensic pathologists, but I believe each of them gains a tremendous amount of valuable experience by participating in such academic exercises. Each of the textbooks that I have been involved with, either as editor, author, or chapter contributor, has had, as its primary focus, education and training.

Legislative change in which I was involved.

As NAME President, I spent a tremendous amount of time combating the language that existed within the Uniform Anatomical Gift Act model legislation. As mentioned above, the model legislation advocated making tissue and organ procurement essentially equivalent in certain important regards as they relate to death investigation. Had this language been incorporated into various state laws, medical examiners and coroners would have lost a tremendous amount of control over many cases, with the very real potential for evidence loss/compromise.

My contributions to the field of forensic pathology.

See above. My hope is that I have been (and continue to be) a strong advocate for excellent education and training within forensic pathology and death investigation.

Perspectives gained.

I believe that I have gained a tremendous diversity of perspective when it comes to forensic pathology practice and death investigation. I have had the good fortune of working within, or observing from the national scene, a variety of death investigation system types. As most within this line of work understand, all systems are not equivalent. At the same time, it is unwise to suggest that a certain system type, based on name alone, is superior. The best system is one that is well-funded, well-supported, well-staffed, free from undue political or other influence, functions within a NAME-accredited facility, follows NAME autopsy standards, has ABMDI-certified death investigators, and has the important decisions regarding autopsy performance and death certification carried-out by ABP-certified forensic pathologists.

Difficult cases I have managed.

Too many to discuss in any amount of detail. The most difficult cases I encounter now tend to be those that I encounter via consultation where the guidelines described above (perspectives gained) were not followed.

How I deal with job-related stress, anxiety, and personal performance issues.

Like many others, I suppose I haven't done the best job here. When I'm stressed, I tend to eat too much and don't find time for exercise. Ultimately, when I'm handling the stress well, it's because I don't "take my work home with me," I'm supported by a loving wife and family, I eat in a healthy fashion, I exercise regularly, and I trust in a higher power.

Advice for forensic pathologists entering the field.

Be honest in all that you do. Be open to the ideas/opinions of others. Be willing to admit that you may be wrong. Don't over-commit. When testifying, pretend that there are several other FPs in the room, to guard against being too self-assured. If consulting or reviewing a case, attempt to treat the case as if it were a case in your regular daily practice.

How my work experience changed me, changed my life, and what I learned from my work.

I don't think that my work experience has changed me as much as it has confirmed for me what I already believed about life: 1) Human bodies represent physical entities…there is a spiritual component to life. When death occurs, the spiritual component is no longer present within the physical body. 2) The human being is a marvel to behold, from the grossly-visible anatomic structures to the microscopic features to the submicroscopic physiologic and biochemical processes that make-up what we know as "life." 3) It never ceases to amaze me how humans are so very similar to one another, both inside and out, and yet so incredibly unique.

How has forensic pathology changed during my career, for the better and for the worse.

Better – Guidelines/standards are being advocated. NAME and other organizations are stronger advocates for FP. There's more "mainstream" knowledge about the profession. Some places are paying better.
Worse – "Mainstream" knowledge about FP has propagated and created new myths. Many places continue to underpay FPs. Recruitment of FPs has not increased as much as should be. We are limited to a great extent by the fact that our closest recruitment pool is general pathologists (or more specifically, pathology residents), many (most) of whom despise the autopsy.

(The following was provided by the NAME Educational Activities Committee (EAC) July 2020)



Current position: Professor and Vice Chair, Department of Pathology, Western Michigan University Homer Stryker M.D. School of Medicine; Deputy Medical Examiner; Kalamazoo, MI

Education history:
BS – Chemistry and Biology, Valparaiso University, Valparaiso, IN
MD – Indiana University School of Medicine, Indianapolis, IN
Anatomic and Clinical Pathology Residency – Wake Forest University School of Medicine, Winston-Salem, NC

Forensic Pathology Fellowship – University of Texas-Southwestern Medical School/Dallas County Medical Examiner's Office, Dallas, TX

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

I struggled during 3rd year of medical school regarding my choice of a medical specialty. It wasn't that I couldn't decide between a group of really great options. In fact, I had quickly ruled-out "surgical" and "medical" specialties, and, like most medical schools at that time, exposure to various "non-mainstream" specialties was not promoted much at IUSM. After I settled on pathology as a career choice (which is a story in and of itself), I participated in a 1-month elective in forensic pathology in Indianapolis, early as a 4th year student. Under the tutelage of Drs. John Pless, Mike Clark, and Dean Hawley, I was introduced to the wonderful world of forensic pathology. I was hooked. What a fascinating career choice! I decided that I would try to find a residency program that allowed me as much exposure to forensic pathology as possible.

WHAT ADVICE DO YOU HAVE FOR ASPIRING FORENSIC PATHOLOGISTS, INCLUDING RECOMMENDATIONS TO MATCH INTO A PATHOLOGY RESIDENCY PROGRAM AND ACCEPTANCE INTO A FORENSIC PATHOLOGY FELLOWSHIP?

First, to become the best forensic pathologist that you can be, you must first become the best pathologist that you can be; and, to become the best pathologist that you can be, you should strive to become the best physician that you can be. Second, recognize that not all pathologists (or pathology residency programs) recognize (let alone embrace) autopsy and/or forensic pathology as important aspects of pathology training and/or practice. You will need to be careful to balance your commitment to becoming an excellent pathologist with your enthusiasm for forensic pathology, recognizing that, in certain circumstances or at certain times, it may not be the best thing for your overall training to be outspoken about your desire to become a forensic pathologist. To a great extent, how this balance works-out for you will depend on how your residency program (and attending pathologists) view forensic pathology. Try to select a pathology residency program that accepts, or better yet embraces, forensic pathology as an important subspecialty of pathology. If possible, select a program that provides (or allows) abundant exposure to forensic pathology during your residency training. There are many available options in this regard. I was fortunate to participate in a 5 year AP/CP residency program where the hospital and ME autopsy services were

conjoined and run by Board-Certified Academic Forensic Pathologists. By the time I had completed my residency training, I felt very well-prepared going into my forensic fellowship. Third, if at all possible, students and residents should get involved with professional pathology organizations, including the general ones (like CAP and ASCP) as well as the more specific forensic organizations (AAFS and NAME). If possible, attend the meetings and present papers/posters. It's a great way to "get a feel" for the specialty and to confirm whether or not the specialty is for you. Finally, regarding fellowship programs, it's probably never too early to contact programs that you might be interested in. As you know, certain programs fill years in advance, but it is also noteworthy that, every year, there are open "slots" available for forensic fellows. Every program has something excellent to offer, and I know that each program is staffed by outstanding forensic pathologists. If time and circumstances allow, a prospective forensic pathology fellow should try to make a determination regarding whether they want to train at a large, multi-fellow, busy office where the case volume is high versus a smaller to mid-size office with only a single fellow, where they are not as busy, but fellows may receive a bit more personalized attention. Each of these basic types of programs has its pros and cons.

WHAT IS THE MOST REWARDING ASPECT OF BEING A FORENSIC PATHOLOGIST?

Providing answers to grieving family members/loved ones, as well as others who require answers from us for public health and justice purposes. Ultimately, providing these answers is part and parcel of a more all-encompassing aspect of being a forensic pathologist… that of being a teacher.

WHAT IS THE GREATEST CHALLENGE OF BEING A FORENSIC PATHOLOGIST?

I think the greatest challenge for forensic pathologists mirrors one of the greatest challenges facing society in general. More and more people embrace a worldview that suggests that there is no such thing as an absolute truth. I am by no means suggesting that the answers that we provide in forensic pathology are necessarily "absolute." In fact, many of the findings we report and the opinions we render are merely our best efforts to provide the most likely explanation for a set of facts presented to us. However, in a medical/scientific arena where we strive to find and express the truth, the prevailing non-absolutist mentality that "my opinion is just as legitimate as yours" can sometimes lead to some disheartening, dare I say "unjust," outcomes. This is exemplified in certain legal "battles." -- More important and concerning, however, is a corollary to the above worldview statement, which essentially says "what I believe and/or report to be a truth about you is true," even if there is no evidence to support this so-called truth. Unfortunately, this mentality often results in vicious character assassination. The practice seems to have been perfected by certain members of the media, but unfortunately, sometimes even our own colleagues engage in such activity.

WHAT DO YOU THINK ARE THE MOST IMPORTANT ISSUES/CHALLENGES OF FORENSIC PATHOLOGY TODAY?

In addition to the issues related to "truths" and "untruths" as addressed in the previous question, I believe that the following items represent a list of other very important issues facing forensic pathology today: 1) Workforce shortage issues; 2) Attempts by certain entities (Government or otherwise) to regulate the practice of FP; 3) Lawsuits filed against FPs; 4) Lack of time, resources, workforce to perform FP research.

WHO IS YOUR ROLE MODEL AND WHY?

My father, August Prahlow, who was *not* a pathologist or a physician, but was a parochial school teacher. He was solid in his beliefs, unshakeable, and humble. He led by his actions. He was quiet, gentle, and loving, but stern when he needed to be. He was a beloved teacher and father.

WHAT ARE YOUR HOBBIES AND HOW DO YOU MAINTAIN A WORK-LIFE BALANCE?

While my professional focus is Forensics, my worldview, values, priorities, and free-time can be summarized by several additional "F" words: Faith, Family, and Friends. As a Christian with a Biblical worldview, I strive to live my life according to the values and principles espoused by Jesus Christ, including the very important practice of Forgiveness. Ultimately, it is my Faith that allows me to balance the stresses of work and life. My Family (including my wife, Tamara, our children, and our grandchildren) is another source of strength for me, as are my Friends, both at and outside of the work environment. Favorite hobbies include exercising (I used to say "running," but now it's better described as "jogging," biking, kayaking, walking/hiking), shooting, woodworking, and traveling. Finally, I'll end with a few more of my favorite "F" words: Fellowship, Fitness, Frisbee, Food, and Field, as in Wrigley Field.

Donald T. Reay, M.D.



NAME President 1987-88
5/14/37-11/10/18

June 2011

I had no intention of pursing a medical career in forensic pathology. When I received my draft notice to report for induction into the US Army, I was in an internal medicine program as an intern with a special interest in hematology. While in medical school, I had been doing basic research in the pathology of copper deficiency anemia in swine that required autopsies on pigs. With my draft notice, I sought a reserve commission in the USAF that allowed me to complete an AP/CP residency in pathology before active duty. Because of my research in medical school, the American Board of Pathology gave me one year of credit so I was eligible for certification after three years of pathology residency. I had a vacant year before military service and I chose to find out what forensic pathology was all about. I sought a year of training in this specialty of forensic pathology about which I knew nothing. There were not many programs available for training but I was fortunate to be accepted by Dr. Lester Adelson for a year of training with him and his staff at the Cuyahoga Coroner's Office in Cleveland, Ohio. What a marvelous experience! I was totally captivated by Dr. A's intellect and dedication to forensic pathology. He had a perspective about the importance of death investigation and the value of good forensic pathology to a community. In addition to Dr. A, I had stimulation from my contact with Dr. Irving Sunshine who was the toxicologist at the Cuyahoga office. Oliver Schroeder, professor of law at Case Western Reserve, would occasionally drop by to kibitz with Dr. A and I relished their exchange. The year in Cleveland had transformed my perspective on the practice of pathology and remained as an inspiration for me to pursue a career in forensic pathology.

My interest in forensic pathology was further stimulated by my assignment to the AFIP when I entered active military service after Cleveland. It was my good fortune to be assigned to the forensic pathology unit at the AFIP that was under the capable leadership of Dr. Charles Stahl. Although the unit was under the titular head of Colonel Pierre Fink, it was Charlie who became friend and mentor. Thru his quiet style, Charlie emphasized the value of careful death investigation in the military and years later the DOD wised up and established the Military

Medical Examiner as it exists today. It has Charlie's fingerprints all over it. I learned much from Charlie about effective administration. As I was completing my tour at the AFIP, Dr. Richard Froede arrived at the Institute to begin his year of forensic fellowship. Dick was regular Air Force and knew much about the military. He and I became friends and he became my military advisor. Dick and his family had spent several years in England with the RAF on an exchange program and enjoyed it. I was curious about the program and became interested since I still had my father's relatives in Durham, England where my father was born. The program sounded interesting since I had become aware that a forensic pathologist, Group Captain Ken Mason, was on staff and was involved with aircraft accident investigation. Although my duties would be those of a surgical pathologist, I welcomed the opportunity to be exposed to a new dimension of pathology. I arrived at the Institute of Pathology and Tropical Medicine in RAF Halton to do my duty for two years. Despite the culture shock, I had numerous opportunities to accompany Ken on a variety of investigations, including a hovercraft and commercial airline accident investigation. Ken was a most gracious mentor and advisor during my time in England. His dedication to forensic questions was stimulating and I was allowed to perform autopsies during many of the accident investigations for which he was responsible. This experience was most valuable.

When I returned to the U.S., I was assigned to a USAF hospital laboratory as director of laboratories. I had wondered whether I could regain my early interest in surgical and laboratory pathology. As I performed hospital pathologist duties, I became aware that I mostly enjoyed performing autopsies and, in particular, if there were forensic questions about the case. I knew then that I must search out a full time position in forensic pathology. In December of 1973, I left the USAF and my family and I set out for Seattle, WA to seek a new experience.

In 1969, Seattle-King County had converted its 1899 coroner's office into a Medical Examiner appointed by local county government. I came to Seattle naïve about creating a new agency out of embedded traditions and customs with nepotism throughout. I came to Seattle with Dr. Patrick Besant-Mathews who was to take over the administrative/executive functions while I would concentrate my activity on autopsies and death investigation. Patrick was more naïve than I was about county government and running an agency that was tethered to the past. In 1969, there was a desire by county government to have a medical examiner and dispose of the elected coroner but this was done without enabling legislation in the county charter except that the medical examiner would be in the Dept. of Public Health and perform autopsies. I didn't realize that nothing had been done except change the name plate on the door. I hadn't paid attention to such issues since money had been set aside to construct a new facility at the Harborview trauma center. The School of Medicine Dept. of Pathology at the University of Washington had agreed to regular faculty positions for ME pathologist staff and promote resident rotations in forensic pathology. The staffing of the office was structured so that there were 22 Investigators (deputy coroners) 3 office staff, 1 toxicologist tech and 2 pathologists to perform about 900 autopsies per year. I had energy then and I was content to perform autopsies with enthusiasm although the facility was a converted surgical suite at an old

hospital. This was the time I created a rough design for roll around autopsy tables since we were using old hospital trolleys with cutting boards balanced on the body. The concept has been developed in many new autopsy facilities with roll around autopsy tables and stations. Although the conditions were primitive, I was content doing autopsies and responding to homicide death scenes.

However, things did not go well. There was staff resistance to reconfiguring office positions in order to generate quality autopsy reports and create other important administrative functions. After two years, Dr. Besant-Matthews resigned and I was left to put things together. The new facility was completed and that was a boost to morale. I was fortunate to create an administrative position that designed enabling legislation accepted by county government along with policy and procedure documents. With retirements, positions were reclassified in line with job functions and union negotiations. The process was slow but there was good support by different Directors of Public Health during my 26 years as Medical Examiner.

We always struggled with a shortage of pathologists to perform autopsies. Fortunately the medical school pathology residency program provided residents to rotate for forensic experience. In the early eighties we applied and received approval to have a recognized fellowship training program. Over the years and until my retirement in 1999 we always had a fellow, usually from the University of Washington Medical School pathology program, who joined us for a year or sometimes two years. Many continued on in forensic pathology, and a few who have been active in NAME are John Howard (recent president) and Greg Schmunk. It was always a delight to work with the fellows since they were both challenging and a joy to see them develop forensic skills. I constantly found myself using Dr. A's aphorism that "you do an autopsy with your head and not your hands." Generally within three months you could assess whether or not the fellow understood the issues.

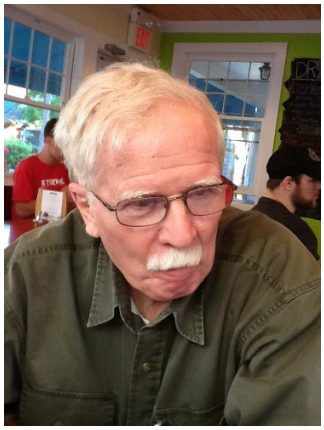
The state of Washington has 39 counties and Seattle-King County was the first to make the transformation from a coroner to a medical examiner system. Gradually the major population counties made the transformation much like Seattle-King County. The less populated counties have still retained the elected coroner or a coroner-prosecutor. The elected coroners were suspicious of me since there had been discussions by the state medical society of establishing a state ME like neighboring Oregon. I was less than enthusiastic about such overtures since I had become aware of political forces with which I had to deal at the county level. I had become more politically astute over the years and such issues meant money. Because there was a desire to improve death investigation state wide, the governor established a Forensic Investigation Council and I was appointed as a member and eventually became chairman. I was very aware of what was needed to improve death investigation in Seattle-King County that would also improve death investigation throughout the State of Washington. To allay the fears of the coroners, I sought to establish a quality toxicology laboratory that would benefit all jurisdictions. Funding was accomplished by a death certificate surcharge and I offered to support the coroner's need for pathologists to perform autopsies by having our fellow available

to perform autopsies when needed. Fortunately, our fellows agreed to this arrangement that required an additional year and the success of establishing the state toxicology program was done with their cooperation. I felt like the typical politician pulling this off. It was necessary to do it, if death investigation were to advance in the State of Washington. Forget the State ME. It will never happen.

I have always had a desire for investigative work whether it is a laboratory bench or an autopsy table. As in years past, forensic pathology is unique because the autopsy dissection and interpretation still remain the same. Yet there is a need to understand and discover new information about why people die. Death in infancy is still perplexing. Deaths in custody deserve careful scrutiny. I had the occasion to study neck holds used by law enforcement as a common method of restraint. The impetus for my work to understand what happens was prompted by autopsy observations in two victims of law enforcement restraint. The benefit of having a facility in a medical center is that there are cardiologists, radiologists, anesthesiologists etc., and if approached, are willing to assist in reasonable investigative studies. We were able to design and utilize clinical instruments in our investigation of neck holds. Similarly, in evaluating the effects of hog-tied restraint we used resources borrowed from clinicians. Judicial hanging studies were performed on victims utilizing the latest radiological techniques. In any major ME office, abundant epidemiological data is collected that can provide a wealth of information. I had the good fortune of working with a medical resident assessing the risk of firearms in the home. The study achieved national attention. In forensic pathology, funds for research are limited or none existent but autopsy observations can provide an opportunity to seek answers about what causes injury and death. I still have some studies I would have liked to have performed if animal material was available. To those beginning their career in forensic pathology, I suggest that you look first then see. There are still questions that need answering.

I end this memoir with a tribute to NAME. My association with NAME starts in the 1970s when NAME first developed Inspection and Accreditation. My memory is that the Seattle-King County ME office was one of the first offices to be officially inspected and accredited. Joe Davis did us the honors and I was pleased to have Joe spend time with us. He is one of the icons of forensic pathology. It was with Joe's encouragement that l became active in the organization. It was my good fortune since this introduced me to George Gantner, an early driving force in the organization. I was on the board of directors for about 8 years and then was president-elect in 1987. Jim Bell, president at that time, died and I assumed the office of president sooner than expected. Jim was a strong advocate for Inspection and Accreditation and I am sure he would be pleased with the growth of the program. When George Gantner died in 1988, I then became pro-tem Secretary/Treasurer. Both Jim and George were such stalwarts in the organization and I truly missed their advice and counsel during those years. Over the years NAME has been an important organization for me since it has allowed me the opportunity to develop cherished friendships. Since retirement in 1999, I look back to my years in forensic pathology as a rewarding and satisfying experience. I would do it all over again.

Leroy (Roy) Riddick, M.D.



3/13/1936 – 1/29/2021

January 2017

A Memoir and the Origin of the Mobile County, Alabama Medical Examiner System

My Interest in Forensic Pathology

During my second year of residency in anatomic pathology at the Cornell University New York Hospital Medical Center in New York City, I had the opportunity to spend a month externship at the Office of the Chief Medical Examiner at 30th Street and 1stAvenue. The residency at Cornell stressed the autopsy; the Monday morning organ review was mandatory; the autopsy room at the medical examiner's office was an exciting place with abundance on interesting cases. I was hooked. I to moonlighted on weekends, and during my fourth year, I spent six months at the OCME, under the tutelage of John Devlin, Mike Baden, Farouk Presswalla and others. On occasion, I worked as "the tour doctor", attending scenes and deciding disposition of the body, i.e., sending the body to the Office of the Chief Medical Examiner or releasing it to a funeral home after signing the death certificate based on the provided history. Dr. James Luke, the Chief Medical Examiner in the District of Columbia, offered me a position as a Deputy Medical Examiner in the spring of 1974.

Places I worked as a Medical Examiner and My Mentors

My four years at the Washington Medical Examiner's Office working with Jim Luke and Brian Blackbourne served as my fellowship in Forensic Pathology, and more. With an abundance of experience, Jim Luke had both the broad view of what professional death investigation means for the entire community and the administrative skills to run an office providing that kind of service. Brian Blackbourne, who had trained as a neuropathologist and worked as Deputy Chief with Joe Davis in Miami, took a meticulous scientific approach to autopsies and scene investigation. The weekly review of the current and pending cases kept the ship tight and on course. Each morning the Homicide Detectives of the Metropolitan Police force provided detailed type written reports of their investigative findings; they also guided me through

multiple scenes. The Assistant United States Attorneys prosecuted the homicide cases; as fulltime employees of the United States Justice Department, they did not bear the burden of running for office. They taught me the job of the district attorney was to see that justice was done, not necessarily winning cases. The Public Defender Service had the opposite side of the ledger. Both groups invariably had pretrial conferences with the medical examiner; those sessions were invaluable learning and teaching experiences. With Jim Luke at the helm and Brian second in command it was obvious there was no place for my advancement in the Office. Time to look elsewhere.

An ad in the Journal of Forensic Sciences in the fall of 1978 announced an opening for a forensic pathologist in the Alabama Department of Forensic Sciences (ADFS) in Montgomery, Alabama. The Department was founded in 1935 as a crime laboratory to provide scientific expertise to law enforcement and coroners in their investigation. By reputation death investigation in Alabama needed improvement. Every county except Jefferson (Birmingham), Montgomery and Mobile had a lay coroner's system for which the only requisite was being eighteen years old and a citizen of the county. Non-medically trained personnel of the Department performed the majority of the forensic autopsies Thus, I was somewhat wary of taking a position in an organization with that background. Mr. Carlos Rabren, the soon to be Director assured me of his desire for the Department to have qualified forensic pathologists investigating deaths and performing autopsies statewide.

I started to work in the Mobile Laboratory on April 1, 1979. The facility consisted of a rabbit-warren of rooms in the basement of the Mobile County Court House, where we shared the under-ground parking lot for the sheriff's department and the court personnel. The place always smelled of exhaust fumes and the cleaning compound used on the floor. The largest of the rooms housed instruments for chemical extractions and analyses. The firearms examiner with his comparison microscopes shared the evidence room. Since the custom of the Department had been for the State Toxicologist to perform postmortem examinations in preparation rooms of mortuaries, there was no autopsy facility in the laboratory. Mobile County had no morgue. Until the proposed new laboratory opened, I worked as a peripatetic pathologist performing my duties in funeral homes throughout south Alabama.
What the laboratory lacked in space and equipment was compensated for by the quality of the personnel. Matthew Barnhill, Jr., the toxicologist, had a PhD. in Physical Chemistry and had been tutored in forensic toxicology by Ms. June Jones, former president of the American Academy of Forensic Sciences. Dr. Barnhill was a diplomate of the American Board of Forensic Toxicology. James Small, the Criminalist and Laboratory Director, held a M.S. degree in toxicology and was a Diplomate of the American Board of Forensic Toxicology. Elaine Scott, the serologist, had a B.S. degree and had received special training in blood splatter analysis. Dale Carter, the firearms examiner, had been a qualified range officer in the U.S. Air Force. Deborah Sennet, the Controlled Substance analyst, had a B.S. Brian Delmas, my investigator, had worked five years in the Mobile City Police Department in communications and in identification as a fingerprint examiner.

Contributions to Forensic Pathology

My first contribution to forensic pathology was to accept the position as the first board certified forensic pathologist in south Alabama. The Alabama Personnel Board did not have a position designated medical examiner; my title was Forensic Pathologist and, as such, was an on-call position responsibility. Essentially, I was the coroner's pathologist for eight counties in southwest Alabama: Baldwin, Choctaw, Conecuh, Clarke, Escambia, Monroe, Mobile and Washington, but, in my tenure, coroners requested autopsies in eighteen the counties in south Alabama. The coroner's law stated that when notified of a person having been killed or died suddenly under suspicious circumstances, the coroner must make inquiry into the facts and submit them to a judge or district attorney for approval. If approved, they authorize the coroner to hold an inquest, which included, if necessary, an autopsy. Authority for the autopsy lay with the criminal justice system. Establishing the credibility of and validating forensic pathology meant personally working cases.

My first case in Alabama occurred in Fairhope, an upscale town on the Eastern Shore of Mobile Bay. Jim Small, the Laboratory Director, drove me to the scene of a middle-aged white female, who while visiting friends, was found dead lying on the ground next to the heat pump located below the second story window of the bedroom she had been using. The previous night there was party at the house. The body was clad in a nightgown. Neither the surrounding area of the lawn nor the bedroom had any signs of a struggle; the bed in her room had been slept in. The window sill was only two feet above the floor. The bottom portion of the tall window was open. The sill had no skid marks or smudges indicative of the body having been pushed out of the opening. The coroner had transported the remains to the preparation room of a funeral home where I went to exam the embalmed body. As a traveling pathologist, I came prepared with the necessary tools: a scrub suit, sneakers, plastic apron, face mask and surgical gloves and the necessary instruments of hand lens, assorted knives, scalpel handles, ruler, recorder and camera. The preparation room had plastic gowns, shoe covers and examination gloves.

On external examination, the only injury was a blue was a blue contusion on the occiput. The head was easily movable on the neck. Internal examination of the scalp confirmed the bruise. The thorax and abdomen had no injuries. The soft tissue along the anterior cervical spine was hemorrhagic. Reaching up into the neck I could palpate a fracture. Since the funeral home had no x-ray machine to verify this, utilizing the technique of an anterior neck dissection taught me by John Devlin in New York, I removed the entire cervical vertebral column with the spinal cord intact. Further dissection exposed a fracture separation at C1/C2 and a contusion laceration of the cervical spinal cord. This answered the question of the cause of death, blunt force injuries of the head and neck. All the circumstances surrounding the death indicated that she had died from an accidental fall. The question of how she had fallen out the window remained to be answered. During the process of draining the blood from the body prior to injecting embalming fluid, the funeral director had obtained a blood sample for toxicology which would take weeks for an answer. As it turned out, not unexpectedly, the victim had elevated blood alcohol content. For the four years prior to completion of the new laboratory, this type of case set the pattern for my investigations.

The summer of 1979 took me across south Alabama. My longest day occurred in May when I traveled 404 miles across the southern part of Alabama from Mobile to Dothan and back to Mobile with several stops along the way to perform autopsies. I started about 6:00 am from home, traveling first along US 98 across Mobile Bay to US 31in Bay Minette (U.S. Interstate 65 across the Delta of the Mobile River had not been completed) and then US 84 to Enterprise. There I met Earl Bankston, the coroner of Dale County., who took me to his funeral home, where I performed an autopsy on a three-month-old infant who had died suddenly and unexpectedly. Death of an infant required my obtaining tissue specimens for microscopic examination, vitreous fluid for electrolytes and blood for toxicology to be transported to the lab. Upon completing that examination, I drove another 20 miles to Dothan, where I performed an autopsy on a decomposing body that had been brought to the Flowers Hospital, not the usual disposition for decomposed bodies which most often were sent to a funeral home. After documenting the gunshot wounds and recovering the bullets, I got back in my car and drove 120 miles to the Johnson Quinby funeral home in Atmore to examine a motor vehicle crash victim. Upon completion of the examination, I made the trip back home arriving after midnight the following morning. The trip established the willingness of the coroners to utilize the services of a forensic pathologist and the willingness of that pathologist to render the services.
After this and other similar journeys it became apparent that I could not sustain such a schedule indefinitely. Huey Mack, Senior, Coroner of Baldwin County, who had witnessed my first autopsy, arranged with ADFS to use his funeral home for examinations of bodies from counties other than Mobile. This required transportation for which counties did not have the funding to implement. Consequently, the Department purchased vans and designated the investigators as drivers, which facilitated their attending scenes and securing information about the circumstances surrounding the death. Some coroners took it upon themselves to transport the bodies. One came across the state from Dothan in the back of a pickup truck. Another, a baby from the same county, lay on the console of the Corvette driven by the coroner's son. Even the contract drivers of the Department created problems. One driver got in line at a fast food restaurant with a body in the back of a station wagon; another led the football victory parade around town while carrying a body inside the vehicle. Although the Mack Funeral Home provided examination space, it did not include most of the necessities for performing professional autopsies.

Assistance from the School of Medicine of the University of South Alabama

In order to provide professional services, particularly on infant and children deaths, I needed in addition to toxicology other tools for resolving cases. After an interview, Doctor Edmund Dowling, Professor and Acting Chair of the Department of Pathology at the University of South Alabama, offered me a position as an Assistant Clinical Professor. This provided some prestige in the medical community, access to the department autopsy room with deniers, the clinical laboratory with histology, chemistry (vitreous humor, a first for that lab) bacteriology and a secretary dedicated to typing autopsy reports. In addition, and most importantly, the position brought me in contact with Doctor Gary Cumberland, who had an interest in forensic

pathology. Dr. Cumberland provided expert assistance, became a trusted colleague and went on to be Chief Medical Examiner in the First Judicial Circuit of Florida.

Another case in Baldwin County extended my reliance on the University of South Alabama. A forest ranger searching for the origin of smoke found a burning car among the pine trees on the north side of US Highway 31. The entire car was engulfed in flame, the result, as subsequently discovered, of its being doused with diesel fuel. Once the fire had subsided and the vehicle cooled enough to permit inspection, the sheriff and coroner found the passenger compartment burned out and devoid of any human remains. Burned, fragmented remains were found in the trunk of the car. Brian Delmas, my investigator, and I extracted the mostly skeletonized, partially calcined remains and transported them to the autopsy room at the Medical Center. The partially charred tissue of the pelvis contained a prostate gland, making gender determination obvious. More definitive identification, however, was needed. No teeth remained. Among the skeleton remains were the patellae, which would a means for solving the identity puzzle. When Byron, "Gil" Brogdon, Chief of Radiology and a well-known expert in forensic radiology, surveyed the remains, he noted that the victim had a dorsal defect of the left patella, a congenital failure of complete reabsorption of that bone. Research led to the recovery of an antemortem x-ray of the left knee at a local hospital. Gil was able to superimpose images made from the left patella onto the ante-mortem x-ray. This and other pieces of evidence, including, the car registration, led to presumptive identification. Meanwhile, Ms. Jane Hopf, an assistant professor in the Department of Anthropology, meticulously reconstructed the fragments of the skull to expose a gunshot exit wound of the occiput. Her examination confirmed the death as a homicide.

Working Cases for the Coroner of Mobile County Provided Steps toward the Medical Examiner System.

The situation in Mobile County differed from the other counties in several ways**:** First**,** the law required the coroner to be a physician or surgeon. Second, he Coroner had the authority to perform any and all autopsies upon bodies of persons who died from violence or other causes in order to ascertain or verify the cause of death. Although the law stated that the body of those dying from violence was not to be moved, it did not require that the coroner attend the scene. Nor did the law mention the manner of death.

Dr. Earl B. Wert, a board-certified pathologist, ran the busiest hospital laboratory in Mobile and had served as coroner for over twenty years, mainly out of wanting to serve the community. His secretary operated the coroner's office, taking police calls, arranging for bodies to be sent to an appropriate funeral home and notifying Dr. Wert or one of his three assistants of the need for an examination. Dr. Wert appreciated the position and enjoyed working cases but did not like dealing with lawyers and testifying. His three partners preferred not to perform autopsies at all. Without any hesitation, Dr. Wert made me a deputy coroner. Consequently, I had the opportunity to practice forensic pathology on many homicides; for the remaining nine months in 1979, I examined 53 of the 87 homicides. This type of involvement in Mobile

continued for the next three years: in 1980, 89 of 94 cases, in 1981, 100 of 104 cases and in 1982 all but 2 of 95 cases.

The proof of the pudding for forensic pathology comes in the court room where the expertise of the pathologist and pathologist's ability to transfer the findings of an examination to the jury becomes public.

The call from the police dispatcher to attend the scene of a shooting in west Mobile came around 2:00 am. The victim, a middle-aged white male, lay supine in bed with his head turned slightly to the left and partially resting on his left arm bent at the elbow. A classic, hard contact shotgun wound distorted his right eat; the exit was in the vicinity of opposite ear. The victim's wife, who had confessed to the shooting, had been confined to another room. She was the victim's second wife. According to her, she had been cleaning *her shotgun* in bed while her husband slept. While rubbing the trigger guard with a Q-tip, it slipped, and the gun discharged against her husband's ear. Her husband had been a prosperous real estate agent with substantial life insurance. I ruled the death a homicide. The grand jury indicted her for manslaughter. She had claimed claiming that it was an accidental shooting. At trial when the district attorney asked how I ruled the manner of death, I had hardly gotten "hom…" out of my mouth when the defense attorney objected. The judge summoned the lawyers to the bench and called for a session in his chambers. As I tried to explain that the manner of death did not imply to intent, it occurred to me that in previous trials testimony about the manner of death issue had not arisen. No matter, the judge ended the session with: "We don't want to use homicide in the trial of this little lady". She was found guilty of criminally negligent homicide. The district attorney later told me that the coroner and his associates never testified about the manner of death, limiting their testimony to the cause. The difference between a forensic pathologist who interprets injuries and a hospital-based pathologist was evident.

Another concept lacking in the coroner's office was the cause of death being the underlying disease or injury that started as series of pathophysiological changes resulting in death. Cases of trauma; homicide, accident or attempted suicide admitted to a hospital and dying later from complications, often did not get reported to the coroner's office. I learned of this at a community meeting about widening a narrow bridge on a major highway, the scene of many fatalities. Several citizens acknowledged crash victims who had died in the hospital but were unknown to county officials attending the meeting designed to learn the extent of the problem. The coroner's office was not a repository of trauma deaths in the community.

Expansion of the Medical Examiner System

Forensic Science begins at the scene. Attending death scenes proves the value of forensic pathology for determining the cause and manner of death. At 6:30 am on March 21, 1989 there was enough light to make no mistake that the body of a young black male was hanging from a tree. The hangman knot protruded above and laterals to the left side of his neck; the rope was looped over a crotch in the tree some ten feet off the ground. The position of the body, however, indicated that this was not a simple hanging death. The left arm extended from

the shoulder with the left forearm bent across the chest of the deceased, parallel to the ground. The right arm extended laterally from the shoulder with the right forearm held at a forty-five-degree angle from the ground. The legs were half flexed; the feet barely touched the grass. The body was stiff and cold to my touch, not limp and warm as if he had died there in the cool March morning. Rigor Mortis had set in before the body was strung up. He had died in some other location and long enough previously to develop rigidity and then be transported to where the body was found. The police had roped off the far end of the street that intersected with Springhill Avenue, the main thoroughfare in the neighborhood. The crowd was large, quiet and contained.

The case of the lynching of Michael Donald, a sixteen-year-old black male, by members of the Ku Klux Klan in retribution for the mistrial of the prosecution of a black man accused of killing a white policeman in Birmingham, Alabama had begun. At autopsy, the body showed evidence of having been beaten, stabbed and strangled with the hangman's noose. As the case unfolded over many months, Donald had been walking to the store when he was picked up and taken across Mobile Bay to Baldwin County where he was killed and then transported back to be strung up across the street from the home of the Klan Members who had killed him. The murder made national news. After several years of investigation, two of the Klan members were arrested and convicted. One was executed. The other, on the basis of his confession and testifying for the State, was sentenced to life without parole. The third died before he could be tried. Through the efforts of the Southern Poverty Law Center headed by Morris Dees, Mrs. Donald, Michael's mother, successfully sued the Klan for a wrongful death and was awarded $7 million of dollars. The settlement broke the financial backing of the Klan.

The resolution of another case in Mobile rested on the manner of death. Blakeley Todd Bell died on August 16, 1981, having lived only forty-five days. The previous day, the Alabama Country Music Group was playing a concert in Mobile. The sixteen-year-old father indicated that he wished to attend, but his teenaged wife insisted she had to work, leaving him to care for the infant. According to the father, he placed the infant on the kitchen counter while he mixed formula. Evidently when the sound of the concert music dimmed from the bedroom radio, he left the infant to turn up the volume. Upon returning he found the infant unconscious on the floor. He called his wife at work. She returned home and found the baby unresponsive and not breathing. The father claimed that his son had rolled off the counter onto the floor. The parents took him to the local hospital, where he was found unconscious and apneic; hours later he died. The following morning, Dr. Wert performed an autopsy which revealed a subdural hemorrhage and marked cerebral edema.

Several days later a pediatrician on the staff signed the death certificate. The cause of death was Cardiac Arrest due to Cerebral Edema due to Head Trauma. The manner of death was ruled accidental. A month later, a pediatrician in the same group, Dr. John Schiener, wrote a letter to Lieutenant Prine in the Youth Division of the Mobile Police Department suggesting that the infant had died from abuse; Dr. Schiener had previously seen the child and suspected abuse but did have enough evidence to substantiate his impression.

The police turned the letter over to the District Attorney, who came to me and asked what should be done. I said we needed to reexamine the body. On September 24, 1981, my investigator, detectives and funeral personnel exhumed the body and transported it to the Medical Center where I performed a second autopsy. An Assistant District Attorney, Ms. Nicki Patterson, and several police officers were in attendance. A full body x-ray told part of the story; radio-opaque embalming crystals accentuated the internal organs, which had not been removed. On internal examination, it became obvious that the first prosector had peeked inside and obtained small pieces of tissue for microscopy. The pleura had not been stripped; doing so exposed seventeen rib fractures. The dura mater had not been stripped; removal revealed a basilar skull fracture in addition to the fracture of the calvarium. It was obvious to all present the injuries were not commensurate with the story. The manner of death was homicide. Subsequently, the father was arrested and charged with murder. At trial, he was found guilty of manslaughter.

The results of the second autopsy embarrassed Dr. Wert, who as the grandfather of pathology in Mobile, was held in high esteem. Although he continued to perform autopsies for a few months, in May of 1982, he resigned. The Mobile County Sheriff and the Chief of Detectives in the Mobile Police Department recommended me to the County Commission to succeed Dr. Wert. Without any fanfare, the Commission appointed me Coroner of Mobile County – the first forensic pathologist to hold that position.

Establishment of a Forensic Laboratory

The appointment came a propitious moment. The new laboratory housing personnel and equipment for pathology, toxicology, serology, controlled substances, trace evidence and firearms- toolmarks was moving toward completion. In the summer of 1981 the architect, Edward Baumhauer, and I met in Dallas to tour the Southwestern Institute of Forensic Sciences where Dr. Charles Petty was chief. The visit provided Mr. Baumhauer with the basic concept on which he based a smaller but still functional laboratory for all disciplines. We moved into the facility on January 1, 1983.

The Mobile County Medical Examiner System

The big push toward the Mobile Medical Examiner System came in the summer of 1987. ADFS Director Carlos Rabren felt this was the time to have a member of the Alabama House of Representatives sponsor a bill abolishing the coroner's office in Mobile, replacing it with a medical examiner system. In July of that year while on vacation, Director Rabren called requesting me to come to Montgomery for a presentation. I outlined a law replacing the lay coroner with medically qualified pathologists whose mission was to implement the Model Middle Examiner Law already in place in Birmingham. Whatever Mr. Rabren and I said must have worked; the bill became law, Alabama Code Act-87-525.

The law had no provision for a Chief Medical Examiner; however, during my twenty-seven years with ADFS, I served as the senior forensic pathologist at the Mobile Regional Laboratory and,

once the law passed, as the senior medical examiner at the Mobile Office of the Medical Examiner. Dr. Jerry Francisco, Chief Medical Examiner of Tennessee, inspected the office in 1988; subsequently, the office was certified by NAME. This was my major accomplishment as a forensic pathologist.

During my twenty-seven year tenure, several colleagues, all board certified forensic pathologists, joined the office and made the system work: Gary D. Cumberland, Gregory P. Wanger, James C.U. Downs, Julia C. Goodin, Dwayne A. Wolf, Kathleen Enstice, Lesek Christowski , Song Wong, Marie A. Herrmann, Leon Hart and Karen L. Kelly.

Expansion of the Medical Examiner System

Examining cases from Escambia County led to expansion of the medical examiner system. In 1993, Daniel Raulerson, M.D., a local internist, decided to run for coroner. Once Dr. Raulerson became coroner, he had a State Representative replace the coroner's law with the Model Medical Examiner Law. Dr. Raulerson and or his medical colleagues signed the death certificates and sent all cases requiring autopsies to Mobile.

Difficult Cases I have managed.

There are no easy cases. Every medical examiner's office needs one "Mass Disaster". These are multiple fatal events that test every operational facet of any medical examiner's office or cases that stretch the capabilities of the office beyond the busiest of days. The Mobile Office responded to such an event on Tuesday, September 22, 1993. The Amtrak Sunset Limited passenger train from Los Angeles to Jacksonville Florida traveling at 80 miles an hour jumped track crossing a bridge over Bayou Canoe in the Delta of the Alabama River. The rails had shifted following a barge striking a piling in the fog. The engine with two drivers went airborne, ploughing into the swamp on the opposite bank. The baggage car with two trainmen followed onto the opposite riverbank and caught fire. The passenger car directly behind the baggage car went off the bridge and sank into the water, turning over. The car behind it went partially into the water. The automatic airbrakes deployed, stopping the remaining four cars. Forty-seven people, including the four trainmen died. The survivors had no injuries.

The problems were many. The only access to the crash site was by boat, and the nearest staging area was at a port several miles down-stream. After rescuing the living, barges from local timber companies transported responders from the sheriff's flotilla and divers from a Reserve Marine Reconnaissance Unit to the scene. The divers, without using scuba equipment, that is free diving, because of poor visibility and all the obstacles within the passenger car, proceeded to remove the bodies. Once loaded they were brought to the staging site where multiple transport vehicles waited. Unfortunately, deputies traveling with the victims began to remove wallets and other means of identification without tagging the effects. A controversy between heads of various law enforcement agencies resulted in last minute changes at the staging site. It only became clear later that because the crash occurred on an inland waterway the investigation was under Coast Guard jurisdiction. Recovery of the victims in the engine and baggage compartment had to wait several days until heavy cranes on barges could be towed

from New Orleans. By mid-afternoon on Tuesday most of the bodies of the passengers had reached the Mobile Laboratory of ADFS. The problems inherent in a mass disaster, defined as more fatalities than the office can handle conveniently include identification and determination of the cause and manner of death. Using Polaroid and 35mm photographs (Before digital photography), the bodies were photographed before and after the clothing and personal effects were removed, catalogued and stored. The usual procedures of weighing, measuring, and performing detailed external examinations were done in all cases. All the trainmen were x-rayed and autopsied; thirty-nine of the passengers were also autopsied (should have been a 100%). The operator and assistant died from mechanical asphyxia, buried in muck. The trainmen in the passenger compartment died of smoke inhalation and body burns. The passengers drowned. The manner was accident.

Although the bodies of the passengers were intact with no facial disfigurement, thus making visual identification by photograph seem simple, it was not. The ages of the passengers ranged from six to 78 with thirty-three over 65, senior citizens enjoying their Amtrak tickets. Members of the ADFS using questionnaires and Polaroid identification photographs interviewed relatives and friends of the deceased passengers at a local hotel where blocks of rooms had been retained by Amtrak. Trains have no manifest. There are no assigned seats. Moreover, people can and do move about. For the men who had their wallets in their pockets the procedure was reasonably straightforward. The women's purses were scattered throughout the cars. Many of the relatives had not seen the decedents for year. Some had undergone surgery, others had remarried. Nonetheless all the passengers had been identified by that Friday. The trainmen, who had been recovered by Friday, were identified on Saturday. All the bodies had been released in six days.

Lessons learned: Practice of handling mass disasters with all agencies involved is essential. The medical examiner office had practiced a water rescue earlier in the summer, which helped. Scientific identification should be used on all cases, if possible.

Accreditation of the Mobile Laboratory by the American Society of Crime Laboratory Directors/Lab

By ADFS tradition the person performing autopsies assumed the title of Laboratory Director, which for the most part was for administrative purposes. In my case, not being conversant with the laboratory sciences, Dr. Barnhill, the Toxicologist discharged most of these duties. Unfortunately changed when Dr. Barnhill's retired in 2003, the year the Department's four laboratories were scheduled to be inspected by ASCLD/LAB for accreditation. With the help of all ADFS personnel and most especially, Ms. Darlene Williams, the senior secretary, we pulled all the documents together and were inspected and accredited that August.

Academic Involvement through Research, Education, and Training.

During my thirty years as a forensic pathologist, I published several papers in the Journal of Forensic Medicine and Pathology and the Journal of Forensic Sciences and presented abstracts

at the Annual Meeting of the National Association of Medical Examiners and the American Academy of Forensic Sciences.

By working in the Mobile Medical Examiner's Office for a year, Alfredo Paredes, M.D. met the requirements for Board Certification and, after passing the examination, went to work as a Forensic Pathologist at the ADFS office in Montgomery, Alabama.

As Clinical Professor of Pathology at the University of South Alabama College of Medicine for thirty years, I instructed residents in the technique and art of the autopsy, supervised residents during their month rotation in forensic pathology, performed autopsies with second year medical students, gave lectures on pathology and forensic pathology to residents and students. At the Mobile City Police Academy, I lectured about scientific death investigation.

Four of our residents from the University of South Alabama College of Medicine, Carolyn Cohen M.D., Jennifer Corneal M.D., Allison Hunt M.D., and Dalia Geli, M.D. completed Fellowships in Forensic Pathology.

Lessons Learned as a Medical Examiner

The amount of accurate information about a case is inversely proportional to the distance from which the case originated.
A little history clears the mystery (Thanks to Marcella Fierro, M.D.)
Most deaths are not the result of criminal activity.
The Dead are No One's Constituent (Thanks to James Luke, M.D.)
Rigor Mortis does not Defy Gravity (Thanks to Brian Blackbourne, M.D.)
Most Lay Coroners do the Best They Can (The system is unmanageable without properly trained personnel.)

Changes in Forensic Pathology during My Career

For the better
The Digital Revolution
DNA individualization
Public awareness of forensic science
Increased certification and accreditation of pathologists and laboratories
For the worse
The litigious nature of society, the blame game
Inflated expectations of forensic capabilities

Advice for Forensic Pathologist Entering the Field

Prior to entering a pathology residence, consider an internship in a clinical specialty, surgery, emergency and internal medicine. I found it important for evaluating cases.
Learn all you can about the history of the position you are considering and the political-economic landscape of the position you are considering.

Knowing what I do now, would I "do it again" under the same circumstances as when I began, or under today's circumstances?

I would certainly seek a position as a forensic pathologist working as a medical examiner. I would, however, consider a system which was either a separate administrative entity or under the public health department, but not one under law enforcement.

Lakshmanan Sathyavagiswaran, M.D.



Chief Medical Examiner-Coroner
Los Angeles County California (1992-Present)
NAME President 2010

July 2011

Why did I select forensic pathology as a career?

I desired to be a medical detective and wanted to help bring closure to families.

Places and times I served as Chief Medical Examiner-Coroner

I was the acting Chief Medical Examiner-Coroner from April of 1990 to June of 1990. I was appointed Chief Medical Examiner-coroner in 1992 to the Present.

Major accomplishments as Chief Medical Examiner-Coroner

I believe my major accomplishments have reflected the many improvements in the professional image of the medical examiner-coroner office. The improvements and accomplishments include:

Attaining and Maintaining NAME, ACGME, ASCLD (Provided support) and POST Accreditation for the office.
Increasing the number of professional consultants (31) for the office in different subspecialties.
Improving the Health and Safety measures of the office through implementation of policies and procedures.
Developed and strengthened the visiting Physician-Scholar Program.
Improved relations with the County Government Administration.
Upgraded and expand the office facility with a $32 million program to refurbish and renovate the existing facility with new HVAC and body storage capacity.

Instituted systems of automated reporting to public health authorities.
Implemented funding and planning for DNA laboratory for the ME/Coroner.
Assisted in the development of the Electronic Death Certificate System in California.

Efforts on behalf of forensic pathology and the forensic sciences

I am a co-author of the first published textbook in Forensic Neuropathology.
I have been involved in the training and education of over 65 forensic pathology fellows, hundreds of pathology residents, medical students, emergency room, family medicine residents, Law enforcement personnel Coroner investigators, Paramedics, Public defenders, and District attorneys, during my career as Medical examiner, Senior physician, Chief of Forensic Medicine and Chief ME-Coroner.

Recollections of places I have trained and worked

I worked part-time at the New York Medical Examiner Office where I had the opportunity to train under Drs. Dominick DiMaio, Devlin, Presswala, Hyland, and Michael Baden. While in the NY office, I gained valuable experience in autopsy dissection techniques, evidence collection, and identification and I learned the importance of toxicology testing.

Comments about people who trained me and from whom I have learned

My medical school mentor, Dr. Ganapathy taught me the value of the autopsy in diagnosing infectious diseases and the role of the pathologist in public health.

My internal medicine program Directors Drs Harvey Chase and S. Bleicher emphasized compassionate patient care , importance of obtaining a good history, be an attentive listener and explain diagnosis to the patient and family in plain language

My Infectious disease fellowship Directors Drs. Dickinson and Thadepalli emphasized the importance of the microbiology laboratory /radiology staff interaction in making a proper diagnosis and the role of the ID physician in infection control.

My pathology residency program director, Dr. Begg, a gracious and kind man, taught me to be open-minded and thorough. He emphasized to do the right thing, to share knowledge with others, and to never assume anything, but always ask questions.

Dr. Wisely, my forensic pathology fellowship program director, instilled the need to be sensitive to families and acknowledge when you are wrong. I learned the value of the scene investigation as a part of good training in forensic pathology.

Dr. Noguchi, my former boss and former Chief Medical Examiner-Coroner, taught me that the family, next-of-kin, and the public have a right to know the facts of the case. He also instilled in me the importance of giving back to one's medical community through the Visiting Physician Scholar Program.

Dr Choi, my former supervisor in the Los Angles Medical Examiner Office, fine-tuned my approach to handling forensic cases.

Finally, the late Dr. Ronald Kornblum, my other boss who followed Dr. Noguchi, gave me valuable management skills and taught me to be broad-minded and the value of establishing policies and procedures.

Recollections about people I have been involved in training in the field of Forensic Pathology

I have trained many fine forensic pathologists. A few have become chief medical examiners: Dr. Greenwald-Maine, Dr. Landron-Virgin Islands, and Dr. Marzouk, Senior Forensic Pathologist at the AFIP.

Major controversies and frustrations in completing my responsibilities

Inadequate budget and constant staffing issues, along with the need for a new Forensic science center have mostly have been addressed during my tenure. Also, handling high profile trials/major disasters all have been a constant source of frustration but have also added immensely to my overall professional experience.

Academic involvement through research, education, and training

I graduated from medical school from Madras University in India. I have been affiliated with the Los Angeles County Coroner's Office for over thirty (30) years and was appointed as Chief Medical Examiner-Coroner for Los Angeles County in 1992 by the Board of Supervisors. The office is the only Coroner's Office for Los Angeles County and serves an area of 5,000 sq. miles, 88 cities, and interacts with 52 different law enforcement agencies.

I am board-certified in 6 medical specialties including Anatomic, Clinical & Forensic Pathology, Internal Medicine, Infectious Disease, and Geriatrics. I am is also certified in pathology by the Royal College of Physicians and Surgeons of Canada. I am a Clinical Professor both at USC-Keck School of Medicine and at UCLA, Geffen School of Medicine.

I addition to my own abstract presentations, journal articles, and book chapters, I have been a supporter of publications by staff and fellows in the medical examiner-coroner office. We have improved the continuing medical education program through video conferencing and enhanced mode conference formats along with the use of the psychological autopsy.

Legislative changes in which I was involved and provided input

AB777 – Establishes procedure for cases where the ME/Coroner is considering withholding permission for organ procurement.
AB 275 – Requires California Coroners to collect DNA samples from unidentified decadents and submit to DOJ for identification.

My contributions to the field of forensic pathology

Development of a business continuity plan for Department of the Coroner (DOC) with division chiefs.
Development of strategic Plan for DOC to improve service to public.
Develop a policy/procedure for handling high profile/media interest cases.
Practiced Cost effective Forensic Medicine and Pathology without sacrificing Quality.
Coordinated development of a large teaching collection data base from ME/Coroner case material for DOC staff use.
Enhanced the use of the psychological autopsy process by developing a consent form for the process.

Perspectives I gained as a medical examiner, how my work experience changed me, changed my life, and what I learned from my work

Do the right thing and you sleep well at night.
Team work is the Key.
Do not Attack, Belittle or Criticize (the ABC's of Sure Failure).
Acknowledge other people's expertise, build relationships, and develop cooperative ventures (the ABC's of Guaranteed Success).
Always listen to families. Families know the decedent better than you--Listen to the families and communicate with them in a compassionate manner
Apologize when you have made a mistake. Take corrective action plans to prevent it happening in the future.
Acknowledge your limitations and be bold to say "I don't know."
Be truthful to the media. But NOK/family comes first.

Difficult High-Profile cases I have managed

During my career at the Department of Coroner we have responded to several disasters. These have included a wide variety of environmental, man-made disasters, as well as the deaths of high-profile persons.

1986: The Cerritos air crash

1991: LAX US Air crash and Whittier earthquake, Brad Davis

1993: Nicole Brown Simpson, Ronald Goldman

1992: Los Angeles Riots

1994: Northridge Earthquake

1995: Linda Sobek

1996: Korean Air Flight 801 – Guam – (Assist/DMORT), Sandra Orellana, Don Simpson, Haing S. Ngor, Ray Combs, Margeaux Hemingway

1997: Christopher "Notorious B.I.G." Wallace, Brian Keith, Emil Matasareanu/Larry Phillips (North Hollywood Shootout)

1998: Angel of Death – Glendale (20 exhumations)

1999: Nerine Shatner

2000: Steve Allen, Christopher Antley

2001: Bonnie Lee Blakely

2002: Teresa Graves, Glenn Quinn, Robin Crosby, Dee Dee Ramone, Yolanda, Schlessinger, Irv Rubin

2003: Nell Carter, Lana Clarkson, Lynne Thigpen, Michael Jeter, Trevor Goddard, John Ritter, Fred Berry, Elliott Smith, Willie Shoemaker, Jonathan Brandis, Kellie Waymire

2004: Robert Pastorelli, Rick James

2005: Glendale Metrolink multiple fatality train incident, Matthew McGrork

2006: Chris Penn, June Pointer, Michael Gilden

2007: Richard Jeni, Benjamin "Bob" Clark, Chad Butler (Pimp C), Donda West

2008: Chatsworth Metrolink train accident (25) and handled several high profile cases and Christmas/Santa Shootings – Covina (9), Porter Ranch Family Shootings – Porter Ranch (5), Long Beach Homeless Encampment Shootings – Long Beach (5), Christopher Bowman, Maila Nurmi, Brad Renfro, Scott Ruffalo, Christian Brando, Paula Goodspeed, David Foster Wallace

2009: Marilyn Chambers, Michael Jackson, Gene Barry, Ricardo Montalban, Brittant Murphy, E. Lynn Harris, Felicia Tang, Lily Burk, Amy Farris, Jeffrey Tidus, Wilmington Family Shootings – Wilmington (7)

2010: Willie Davis, Corey Haim, Merlin Olsen, Robert Culp, Teena Marie, Simon Monjack, Roni Chasen, Michael Blosil Bryan, Casey Johnson, Peter Lopez, Sally Menke, Mitrice Richardson, Lynsie Ekelund (Orange County case)
Acton Air Crash – Agua Dulce – (3)
Grim Sleeper Investigations – (10 +)

2011: Monte R. Talbert (M Bone), Yvette Vickers, Jeff Conaway

How I dealt with job-related stresses, anxiety, and personal performance issues

I have a great wife and daughter who always stood beside me in all challenges in my career

Other recollections

My visiting physician scholars whom I have trained over the years from Asia, Europe, North America and the Middle East.
My medical examiners, consultants, and all other Coroner staff – very supportive of me and Department Of Coroner mission.
Always had the support CAO/CEO and Board of Supervisors of LA county

Advice for forensic pathologists entering the field

Be passionate on what you want to do.

How has forensic pathology changed during my career, for the better and for the worse

I think it has made me a better man; I am humbled every day.

Knowing what I do now, would I "do it again" under the same circumstances as when I began, or under today's circumstances

Yes.

Personal information such as family, hobbies and interests

I love movies and Broadway shows. I also enjoy travel with my family. My hobbies include: numismatics and philately and I love to walk.

Dr. Charles J. Stahl – Oral History Interview

Armed Forces Institute of Pathology Oral History Program

SUBJECT: Dr. Charles J. Stahl
INTERVIEWER: Charles Stuart Kennedy
DATE: June 15,1994

Q: This is an interview with Dr. Charles J. Stahl, distinguished scientist of the Armed Forces Institute of Pathology. Dr. Stahl, we like to start these interviews off with getting an idea of where you came from. Could you tell me when and where you were born and something about your family.

DR. STAHL: I was born in Philadelphia, Pennsylvania, in the section of Germantown, on August the 5th of 1930. My father at that time was a banker and subsequently became a trust officer of the Northwestern National Bank, which is located in Philadelphia. My mother was a housewife. Both of them are of German-American background, because they have Germanic names, so I would consider myself a Pennsylvania German. My father originally lived in central Pennsylvania, near Pottsville, a place called Ashland.

Q: That's John O'Hara country.

DR. STAHL: That's right. And then moved to Philadelphia with his parents as a little boy. He was born in 1897, and my mother was born in 1903. We lived in the Germantown area for about four years, and then moved from there to a section of Delaware County known as Kirklin. Kirklin was at the junction of City Line Avenue and Westchester Place, which turned out to be the Main Line. We lived in a house, a single- family home. I have a sister, born about four years later, in 1934.

At that time, I started going to school at a Quaker school, on City Line Avenue, which was Friends Central School in Overbrook, Pennsylvania, and attended that school until I was in the fourth grade. We also had a summer place, which was a farm, in Montgomery County, Pennsylvania. We moved to that farm in 1939 and lived there until 1953. So I actually grew up in a farming area, which was a true Pennsylvania Dutch area, where the people still spoke Pennsylvania German. They communicated that way. Many of the school children who entered first grade couldn't speak English at that time. And in fact, the school had just consolidated a township school from one-room schoolhouses about four years before I started.

Q: Did you learn to speak Pennsylvania Dutch?

DR. STAHL : No, I didn't, because as time went on, the children no longer spoke it at home, and the older people were the main people who spoke PennsylvaniaDutch.

Q: You graduated from high school when?

DR. STAHL: In 1948. We actually graduated from grade school. In those days, in 1944, we had a graduation ceremony from grade school, because a lot of the boys went to work on farms and they didn't go to high school. I would say that out of our elementary school class, probably about a third stopped going to school at that time and went to work on a farm.

Q: You graduated from high school in 1948. Sometimes people catch the bug to get into the medical profession early on. Did that happen to you?

DR. STAHL: Yes, I was involved for a number of years with the Boy Scouts, which are very active in that area. I became the first Eagle Scout in our town, which was Harleysville, Pennsylvania. Ultimately, I became the assistant scout master, a merit badge counselor, provisional leader at the council camp, which was located in Sudleytown, Pennsylvania, called Valley Forge Council Camp Delmont. As a result of this interest in first aid and other types of things dealing with health and safety, I did develop an interest in medicine.

And this was fostered by our family physician, who had graduated from Hannaman Medical College in the late 1930s and had gone into the Army in 1941, remained on active duty until 1945, when he returned to Harleysville as the town physician. So we knew each other, and he fostered my interest in medicine.

Q: Well, you went off to college then in 1948. Did you start a pre-med program at that time?

DR. STAHL: Yes, I was a pre-med student at Ursinus College in Collegeville, Pennsylvania. The course consisted mainly of courses in biology and chemistry, with a certain number of required courses that everybody took. We all had to take languages; we all had to take math, English, history, economics, courses of that type. But the major courses were chemistry and biology.

Q: Was this a major element of Ursinus at that time?

DR. STAHL: Ursinus was an interesting college. It had a Navy V-12 Program during World War II. And this was an input for physicians going into medical school.

Q: For the record, the V-12 Program was a hurry-up course to bring people into the Navy as officers, in one way or another.

DR. STAHL: Yes, that's right. But many of those people in that V-12 Program also went to medical school and became Navy doctors. Some of the professors were there on active duty as instructors in that program, and after 1945, they remained as professors at the college. The college was rather interesting. It was known for two things; it was known for pre-med

and women's phys ed. They didn't seem to combine, but many of the women were experts in field hockey, and some of them later on became members of the Olympic teams or became professors at othercolleges.

During my first year, we had about 300 students. It was a small college, about 1,200 total people, and 200 out of the 300 students were pre-med. By the time we graduated four years later, about 12 of us went to medical school. One went to osteopathy college, one became a veterinarian, and one became a dentist. So we had about 16 out of 200 going on to graduateschools.

Q: What happened? Why the falloff?

DR. STAHL: Well, it's not an easy program, and people lost interest generally after the first or second year and switched to some other field.

Q: Graduating in 1952, it was still the Korean War, and also, you grew up in what you might call the military age. Almost everybody, whether it was your older brother or older cousin or something, had served in the military. Did this sort of point you towards the military, or was it just the government that pointed you towards the military?

DR. STAHL: No, at that time, there was an active draft. If you went to college, you might be deferred, but it wasn't necessary, depending on your home draft board. You would not be deferred if you failed in your courses and were dismissed from college. You would be drafted. If you were in an essential career field, such as pre-med, and did this successfully, you were generally deferred.

As soon as I graduated, I looked towards military programs to see what was available. Of course, I was accepted to medical school at the end of my junior year, so I knew, when I was in my senior year, that I was going to medical school that next summer.

In May of 1953, I was commissioned as an ensign in the Navy, and served on active duty during the summers until I went on permanent active duty November, 1955, during my last year of medical school. When I graduated in 1956, I was promoted to lieutenant junior grade and became a Naval intern.

Q: What pointed you towards the Navy? At that time, we had a separate Air Force, just fairly new, and, obviously, a separate Army.

DR. STAHL: I think its association with Ursinus College was one factor. Secondly, it was one of the areas in Philadelphia that had the most attention. The Philadelphia Naval Base at that time was quite large. And we had a large Naval hospital in Philadelphia, which at that time had 1,000 beds active. It was larger than Bethesda and many other military hospitals. Valley

Forge Hospital was also active in the Army. But the Philadelphia Naval Hospital was a premier hospital, a major teaching hospital, and had an excellent staff at that time.

Q: What did you do in these part-time times during the summers as an ensign?

DR. STAHL: I went on active duty. Most of us think of going on active duty for two weeks active duty for training. But in this special program for medical students (again, I was one of the first people to go into this program, which was brand new), we went on active duty for long periods oftime.

One summer, I spent the entire summer on active duty. I was assigned varying responsibilities. In one case, I was assigned responsibility for a surgical ward, under the supervision of one of the staff surgeons. So I essentially functioned as an extern and admitted patients, wrote up histories and physicals, assisted in the operating room with surgery. We did the same thing in pediatrics and OB/GYN, internal medicine, and pathology. During that summer, I had some exposure to pathology for a couple of weeks, and it was sort of interesting.After my sophomore year, I went back again, and I had, I believe, 60 days plus two weeks of active duty for training. Some of this time I spent in psychiatry, but the balance I spent in pathology. And that, again, fostered my interest in the field of pathology.

Q: Where did you go to medical college?

DR. STAHL: Jefferson Medical College, in Philadelphia. And this was before the days when it was a university. Jefferson Medical College is now part of Thomas Jefferson University. The college itself had been founded in the early 1800s, and it's one of the oldest medical colleges in the UnitedStates.

Q: Was there a hospital attached to it?

DR. STAHL: Yes. Jefferson Hospital is a very large Philadelphia hospital.

Q: When did you finish there?

DR. STAHL: 1956.

Q: In between, on a personal note, I note you got married, didn't you?

DR. STAHL: Yes, Idid.

Q: Did you meet somebody from still within the Pennsylvania area?

DR. STAHL: Yes, my wife is a nurse. She's from northeastern Pennsylvania, the mining area, Wilkes-Barre. She went to nursing school at Jefferson and was working in that area, and that's where we met. She graduated from the school of nursing in 1950, and we were married in 1954.

Q: At Jefferson Medical College, was there any push towards pathology, or, as far as the school was concerned, was this just one branch? Or was there some mentor who might have gotten you off on that?

DR. STAHL: I think that the interest in pathology was unusual at that school. Peter A. Hurbert M.D., who was the chairman and professor of pathology, had written the textbook that we used. And we had an excellent course during the second year. So that was the first interest. His faculty were also very good and gave very excellent lectures. They were oriented towards the practical aspects of pathology, not research, so we were talking about things that really happened in hospitals as compared to research activities. Furthermore, it was very unusual for a medical school to have a course in surgical pathology, later on, during your fourth year, which we had. And, again, he had written a textbook on surgical pathology, which we used. This then correlated with our experiences as medical students in clinical rotations on surgery, so that you could correlate both the clinical aspects and the pathologic aspects of disease.

This interest was rather strong. And we had a number of people who went into pathology from my medical school class. If you pick a class now, maybe one percent of people go on to pathology. It's very, very low. But we probably had about 12 people start in pathology out of a class of 160, which was much higher than usual.

Q: So you finished there in 1956, and then where to?

DR. STAHL: In 1956, I went into the Navy. Remember, I was commissioned as an ensign in 1953. And I, again, was one of the first people in a new program, which started in 1955. I was actually on active duty in the Navy in 1955, as a senior in medical school.

Q: What was the program called?

DR. STAHL: It was the Ensign 1955 Senior Medical Student Program.

Q: I was just wondering. I've heard here in other interviews about the Berry Program.

DR. STAHL: No, no, this was different.

The Berry Plan was a different program, which was implemented by the assistant secretary of defense for health affairs (I'm not sure what his title was in those days), to defer people

who were in residency training in areas of interest to the services. So they would bring them in after completion of their residency training program.

But this was totally different. This was a Navy program, where you'd come on active duty in your senior year.

Q: Well, then, in 1956, what did the Navy do with you?

DR. STAHL: Then I became a Naval intern. In those days, we had general rotating internships. Everybody rotated through the same type of program, which included every field of medicine at a naval Hospital. In Pennsylvania, it was also mandatory to have six weeks of pathology. That was a mandatory part of the internship.

Q: This was unusual for a state?

DR. STAHL: Yes, it's sort of unusual, because most states didn't require that. So, once again, I'm back in pathology. During the year, I rotated through medicine, surgery, pediatrics, OB/GYN, and pathology, as well as other fields of medicine and surgery. It was a very interesting experience.

Q: Were you beginning to fix on pathology, or was this just a sideline?

DR. STAHL: No, I was beginning to fix, because a decision had to be made.

Now something happened in the 1954 to '55 period that also impacted on what happened. Most people who finished internships at that time had to take a utilization tour somewhere, either aboard a ship or with the Marines or at some small Naval hospital or clinic.

But, in the 1954-55 period, there was a rumor that all dependent care was going to be discontinued in the services. As a result of that, the Navy had large numbers of retirements and resignations that year, which then created a deficit in specialists. I can remember that the chief of pathology, the assistant chief of pathology, the chief of OB/GYN, the chief of pediatrics, as well as numerous other people, either retired or resigned during that period. Throughout the Navy, I believe between 500 and 700 people left very abruptly.

But the rumor was not true. Nevertheless, there was a deficit. So we had the unique experience that all of the interns in my group were accepted for residencies at the Naval Hospital, Philadelphia, and remained there to complete the residencies.

Q: From '51 to '61, you were at the U.S. Navy Hospital in Philadelphia. There, did you have to specialize?

DR. STAHL: The residency program in most military hospitals, even today, is a program in anatomic pathology and clinical pathology. So, during the five-year period, which includes your internship (or, these days, includes an additional year that may be clinical or related to pathology, so it's a five-year program), we rotated between the fields of anatomic pathology and clinical pathology. At the end, we were eligible to take the examinations given by the American Board of Pathology in anatomic pathology and clinical pathology.

Q: Could you explain, for the laymen who will be looking at this at some point, what was the difference, at that time, between anatomic and clinical pathology.

DR. STAHL: Anatomic pathology, at that time, consisted of surgical pathology, autopsy pathology, and cytopathology. Electron microscopy was just starting. Most hospitals didn't have an electron microscope; most pathologists knew nothing about it. In Philadelphia, at that time, there was only one in the entire city. And cytopathology was also developing. It was mainly vaginal cytology rather than aspirates from the stomach or other sites. And fine-needle biopsy aspiration was unknown, was not done atall.

During my residency, since it was in Philadelphia, we had a unique experience. I think it was a very interesting and unique residency because we had affiliations not only with our own primary hospital, Philadelphia Naval Hospital, but also with the University of Pennsylvania, Hannaman, Jefferson, and Temple. So we rotated among these hospitals for certain purposes.

If we look at clinical pathology, on the other hand, which is the other field of pathology, this includes blood banking, microbiology, clinical chemistry, urinalysis, and other fields that are more clinically oriented. This is the section of a laboratory that does all of the clinical laboratory tests.

Now the rotations that I mentioned as being rather interesting included a time with Irina Kaprowska at Hannaman, who was one of the people who had trained with Papanicolaou and had developed the cytologic methods for examination of cells.

Q: This is the Papsmear.

DR. STAHL: The Pap smear, right. So she had trained with Papanicolaou, and she had developed the program at Hannaman. And we rotated under her for training. Her husband, Hilary Kaprowski, was director of the Wistar Institute at the University of Pennsylvania. So both of them were rather eminent people in their respective fields.
The other interesting area, we rotated back to Jefferson for hematology. We not only learned laboratory methods in hematology with the Cardeza Foundation, but we also assumed responsibility for the care of patients. Every third night, we worked and covered the entire hospital, private service, the ward services, and the emergency room, for

hematology patients, including all of the patients referred in with problems in hemophilia. So it was a unique experience that many pathologists don't get, actually doing clinical work.

Q: Dealing with all this pathology, what were you hearing about the Armed Forces Institute of Pathology? I think it was the Armed Forces Institute of Pathology by that time, the early '60s.

DR. STAHL: Well, it actually had started in 1949 as the AFIP, and had evolved from the Army Institute of Pathology at that time.

During our residency in pathology, we attended many of the short courses in continuing education given at the AFIP. Among these courses was a course in forensic pathology. I had never heard of the field; I didn't even know there was such a field. But there was a one-week course at that time, and I thought it was rather interesting. There were also courses in research methods, histochemistry, ophthalmic pathology, and other fields that we took as residents. So, during a four-year period, we attended one or two of these courses every year, usually at our own expense. There were no TDY funds in those days. So we drove down from Philadelphia and rented a room, usually on Fern Street. In those days, there were rooms for rent for about five dollars a night. And you could park your car on Fern Street without getting a ticket. And we walked across to the AFIP to take the course in Dart Auditorium. But we paid all this on our own; there were no TDY funds for this. So we were given permissive TDY orders from the Navy.

This fostered my interest in this unusual field. That seemed to be a little bit different, because we were getting cases also at the naval hospital that included aircraft accidents, helicopter accidents, and airship accidents out of Lakehurst, New Jersey. In fact, I did the cases for the last naval airship accident that occurred out of Lakehurst. This sort of bolstered my interest in forensic pathology. And I thought this was the field that is most related to military medicine.

Q: Could you describe, again using the time, what is forensic pathology?

DR. STAHL: Forensic pathology is that special field of pathology, a subspecialty of pathology that applies scientific methods in the investigation of crimes and violent deaths, hazards to health, in the interest of justice. It is a field that uses methods that you learn in pathology, but applies them to events that impact upon the welfare of people in a community or an environment. Essentially, it's a study of the interaction between man and his environment. This is what seems to be most related to activities in military service, where you consider that there are certain occupational hazards we all face, dealing with special equipment, weapons, aircraft, and ships. And the more you know about how to deal with them, the safer it will be for military personnel.

Q: So you spent about two years as a sort of an out-of-country experience, when you completed your studies at the naval Hospital.

DR. STAHL: No, I stayed on there an additional year as the assistant pathologist. I was now on the staff at Philadelphia and participated in the service functions as a pathologist and also in training functions for Navy medical laboratory technicians. We had a school. And some training for our first-year and second-year residents.

Q: Then you left and went to Guam, is that right?

DR. STAHL: No, I came here. I came here. During my last year of residency, I was interested enough in forensic pathology to apply for the residency. I thought there was a residency here, but it turned out the residency had not been approved yet. This was in 1961, and I was disapproved by the Navy for this program. So I reapplied the following year, and I found out that the residency would have been approved in June of 1962. And I started the program in July of 1962. So I was the first person in the formal residency in forensic pathology at the Armed Forces Institute of Pathology, and the first Navy person to enter this field.

Q: Could you describe, because this is an oral history concerned with the AFIP, how you saw the AFIP? I'm talking more about the atmosphere, the administration and all, and what the AFIP was doing in 1962.

DR. STAHL: If you look back at the original dedication ceremony for the AFIP, the president at that time was

Dwight Eisenhower, and he gave the address that essentially established the AFIP. And most of the things they talked about were things that interfaced with military medicine. So the emphasis was on the interface between military medicine and pathology. So, instead of talking about surgical pathology, they talked about aviation, and they talked about things that impacted on soldiers and sailors. As the Institute evolved, of course, interests changed, but some of the early directors, including Col. Townsend and, later. Gen. Blumberg, recognized that this was a very important area that needed to be fostered and developed. When Col. Townsend was the director, and remember. Col. Townsend is now a representative to our Board of Governors as a former director...

Q: He was an Air Force officer.

DR. STAHL: And Air Force officer. He recognized the interest in learning more about aviation safety, and established a branch called Aviation and Forensic Pathology. Later, that evolved into an aviation pathology branch, a forensic pathology branch, and a toxicology branch, and subsequently expanded even further into a wound ballistics branch. And these were all part of a division called Military Environmental Pathology Division, because, again, it's the study of the interaction between man and his environment in a military setting.

We had relatively few people in forensic pathology in those days. Col. Ed Johnston was in the Army. Lt. Col. Pierre Fink, who later became a colonel, was also in the Army. Major Frank Keel, who later became a colonel, was one of the early people who had been trained in forensic pathology and became board certified. And there were a number of people in aerospace pathology who were pathologists and flight surgeons. But there were relatively few forensic pathologists in the service in those days, and most were in the Army. As I pointed out, I was the first person in the Navy to become a forensic pathologist. And I can't remember anybody in the Air Force at that time.

Q: What about the space program, which was just starting to get going?

DR. STAHL: I had done some work when I was in Philadelphia for the people in Johnstown who were involved in Project Mercury. And the Institute had done some work, particularly in veterinary pathology, when some of the non-human people were shot up into space, like the monkeys. But as time went on, this Military Environmental Pathology Division changed some of the branch names to Aerospace Pathology, Forensic Pathology, Toxicology, and so forth. Later, this whole area expanded, during the period of 1965 to 1975, when I was here again, into a Department of Forensic Sciences, which included not only those areas of pathology, but also legal medicine. Legal medicine was part of our group at thattime.

So I was here for one year, from 1962 to 1963, as a resident in forensic pathology.

Q: Was there any particular area you were specializing in?

DR. STAHL: No, the residency program includes several components that are mandatory. First, you need to get exposure with medical-legal autopsies. I had done a number of them at Philadelphia. But our primary affiliation here was with the Office of the Chief Medical Examiner of the State of Maryland, in Baltimore. So we affiliated with that office.

In addition to that, I was appointed as an approved pathologist for the State of Maryland, and I did all of the cases in Montgomery County. So, during the year, if a homicide or suicide or accidental death occurred in Montgomery County, I would be called, usually at nighttime. I would not do these during duty hours, I would do the cases during off-duty hours, at either a local funeral home or a local hospital.

Q: Usually these are political appointments, in some places.

DR. STAHL: No.

Q: Or Civil Service or something like that.

DR. STAHL: Well, in this case, this appointment was based upon the authorization of the chief medical examiner for the state, so he was the one who made the appointment. And this was an appointment that was solely related to training; it was not a salaried position or anything.

Q: Were there any people you looked upon as your mentors here at the AFIP?

DR. STAHL: People who were the mentors here were, first, Ed Johnston, who was the original chief of the Military Environmental Pathology Division. I worked closely with him.

Frank Keel, who was one of the early people in training. Frank was an interesting pathologist. He lives in Texas now; we still correspond with each other. He became an Army colonel. He's an M.D. He also got a law degree; he's a J. D. He became qualified as a paratrooper, qualified as a flight surgeon, and had sort of a varied career background during his tenure in the Army.

Lt. Col. Pierre Fink, who at that time was chief of the Wound Ballistics Branch, is well-known for his participation in the John Kennedy case, with Humes and Boswell at Bethesda. Subsequently, he became a colonel. He was one of the early commanders of the 9th Med Lab in Vietnam. He retired from the Army about 1975, and he lives in Europe at the presenttime.

Gen. Blumberg I would consider as someone who fostered forensic pathology. He became board certified in forensic pathology, based on prior experience, and supported this area significantly.

And Col. Townsend, of course, with his interest in aerospace pathology.

Q: Did you have the feeling that some of the results of what you and others in that field were doing was having an effect on the design of equipment, airplanes, tanks, etc.? Was there an actual connect? Sometimes you have this, but there isn't a connect with the designers.

DR. STAHL: No, there was an impact. Of course, in government, things don't happen overnight. It's usually slow.

One of the things I did, early in my career, was to recognize that when there is a military event — a homicide or unexpected death of some sort — and there's a military investigation, particularly when I was at Philadelphia, we would be asked to perform a postmortem examination and give an opinion about the cause and the manner of death, but were told, "We can't tell you what happened." Well, that's not the way to do things. You need to correlate investigative information with postmortem findings and the results of toxicologic and other types of studies. So I worked with the Navy and we changed the Naval regulations. We changed the manual of the medical department; we changed the JAG

manual to require interchange of information between the investigator and the pathologist in those cases that were under investigation. And that's continued ever since. It took about two years to do it, but it was done.

Q: What was the theory behind not telling you? That if you were operating in a vacuum, this would give a more unbiased report?

DR. STAHL: I don't really know, and nobody really could tell me, because it had been a regulation for years. It was a passive regulation: it didn't allow for interchange, but it didn't prohibit it. Consequently, people simply didn't provide that information. That, I think, was significant in the Navy. Now as far as the other matters were concerned, many of the cases that we saw resulted in either educational programs or publications that helped to prevent these types of deaths in the future.

One area of interest that I had was toxic hazards in a closed environment. We found that sailors aboard ship were using a solvent called 111 trichloroethane, pouring it into a bucket, getting a mop or some sort of a swab, and using it as a degreasing agent to clean shipboard spaces. Consequently, since they were aboard a ship where spaces are closed, the fumes from this killed them. So we had a number of shipboard deaths of sailors using this degreasing agent. That information was published in U.S. Naval Medicine, distributed back through the Navy, and the number of those deaths declined, based on the knowledge that this is a dangerous agent.

We had the same thing in the Air Force, with missile silos. People were lowered into missile silos to clean the sides and degrease them, using solvents. And in one case I can remember, three people died at the same time, because they didn't realize that the vapors from this toxic agent settled to the bottom of the silo. Two rescuers went down to rescue the first person, who had fallen off of a bosun's chair, and they both died, too. So that information was disseminated.

Some of the aviation-safety recommendations were based upon crashes that occurred involving military personnel. They found that rearward-facing seats would prevent injuries, and recommended that military aircraft have rearward-facing seats. However, as you can see, it's not very acceptable — people don't like to fly backwards. And even though it does prevent injuries, it was really never widely accepted. It's certainly not accepted in commercial transportation.

We used to investigate commercial crashes, too. We had an agreement with the National Transportation Safety Board to investigate civil-aircraft accidents. And we also had a team to investigate general-aviation accidents, at one time. So we're talking about small aircraft as well as airliners. When you enter an airplane these days, the first thing you hear about are the safety requirements. The stewardess or the flight attendants will tell you where to get

out of the aircraft, where's the nearest exit, tell you about the lighting. All of these things evolved from some of the work done at the AFIP.

One of the crashes we had, which occurred near Richmond, Virginia, in the 1960s, involved a military contractor. The people all queued up at the main entrance — they didn't know where to get out — and consequently, they all died. Even though they had not died as a result of impact injuries, they were exposed to carbon monoxide and then, later, fire. But they all queued up at the main exit to the aircraft, because they didn't know there were alternatives. That's one important thing.

Secondly, in some of the aircraft accidents, people couldn't find their way out. They didn't know how to get out, because they couldn't see their way. Now you see emergency lights.

So some of these things came as a result of work done at the AFIP.

During Vietnam, we found that many of the people in helicopters, who were shot from below, died as a result of wounds involving the lower extremities or buttocks. The helicopters were not armored. We recommended that armor plating be put in the areas for pilots and co- pilots. The same thing with fuel tanks, because the fuel tanks were being hit. And they were modified.

So a number of these things did result in improvements in aviation safety.

Q: To move on a bit, you did spend about two years on Guam? Dr. Charles J. Stahl -page

DR. STAHL: Spent two years in Guam. Guam is an interesting place. It's our westernmost part of the United States. People don't always realize that, under the Organic Act of 1950, it became a U.S. territory, similar to Hawaii or Puerto Rico. The Guamanians are very patriotic people; many of the people served in the armed forces. They have evolved from a group known as the Chamorro, so they have their own culture. They're rather interesting. It's an island that was visited by Magellan in 1521. Of course, we occupied the island after the Spanish-American War. One of the first people to go to Guam was a naval officer, who was sent from the Philippines to take a look at this place that we occupied after the Spanish-American War. And he wrote a very good description of the flora and fauna of Guam. This was a line officer in the Navy, who later became the naval governor of Guam.

During World War II, Guam was captured by the Japanese, and remained occupied until 1944.

Q: Actually, today is the fiftieth anniversary of the American invasion to retake Guam and the other islands in that area.

DR. STAHL: So, in 1944, we took it back again. There was one sailor who stayed on Guam, by the name of George Tweed, and he hid in a cave that we used to go to periodically. Most of the people these days don't know where that cave is. But he lived in a cave that was towards the north end of the island, in the region not far from Anderson Air Force Base, which is a SAC base. There are some interesting stories about him, and there's also a book and a movie, which talks about George Tweed.

My role there was as chief of a laboratory service. I also was appointed, with the consent of my commanding officer, as the deputy medical examiner for Guam. So I continued to do not only hospital pathology, but also forensic pathology. I had many collateral duties. Most of the committees and boards and other collateral duties were also assigned to me. I was a photography officer and an environmental health officer and so forth and so on.

If something happened on Guam, the division of labor as far as forensic pathology was concerned was, if you were eligible for care in the military service, you then came under the jurisdiction of the deputy medical examiner — that was me. If you were eligible for care at Guam Memorial Hospital, the civilian hospital, then the medical examiner for Guam took that jurisdiction. It turned out that the split was about fifty-fifty, because the people eligible for care at our hospital included all military personnel, all Civil Service personnel. Pan American Airways, Cuomo Stares, the Bishop of Guam, and a few other categories I can't remember. So, large numbers of people, about half of the population, were eligible for care at our hospital.

Consequently, whenever anything happened, I would be called and would go to the scene of death and investigate with either the military investigative agencies or the Guam police. Then we would do the post- mortem examination toxicologic studies, some of the criminalistic studies, or get them done through the U.S. Army Crime Laboratory at Camp Zama. And if there was a trial or a court martial, I would go to court and testify. So this experience continued during the time I was on Guam.

Q: You returned, then, back to the AFIP, where you were to serve from '65 to '75. Was this at your request, or was it a military assignment? How did this comeabout?

DR. STAHL: No, it was a Navy assignment. You have an Officer Preference sheet. At least there was an Officer Preference sheet in those days, where you could select areas of choice. And generally, if you'd had an overseas' tour somewhere, you were given preference. In this case, since I had fulfilled the qualifications (I was board certified now in anatomic pathology, clinical pathology, and forensic pathology), one of my preferences was to come back to the AFIP. And I was assigned as the chief of forensic pathology.

I arrived here at a time when most of the people that I mentioned previously had gone. Major Keel had been promoted; I think he was a lieutenant colonel then. He was in Vietnam. Col. Johnston had gone to Thailand. He went to the SEATO Laboratory in Thailand.

I had one officer on my staff, Bruce Young, who was a Military Police officer. At that time, he was a major, but later became a colonel in the Military Police Corps. I had a secretary, and a yeoman was alsoassigned.

Since everybody had left and there was no fill-in, there was a backlog of cases. There were cases piled up all over the place. I think that particular year I did something like 900 cases myself. There was no one else to do it.

We had two programs, a residency program, which was not filled. No one was in the residency since I left. They also had an Army fellowship in forensic medicine. That was for Military Police officers, CID agents, JAG officers, and Medical Service Corps or Medical Corps officers who were interested in forensic medicine. That was established, but no one had ever been in that program. During that period, I don't remember the exact year, but it was either '66 to '67, or '67 to '68, we had two officers come into that program. One was Tom Nap, who was a JAG officer, and the other was Roy Hazelwood, who was a Military Police Corps officer.

That program subsequently evolved into a more formal program through an arrangement with George Washington University. Again, we established a first at that time by negotiating an agreement with George Washington University that if a military officer from any service and from any of these branches met the criteria for acceptance by the university in the Master of Forensic Science program, they would accept up to ten officers per year, at no cost to the government, at no cost to the officer. And in return, we would provide faculty support to them with a faculty appointment, at no cost to the university. So it was a trade-off of teaching versus training.

Q: You mentioned that you had a JAG officer and a Military Police officer. What functions did they perform? Were they medically qualified? How did this work?

DR. STAHL: Two people were in training. Physicians become familiar with the legal aspects of medicine. We wanted them, as lawyers and as investigators, to become familiar with medicine and pathology and the pathologic aspects of investigations, so that they could interface better with our pathologists in the field, and become familiar with medical terminology and familiar with scientific methods.

Q: For you, I'm thinking, you've got 900 cases or even more, a tremendous backlog, when you arrived there. You have people coming in who are not going to really be able to assist you in making the determination on these cases, because it's medical. This is another added burden. It's worthwhile and all that, but...

DR. STAHL: This was one to two years later, so it didn't occur at the same time. When I arrived here in '65, that's when I had the backlog, and we didn't have trainees at that time. So I had a little gap.

Q: When you arrived, did you see a problem (and this keeps recurring in looking at the history of the AFIP) because too much was coming in and not enough was going out? That it was very spotty — some of the branches or divisions were either better staffed or they worked faster; others were more deliberate and all this. Did you sense an unevenness in how the AFIP was responding?

DR. STAHL: Yes. The military services have had a tri-service, or joint service, regulation ever since the AFIP was established that requires them to send in certain cases. In those days, if you were at a naval hospital or an Army hospital, there were certain types of cases that you always sent to the AFIP.

For example, when I was at Philadelphia, we sent all of our autopsies to the AFIP, and we sent the majority of our surgicals to the AFIP, which involved either unusual diagnoses or tumors. And we received reports from the AFIP in a timely manner. I mean, we're not talking about waiting for months, but we received reports in a timely manner.

Over the years, many of the service hospitals failed to comply with these joint regulations, so that the number of cases from military hospitals declined, and the number of cases from civilian hospitals seemed to be predominant. I think, right now, there is probably an equal distribution betweenboth.

But, at that time, there were parts of the Institute that responded very slowly to field requests for support; others responded very promptly. There was a discrepancy, and there was discrepancy in staffingalso.

Q: When you first arrived, Joe Blumberg was the commanding officer.

DR. STAHL: When I was a resident here. . .

Q: I'm talking about the second time. General Blumberg, in these interviews, has got quite a reputation of being rather a ball of fire, a really dynamic person. Could you describe how he, as you saw him at that time,operated?

DR. STAHL: He had rather broad experience in the Army before he came here, and was already recognized as a pathologist who had many diverse interests. He not only had an interest in forensic pathology, but he had also an interest in fostering the international reputation of the AFIP, and gaining support from many of our federal agencies. He had a lot of charisma, so he could interface with people very well. He traveled fairly extensively in making contacts, not only within the United States, but also overseas. He was the type of fellow who would just drop by your office, as we're doing here, sit down and chat with you and ask what you're doing and ask how things are. He would do the same thing with other employees throughout the Institute. He had a genuine interest in trying to improve the

Institute and its relationships with both the military community and the civilian community. So he was a rather dynamic individual.

Q: He was followed by Bruce Smith, who was a Navy captain. And here you were a naval officer. Did that help at all?

DR. STAHL: We knew each other. He had been chief of service at Philadelphia when I was there. His interest was mainly in surgical pathology. He had been, at one time, aboard a ship early in his career, in the Pacific area. But, subsequently, all of his assignments had been related to pathology, at Mare Island, California, and later, Philadelphia, and then here at the AFIP. When he retired from the AFIP, he went on to become the chief of pathology at the VA Medical Center of Washington. And he just retired from that position about two years ago.

Q: And, sort of to keep it moving. Col, Morrissey, of the Air Force, came. That was a rather short career. Things didn't work out. What was your impression ofhim?

DR. STAHL: Well, the impression is. Col. Morrissey recognized that the Institute is sort of a unique place. It has a very strong informal organization, as compared to the formal military organization. He felt that people were not conforming to the usual practices of a military organization. I think he ran up against the informal group.

Q: The old boys' network,eh?

DR. STAHL: When he left, he wrote a rather scathing report, which he passed on to the Air Force surgeon general, which then was passed back to the director of the AFIP. Nothing really came out of that, but he had expressed his concerns of attempting to run this organization under his type ofleadership.

Q: Did you have the feeling while you were here, you were here a good, solid ten years during this time, that each of the... what were they, were they divisions or branches?

DR. STAHL: They changed their names. Originally, these were branches, and several branches formed a division. And then, later on, they just changed the names from divisions to departments. And then the branches becamedivisions.

Q: Anyway, these basic components, one has the feeling it was a little bit like medieval Italy, each had its own strong dukedoms, where you might have an emperor, but the dukes pretty well ran their own thing, and at different paces. Was this very much the feeling?

DR. STAHL: Yes.

Q: Now were you running one of these yourself?

DR. STAHL: Yes, I was.

Q: Was this sort of as a junior member or a junior duke or something like this? How'd you find it then?

DR. STAHL: Well, I had been there less time than most others. On the other hand, I had very good relationships with other people, and I had no difficulty. In fact, our department, as I said, evolved from the Military Environmental Pathology Division to the Forensic Sciences Division to the Department of Forensic Sciences, over that ten-year period. We were the largest department in the Institute. We had not only divisions of forensic pathology, aerospace pathology, toxicology, accident pathology, underwater pathology, and legal medicine, but for a while, tissue reactions to drugs was part of our group also, with Dr. Nelson Irey, for about a year. After 1976, then the department as we knew it started subdividing. Legal medicine became a separate department. Dr. Irey's group became a separate department. And, with the formation of the medical-examiner system, which occurred in the late 1980s, and the implementation of a Department of Defense directive in 1988, it became the Office of the Armed Forces Medical Examiner. So these original designations of divisions, branches, and so forth no longer exist.

Q: During the ten years you were here, '65 to '15, you had your routine work, but what were your main preoccupations, where you were doing more than sort of the normal work of a pathologist?

DR. STAHL: We developed an extensive educational program for not only pathologists in forensic pathology, but also for military investigators, for attorneys, and other officers who would participate with us later on when they finished and were assigned to field activities. Through this fellowship in forensic medicine, which later became the forensic sciences program at the masters ' -degree level with George Washington University, we trained large numbers of people during the period that I was here. And many of these people have become prominent in their respective fields. For example, I mentioned Roy Hazelwood, a military police officer who later became an FBI agent and a supervisory special agent assigned to the FBI Academy. He was one of the people involved in the behavioral sciences unit that was pictured in the movie with Jody Foster.

Q: "Silence of the Lambs".

DR. STAHL: He worked with that unit for many years. He's written several textbooks, and he just retired this past year. So he is another who moved upward into a significant position. A military police officer who is now assistant inspector general for the Department of Defense was one of our people. The deputy commanding officer for the Army Criminal Investigation Command, who just retired, was one of our graduates. So we have people

throughout the government who have been affiliated with our program, either in forensic medicine, or forensicscience.

As far as pathologists are concerned, we have a tri-service residency, the only tri-service residency.

Q: Tri-service meanswhat?

DR. STAHL: Army, Navy, Air Force. We have trained essentially every active-duty forensic pathologist. There are a few who have come in from civilian life, but we have trained most of the active-duty forensic pathologists. They have become board certified. And we have a continuing input into that program. This year, we have one Army forensic pathology resident, who will go to Tripler Army Medical Center this summer and become one of our regional medical examiners. We will have two people coming into the program this summer, one from the Navy and one from the Army. So there is a continuing input; not a large number, but it's a viable program.

During those years, 1965 to 1975, many of the people who are now prominent in forensic pathology throughout the United States were either trained in our program, or were assigned to the Institute as Medical Corps officers, through the Berry Plan, or sometimes they were drafted and assigned here. So we have very prominent forensic pathologists all over the country who had their experience here at the AFIP.

Q: I would think this would also generate, for better or for worse, a lot of work for you, wouldn't it? Because if you have people who know what you can do and know the standards of the AFIP, then there would be a tendency of these people to say, "Well, let 's send it to the AFIP and get a check on it."

DR. STAHL: Yes, that's very true, they will work with us very nicely. This forms a sort of network of people who know each other, who work together, who can consult with each other. It makes for a very nice environment.

Q: I keep going back to the timeframe that we're talking about, '65 to '15. Were there any particular types of forensic cases that you were dealing with that seemed to predominate? Obviously, this was the Vietnam War period, which also had all sorts of social implications, too, drugs, fragging attacks, all sorts of things.

DR. STAHL: We reviewed all of those cases. For example, the cases coming in from Vietnam including pungee sticks, fragging, assassinations, you nameit.

Q: You might explain, pungee sticks were...

DR. STAHL: These were sharp sticks that were handmade and put in the ground, usually in a pit, and as people were walking through jungle area, they'd come to a concealed pit, fall into it, and were impaled on these pungee sticks.

Q: And fragging.

DR. STAHL: Fragging is throwing a hand grenade into somebody's tent or bunker, purposely. Homicide.

Q: Were you sending people out to Vietnam to investigate these homicides? There were a lot of reports, towards the end of the war, of disgruntled soldiers tossing fragmentation grenades into officer bunkers and things likethat.
DR. STAHL: As I mentioned, we had two forensic pathologists in Vietnam. First, Frank Kiel, who was assigned to the 406th Army Medical Laboratory, located at Camp Zama, Japan. He established the 406th Mobile Laboratory in Vietnam, and remained there for at least a year. Then the Army established the 9th Medical Laboratory, and Col. Fink became the commanding officer of that laboratory. So we had forensic pathology representation in Vietnam as it started to escalate.

There were also Army pathologists, who later became forensic pathologists, assigned to the Wound Data and Munitions Effectiveness Team, known as WDMET, which collected data on scenarios related to firefights, to determine who was involved, the type of weapons involved, and also the types of casualties that resulted from these weapons. That data was collected and came to the AFIP for a while, and I understand that it remained here for a number of years and then went up to Edgewood, and now I think it's back at the Uniformed Services University. So it's a file of cases that involved battle scenarios.

Q: Were there any lessons that were learned or trends that came out of the Vietnam War, from your point of view, that were noted?

DR. STAHL: I think the main thing that people learned was that this was an unconventional war. That the methods used were often not typical, as compared to World War II and Korea, where many of the people died from fragment wounds from bombs and missiles and so forth. This was a war that involved bullets. People were often killed with bullets or unconventional weapons. For example, patrols of people were assaulted and then killed, and then often beheaded and left as they were found.

We had one case that involved Col. Fink, with some soldiers who kidnapped a Vietnamese girl and took her out on patrol with them, assaulted her, and then killed her before they returned to their base camp. The Army sent a CID agent into enemy territory to recover this body, which was subsequently identified and resulted in conviction of the soldiers who had committed this act.

Q: And a movie was made.

DR STAHL: A movie was made from it, called "Casualties of War." And there was also a book written about it.

During that period, we were also involved in some training incidents that occurred in recruit-training camps, where there was some abuse of recruits, particularly in the Marine Corps. We brought that to the attention of the staff of the commandant of the Marine Corps, and they took action and corrected it. Again, this was not recognized by investigators, not recognized by physicians. In fact, there was an overt attempt by some of the drill sergeants to prevent recruits from seeking medical care after they had been physically abused by the drill sergeants.

Q: How did this come to your office's attention?

DR. STAHL: Again, these were cases that came in, from one source or another. During the review of these cases, which was either through a consultative review, or sometimes a very active review, we recognized that there was something that needed to be fixed, and we brought this to the attention of the proper authorities.

The other case we were involved in during that period of time was the case involving MacDonald at Fort Bragg.

Q: Oh, yes, this was called the Green Beret Case. Could you explain what this was?

DR. STAHL: Yes, this was an incident involving the homicide of the wife and children of an Army physician assigned to Special Forces, who alleged that some hippies came into his house, attacked him, and killed his family. Subsequently, it was determined that he was the person who committed these acts, and he was imprisoned for this. It caused many problems, because initially too many people entered the scene. It was not controlled well. He had apparently inflicted a wound upon himself, which was not recognized as a self-inflicted wound initially. There was a need to obtain certain physical evidence from him, and that caused some embarrassment for the people who were attempting to collect this. They sort of had to pursue him with a car, and stop the car and obtain evidence. But it was a very difficult case for the Army to resolve.

Two other cases that were prominent during that time were the astronauts who died on the pod at Cape Kennedy, Grissom, White, and Chaffee. That was an interesting incident, where we did the cases. We were given short notice and flew down there as a team. The team included me, Ed Johnston, and Dr. Dunn, who was chief of aerospace pathology at that time. We arrived there and they said, "We can't tell you what happened. Just do the autopsies and leave."

And we said, "No, we're not going to do that. We expect to have some information about the circumstances. And we're going to do a complete forensic pathology investigation to determine the cause and the manner of the deaths. "

We had to wait almost six hours before we completed these negotiations. There were phone calls back and forth to Houston and various other places. And finally they conceded that, yes, we could go ahead and do what weintended.

The original news reports indicated that these bodies were charred and so forth and so on. That this had been an explosive conflagration inside the capsule.

We learned first that some of the fabrics that they were using or wearing or that were inside the capsule emitted noxious fumes. So they showed levels of these noxious chemicals, like cyanide or carbon monoxide, which, of course, is a product of combustion. So they survived for a brief period of time. That was confirmed by listening to the tape, indicating there was a brief period of survival.

The other thing we found out was that a lot of attention was paid to equipment, but not too much to people. Even though three people were in this capsule, and it was in a test mode, the workmen had bolted a shield over the hatch. So, even if you could open the hatch, you couldn't get out. And there were no explosive devices to eliminate the shield in the event of a fire or other disaster. That changed the course of the whole space program. Furthermore, the door itself was not a positive door, in the sense that you could just turn a switch and open the door. It required some manipulation of a door lock, to get it in the right position and then turn it, which, of course, took time to do.

As a result of this, several things happened. There were better door mechanisms. There were explosive devices on shields. The fabrics were changed so they did not give off fumes. And I think more attention was paid topeople.

There is a book, which I haven't seen but my son told me about, called "Mission to the Moon." We did not release any findings anywhere except to NASA, and yet this book, "Mission to the Moon," contains the front pages from our reports. I don't know where they came from.

Q: How did you attribute this reluctance to let you do a full report? Was this just NASA being…?

DR. STAHL: I think so.

Q: Were they concerned or was it just their turf?

DR. STAHL: I have no idea. I think it was mainly a turf battle.

Q: It so often happens.

DR. STAHL: The other case, of course, the following year, was Robert Kennedy.

Q: His assassination in Los Angeles.

DR. STAHL: Since the big issue was still brewing about the John F. Kennedy case, and real concern about adequacy of consultation and support, the chief medical examiner for Los Angeles called the director of the AFIP.

Q: The chief medical examiner's name is...?

DR. STAHL: Thomas T. Noguchi.

Q: He's become sort of famous — pathologist to the dead celebrities.

DR. STAHL: That's right, he's been known as the coroner to the stars.

The office was called the Office of the Chief Medical Examiner/Coroner for the City and County of Los Angeles.

Of course, as forensic pathologists, which was a small community, we knew each other. In those days, there were probably less than 200 forensic pathologists in the United States, and we all knew each other. So he submitted a formal request to the director of the AFIP, who gained the appropriate approvals.

We were going to have the first international conference on accident pathology, in Washington, the following day. We were at a dinner at Walter Reed Officer's Club that evening, and I remember sitting in the lounge there, talking to some of the speakers for the next day's program, when we heard this news report.

I went home about 10 o'clock, and from that point on, until about 3:30 in the morning, I was getting a call about every hour, as arrangements were being made for us to leave. We left Andrews Air Force Base on an executive jet sometime around 5:00 in the morning, stopped for refueling at Offutt Air Force Base, landed at Los Angeles International Airport, were picked up by a helicopter, flown to the Hall of Justice, and then picked up by a detective, who took us to the hospital. We remained in California for several days.

Q: What was the purpose of having you there?

DR. STAHL: As consultants. Three of us went. I was chief of forensic pathology and assistant chief of the military environmental pathology division at that time. Col. Fink was chief of the

military environmental pathology division and chief of wound ballistics. And Dr. Kenneth Earle was chief of the neuropathology division. So we had three different types of people: neuropathology, wound ballistics, and forensicpathology.

Q: This was done with the cooperation of the coroner's office.

DR. STAHL: Yes, at the request of that office.

Q: The basic purpose was that, since there had been so much brouhaha about the assassination of John F. Kennedy (which goes on today, with an assassination industry of what could have happened), you'd learned your lesson and you wanted to get it rock solid. Was that it?

DR. STAHL: That's right. So we reviewed everything that had been done, and then continued and stayed there until all of the microscopic sections had been completed. They were reviewed. We reviewed the neuropathologic examination, reviewed all of the evidence that was obtained at the scene. We went back to the scene at the hotel. Dr. Noguchi and I went to the hotel the next day and again looked at the scene. Col. Fink coordinated the ballistic evidence with the FBI and the police department. And Dr. Earle worked with the neuropathologist. So that, as a team, we saw everything and participated in all of the examinations.

Q: I gather that, even despite the media attention and everything else, the final result has not been disputed.

DR. STAHL: No, no. There have been a couple of allegations that there were other people in that room, including a security guard, who were armed with a similar pistol, and they raised the issue that maybe he fired some shots. But this is all allegation. Somebody even produced a movie about that. I talked to the producer and saw the movie, and it's entertaining, but that's all I can say. It's not factual.

Q: To move on, looking at the AFIP as a whole, at that time, you'd moved off the Mall. Was the medical museum, per se, used much then or not?

DR. STAHL: When I first arrived here as a resident, I was, of course, rotating back and forth from Baltimore to the Institute. As I remember, when I came back from Baltimore in January of that year, we moved to the building at 7th and Independence Avenue.

Q: Ah, yes, the old red brick building.

DR. STAHL: So we made that move and we were there in the old red brick building. Prior to that, the museum had occupied temporary buildings, which, as I remember, were like Quonset huts, on the Mall. The exhibits were moved back into the red brick building. Most

of the people who were sent down there to that building were the military people, those branches and divisions that were more military-oriented. Elgin Cowart, who later became a director, was the director of the medical museum in those days. The thing that I remember most about it was its beautiful architecture. Interesting building, it had marble staircases, with fireplaces in some of the offices. Large numbers of people and tours who came to that building were excited about the exhibits; they liked them. Even though they were old exhibits that were not as modern as you might expect, they still enjoyed looking at those things. The attendance in those days was many times the attendance now. Now, we're located in a place that's remote, people can't get to it, they can't find parking, and they just don't come to the museumanymore.

Q: I remember going to that museum, back around '41, 42. It also was an inspiration for many people who went there; it was one of the things that got them interested in a medical career.

DR. STAHL: That's right.

Q: I talked to the present director of the museum in a recent interview, and it's really on course that it will once again arise on the Mall. What about the American Registry of Pathology. You had one part of this, didn'tyou?

DR. STAHL: Yes, Idid.

Q: About '75, I think, there was a report that came out, there was a problem about how it was set up. Did this impact on you at all?

DR. STAHL: Not at that time. In the formative years of the Institute, it was recognized that the Institute could interface with civilian pathologists. Several registries were formed, and these became the American Registry of Pathology. They were based at the Institute.

Each one had a registrar, who was a member of the staff. And some of them received very nominal support from a professional organization. For example, one of the early registries, established here in the 1950s, was the Registry of Forensic Pathology. The College of American Pathologists provided very nominal support for that registry in the early years. There was no other source of income. And you're not talking about large amounts of money; you're talking about perhaps two or three thousand dollars, once in a while, not every year. That was not given to the registrar, it was given to the registry, to help to offset costs of operating and producing products that could be distributed through the registry.

But, in 1976, after I left. Col. Hansen was the director, the Army director. The Army surgeon general became concerned about the relationships between the Registry and the Institute. There was sort of an admixture of personnel and funding, which he had difficulty sorting out. And I think, in that time, several groups came in and looked at the Institute: the inspector general, the Army Audit Agency, and soforth.

Initially, there was great fear that the Institute would be turned over to some other agency. But the end result actually was favorable, that they recognized that the American Registry of Pathology had some basis for its association with civilian pathology. And they established a law through Congress that enabled the American Registry of Pathology to continue in existence, and also to serve, in some respects, as a fiscal agent for the Institute, and to operate under the direction of the Institute and no one else.

Q: This also established the Institute as an established entity, which was no longer at the tolerance, you might say, of the armed forces. It stood on itsown.

DR. STAHL: Well, it stood on its own, but it only serves the Institute. So the American Registry of Pathology only exists to serve the Armed Forces Institute of Pathology. It cannot enter into any ventures outside theInstitute.

Q: In subsequent years, have you found that the American Registry is a usefulentity?

DR. STAHL: It is best known for its products, and now, for its sponsorship of educational programs. Many of the continuing medical- education programs in the United States are sponsored by the AFIP and the American Registry of Pathology. And these educational programs are given not only at the AFIP, but also at other locations throughout the United States. Most people recognize this as a very important role for the AFIP toplay.

Secondly, the tumor fascicles are products available through the Institute, generally at rather low cost, distributed worldwide, and used by almost every pathologist in the world.

Study sets are also a product distributed through the AFIP.

Q: These are slides and all, which people can use. Sort of self- teaching guides that are put out.

DR. STAHL: Yes, that's right.

Q: Because this is concentrated on the AFIP, I did want to get your early background. I thought we might move rather rapidly over the time that you were away from the AFIP. You were at Bethesda Naval
Hospital ... what do they call it?

DR. STAHL: The National Naval Medical Center.

Q: From '75 to '80. Then you were with the Tennessee Veterans' Administration up to '92. I would like to just talk a bit about the time at Bethesda. Why did you move over to Bethesda?

DR. STAHL: I was asked to become the chairman of the Department of Laboratory Medicine at the Naval Medical Center, which had several other additional duties. I was also appointed as the consultant in pathology to the surgeon general. I also was professor of pathology at the Uniformed Services University. I was director of the residency program in anatomic and clinical pathology. I was also director of our programs in medical technology and medical laboratory technique and histopathology technique. And this was through an additional duty I had with the Naval School of Health Sciences. So I had many different roles.

I essentially was responsible for operating and managing that department, which was, again, one of the largest departments at the Naval Medical Center, with a staff of about 150 people, about 50 students, and up to 12 residents in pathology at any one time.

The most difficult role was the management of all pathology programs. I was responsible for recommending the assignments of all pathologists, for determining staffing requirements for pathologists and our enlisted technical personnel, for allocating equipment to all of our hospital laboratories, for recommending changes in training programs for the enlisted personnel, and also for monitoring the selection of residents for any pathology program. So it was a very, very busy period. I also represented the Navy as a member of the Scientific Advisory Board at the AFIP.

Q: I've had people on these various interviews say, "There's a right way, there's a wrong way, and the Navy way." The Navy does seem to do things differently than, say, the Army and the Air Force, which used to be together and have worked together. Did you find that the Navy was somewhat removed from using the AFIP, although it was a tri-service institute?

DR. STAHL: No, we used the AFIP quite extensively. Many of our consultants, particularly in neuropathology, were from the AFIP. When we had difficult or interesting cases, they were referred to the AFIP for consultation. Very often, our staff pathologist and residents would take cases over directly for consultation, which would later be accessioned into the files of the AFIP. So I think we had a very good relationship.

Remember that my department consisted of two major divisions: anatomic pathology and clinical pathology. And the chief of my anatomic pathology division was Captain Karnei, who later became a director of the AFIP. So we had a very close relationship there.

The other thing I did, I established at Bethesda the first tri- service residency program in hematopathology, for Army, Navy, and Air Force pathologists.

And the way I did that was unique. When I was an intern at Philadelphia, I met a resident, who was one year ahead of me, named Hal Shumacher. Hal Shumacher became a specialist in internal medicine in the Navy, and later became board certified in hematology and also oncology. So he had subspecialty boards in the field of internal medicine.

He left the Navy, after about 11 years, and went to Hershey, Pennsylvania, where he was associated with the development of the Hershey Medical School, and he worked in some of the hospitals around Harrisburg. But his interest shifted from clinical hematology to the laboratory applications of hematology, and he became an expert in the classification of leukemias and the use of the electron microscope in detection of certain hematologic disorders.

When he was in Harrisburg, one of his peers who knew him had just been promoted to rear admiral. It was a time when we had the title clinical admiral; these were clinicians who were promoted to rear admiral. And he asked Hal to come back to Bethesda, with the expectation that Hal would become the chief of hematology within the Department of Medicine.

In the meantime, our clinical admiral had been shifted to an administrative post somewhere else as a hospital commander. Hal Shumacher arrived at Bethesda, and no one knew why he was there, so he just simply got assigned as a staff person to hematology.

He and I talked, and what we decided to do was that if he was able to become board certified in the subspecialty of hematopathology, I would arrange for him to be shifted from the Department of Internal Medicine to the Department of Pathology, under me, and we would then establish a tri-serviceprogram.

And we did that within one year. We got this program approved by the Navy, the Accreditation Council of Graduate Medical Education, and the American Board of Pathology, and we had a program ongoing in about a year. That program has trained, again, most of the military pathologists in that field. So it's a unique first again.

Q: From 1980 to '92, you went with the Veterans' Administration, and then to the State of Tennessee, and then back to the Veterans ' Administration. Why this move over there?

DR. STAHL: Well, this links with some of my experiences. During the period from 1975 to 1980, as one of my other additional duties, I was the Navy representative to the Scientific Advisory Board of the AFIP. One of the people who was also on the Scientific Advisory Board was a professor from the University of Indiana. I'll get that intertwined a little bit later on, because he then becomes a player in why I moved from Tennessee to Ohio.

I went to Tennessee as the chief of laboratory service. The VA has different types of positions. They have full-time, part-time. I was part-time VA. Seven-eighths of my salary was VA; one-eighth was university professor of pathology. I developed a department of pathology that would interface with a medical school. I did that in three years. I changed from a department that had just provided nominal support to a hospital to one that became a full-service laboratory providing support to a medical school and the hospital.

But my interest related to forensic pathology, so I resigned from the VA and became a full-time professor at the medical school. I established the first medical-examiner's office for northeastern Tennessee, which served five counties, and I became the assistant chief medical examiner for the State of Tennessee, while I was serving as professor ofpathology.

I also developed educational programs for the university. These were continuing medical-education programs that we opened to attorneys, investigators, and police officers. Many of our university educational programs in the fields of medicine, like pediatrics or cardiology, would attract 25 or 30 participants. I was able to bring in 100 people at a time who were interested. It made for a unique program, because we had a lot of interest in these things.

I also participated in educational programs for the Department of Criminal Justice and the State of Tennessee, as well as some of our professional organizations. And I also supported some teaching programs for the Office of the Chief Medical Examiner, Commonwealth of Virginia.

After being there for almost six years, I received a call from Ohio. The person calling happened to be the director of the hospital, who said that he had been talking to the dean at the medical school of Wright State University. Well, the dean was the former professor from Indiana. They were looking for a chief of staff and wanted to know if I was interested. I didn't know anything about the place, so I went up and looked at it. It sounded like a challenging position. I would be chief of staff at the VA, a large teaching hospital with 1,400 patients and 2,000 employees, about half of whom would be under the jurisdiction of the chief of staff, and some teaching responsibilities for the medical school. So I accepted that position and remained there until 1991, when I had anothercall.

And this was a call from a person I used to know at Bethesda, Lou Mantel. Lou Mantel was a commander when I was at Bethesda. He was an anesthesiologist, and for a period of time, he was assigned to the Naval Medical Research Institute. But, subsequently, after I retired, he became a captain, and then he was promoted to rear admiral and became the deputy surgeon general. And with the change from the Veterans Administration to the Department of Veterans Affairs, with a Cabinet-level post as secretary, a new chief medical director arrived, and that was Jim Holsinger. Jim Holsinger and Lou Mantel had known each other because Jim Holsinger was a major general in the Army Reserve Medical Corps, assigned to the Pentagon and J-4 Joint Staff, where Lou Mantel was assigned on a permanent basis. So they got to know each other during these periods of active duty for training. And when Jim Holsinger became the chief medical director for the VA, he selected Lou Mantel as his medical inspector. Then I was invited to become the deputy medical inspector.

And I did that for almost two years when I was then invited to come to the AFIP as the Armed Forces Medical Examiner. So that's how all this evolved.

Q: All right, we're up to more or less now. You arrived here about 92ish?

DR. STAHL: October '92.

Q: What does the medical examiner's office do?

DR. STAHL: We have a Department of Defense directive and a joint regulation that authorizes the Armed Forces Medical Examiner to conduct investigations of deaths of active-duty personnel and persons on active duty for training, in areas of exclusive federal jurisdiction. We also have authority, under certain conditions, to conduct investigations of civilian personnel who may die in areas of exclusive federal jurisdiction. We can also participate in medical-legal investigations when the authority vested in a state medical examiner is waived and the case is deferred back to the military services.

The types of events that we get involved in include homicides on military bases. And I can just tell you that, during this past year, we have sent teams to Fort Bragg, to Fort Sill, to Fort Riley, to investigate homicides involving military personnel. We also get involved in most wartime activities. Before I arrived here, of course. Desert Storm was anexample.

Q: This was a war against Iraq in the Persian Gulf during 1990 and 1991.

DR. STAHL: That's right. So our staff was involved there. Prior to that, they had been involved in the incidents in Panama, in Grenada, and various other places. So, as a group, we have probably more experience in major events and mass disasters. That includes, among the mass disasters, some of the major aircraft accidents. We also send teams out to investigate military aircraft accidents. And we only do this when there are no local resources available. Most recently, we not only did all of the cases from Somalia, but we also did all the cases related to the Iraq shoot down, where the two helicopters were shot down. We sent a team to Germany for a week to identify the people and determine the cause of death of those personnel.

Q: Sort of winding this up, where do you see the AFIP going? It's a new era. One of the themes that has run through some of these interviews is that the AFIP used to be a unique institution. It was the only one looking at things, and everybody turned to it. But now there are universities and teaching hospitals that have also developed parallel programs over a period of time, so that the AFIP does not stand alone in some things. Where do you see the AFIP developing?

DR. STAHL: I think we need to re-emphasize our military mission. I think that's very important. Many of the roles played by the Institute in the past are roles that have now been taken over by local universities, that's true. So there are other people who can perform consultative services in surgical pathology that perhaps are as good as, or similar

to, those performed at the Institute. But our military mission and our federal mission, particularly in my field, is unique. There is no one else doing this.

I only described one area, one division out of six. I have six divisions in the Office of the Armed Forces Medical Examiner.

One is operations, and that's what I described to you.

Second is a division that interfaces with other federal agencies. We provide support, upon request, to the Department of Justice for several areas: environmental crimes, civil rights, public-safety- officer benefits, and those cases that are referred from the FBI.

During the past year, we have been involved in several cases supporting the FBI. These included exhumations of people who had either been assassinated by criminals, or, in one civil-rights case, the allegation was that an officer had shot somebody in an improper way. So we provide that support.

We provide educational support to other agencies, the Federal Law Enforcement Training Center, the Department of Agriculture, and many of our police and investigative agencies.

The newest divisions are the DNA Registry, including the DNA Repository, which is collecting specimens from all military personnel on active duty and the Armed Forces DNA Identification Laboratory, which conducts nuclear and mitochondrial DNA examinations, as well as the Special Investigations Division which consists of Forensic Anthropology and Trace Material Analysis Branches.

Q: This is designed to be a form of identification.

DR. STAHL: We also have the Division of Forensic Toxicology, which monitors and supports the quality assurance program, the Department of Defense Drug Abuse Control Program, provides forensic toxicology examinations, and develops new methods for the detection of drugs in biologic materials, including hair.

We have an Education and Research Division which supports our educational programs in forensic pathology, forensic science and continuing education.

And we also have, as part of our department, a ballistic range for research purposes. So it's a very extensive operation that interfaces not just with the Army, Navy, and Air Force, but with all branches of the federal government.

Q: Well, doctor, this has been a fascinating career, and I really appreciate this.

DR. STAHL: Well, thank you very much. I enjoyed talking to you.

Charles J. Stahl, III, M.D.



1930-2016

NAME President 1993-94

June 2011

After graduating from Ursinus College, Collegeville, PA, in 1952, I went to The Jefferson Medical College of Philadelphia. When I received the Doctor of Medicine degree from Jefferson in 1956, I became a rotating intern at U. S. Naval Hospital, Philadelphia, where I began clinical clerkships in 1954. After completion of the rotating internship in 1957, I became a resident in anatomic and clinical pathology at USNH, Philadelphia, where I stayed until 1962 when I was assigned to the Armed Forces Institute of Pathology, Washington, D.C. for special training in forensic pathology. After completion of the year as a resident, I was assigned to USNH, Guam, as Chief, Laboratory Service, and Deputy Medical Examiner, Government of Guam, 1963 – 1965. I was assigned to the Armed Forces Institute of Pathology, as Chief, Forensic Pathology Branch, and remained there until 1975 when I was Chairman, Department of Forensic Sciences. After AFIP, I was assigned to the National Naval Medical Center, Bethesda, MD, as Chairman, Department of Laboratory Medicine. I was also Acting Director of Clinical Services and Acting Commanding Officer several times during the period 1978 – 1980. I remained in the position of Chairman, Department of Laboratory Medicine until I retired from the U. S. Navy in 1980 after 25 years' service. Although I had been encouraged to become a Rear Admiral, Medical Corps, I turned down the position which would require frequent travel and change in assignment since I wanted to remain as a forensic pathologist. I went to Johnson City, TN, as Chief, Laboratory Service, Veterans Administration Medical Center, and began my career with civil service. While I was there, I accepted the assignment of Assistant Chief Medical Examiner in 1983 and remained in this position until 1986 when I was assigned to the VAMC, Dayton, OH, as Chief of Staff. I also served frequently as Acting Director. Finally, I was assigned as Deputy Medical Inspector, Veterans Health Administration, Department of Veterans Affairs, Washington, D.C. and retired from the Department of Veterans Affairs on 31 August 1992. My last position as Chief Medical Examiner, Office of the Armed Forces Medical Examiner; Member, Graduate Education Committee; Director, Residency Program in Forensic Pathology; and Distinguished Scientist,

American Registry of Pathology, Armed Forces Institute of Pathology, Washington, D.C., as well as Member, Department of Defense Forensic Science Advisory Committee.

During my residency in anatomic and clinical pathology at U. S. Naval Hospital, Philadelphia, 1957 – 1961, Russell S. Fisher, M.D., Chief Medical Examiner, State of Maryland, travelled to identify a serviceman who had died. Subsequently, I passed the boards in Anatomic Pathology and Clinical Pathology and I attended the Forensic Pathology Course at Armed Forces Institute of Pathology, which reinforced my interest in the subspecialty. From 1962 – 1963, I completed the requirements to take the boards in this subspecialty at the Armed Forces Institute of Pathology, Washington, D.C. under the direction of Colonel Edward Johnston, but I was assigned to U. S. Naval Hospital, Guam, Marianas Islands, from 1963 – 1965. I took the boards in this special field in 1964, and I became one of the first 100 pathologists to become certified by the American Board of Pathology in Anatomic Pathology, Clinical Pathology, and Forensic Pathology.

I was Chief, Forensic Pathology Branch, Military Environmental Pathology Division, Armed Forces Institute of Pathology, 1965 – 1970. During this time I had the opportunity to participate in the medicolegal investigation and autopsies of Astronauts Grissom, White, and Chaffee following the Apollo disaster in Florida, and in the investigation and autopsy of Senator Robert Kennedy following his assassination in California. I was Chief, Military Environmental Pathology Division, AFIP, from 1972 – 1974, then Chairman, Department of Forensic Sciences, AFIP, from 1974 – 1975. During this time, I conceived the Office of the Armed Forces Medical Examiner which was published in United States Navy Medicine 61:20-27, 1973: *Forensic Sciences at the Armed Forces Institute of Pathology – Its Role in Military Medicine*. I turned down the appointment as the first Chief Medical Examiner after the role was approved in 1988 – 1990, because I was serving as Chief of Staff, Veterans Administration Medical Center, Dayton, OH. I subsequently became the Chief Medical Examiner of the Armed Forces Medical Examiner System, 1992 – 1996.

Major Accomplishments as Chief Medical Examiner

Development of the Armed Forces Medical Examiner system.

Efforts on Behalf of Forensic Pathology and Forensic Sciences

I became interested in tear gas guns and published numerous articles in medical journals during the period 1968 - 1975. Subsequently, I was interested in drowning. I published 68 articles in medical journals, textbooks, and manuals from 1965 – 2003.

Recollections of Places I have trained and worked

I spent 1957 – 1961 at U. S. Naval Hospital, Philadelphia, which has since been demolished. It was an interesting place. Subsequently, I was assigned to AFIP for training in the special field of forensic pathology and I had the opportunity to work with Russell S. Fisher, M.D., Chief Medical

Examiner, State of MD. After returning from Guam to the AFIP, I trained numerous people in forensic pathology.

Comments about people who trained me

Bruce H. Smith, M.D. was the Chief of Laboratory Service at USNH, Philadelphia where I was trained in Anatomic Pathology and Clinical Pathology. He became Director, AFIP, as Captain, MC, USN. Colonel Edward Johnston, MC, USA, and Russell S. Fisher, M.D. were responsible for my training in Forensic Pathology.

Recollections about people I have trained

I trained numerous people in the special field of forensic pathology including Richard C. Froede, M.D., who was a Colonel, MC, USAF and Flight Surgeon.

Academic involvement through education, research, and training

I have served as Assistant Instructor in Pathology and Fellow in Pepper Laboratory of Clinical Medicine, University of Pennsylvania, Philadelphia, 1960; Lecturer in Homicide Investigation, Dept. of Public Safety, Government of Guam, 1965; Director, Postgraduate Course in Forensic Pathology, AFIP, 1966 – 1970; Program Director, Residency in Special Field of Forensic Pathology, AFIP, 1966 – 1974; 1992 – 1996; Instructor, Basic Course for Special Agents, Naval Investigative Service, Arlington, VA, 1966 – 1969; 1970 – 1971; 1973 – 1974; Faculty, Homicide Investigation, Metropolitan Police Dept., District of Columbia, 1969 – 1973; Professorial Lecturer in Forensic Science, The George Washington University, 1972 -1976; Faculty, Seminar in Forensic Pathology, College of American Pathologists, 1972, 1973, 1974; Medical Director, Medical Technology and Medical Laboratory Technician Schools, Naval Health Sciences Education and Training Command, Bethesda, MD, 1975 – 1980; Professor of Pathology, George Washington University School of Medicine and Health Sciences, 1975 – 1980, Georgetown University School of Medicine, 1976 – 1980, and Uniform Services University for the Health Sciences, 1976 -1979; Program Director, Residency in Anatomic and Clinical Pathology, National Naval Medical Center, Bethesda, MD, 1975 – 1980; Professor of Pathology, Quillen College of Medicine, East Tennessee State University, Johnson City, TN, 1980 – 1986; Professor of Pathology, East Tennessee State University School of Graduate Studies, Johnson City, TN, 1982 - 1986; Assistant Dean for Veterans Affairs and Professor of Pathology, Wright State University School of Medicine, Dayton, OH, 1986 – 1991. I worked closely with the Federal Bureau of Investigation, U. S. Department of Justice, during the period 1992 – 1996.

Contributions to the field of forensic pathology

Consultant in Forensic Pathology, Professional Division, Bureau of Medicine and Surgery, Department of the Navy, 1970 – 1975; Member, Test Committee for Special Examination in Forensic Pathology, The American Board of Pathology, 1973 – 1975; Guest Examiner, Special Field of Forensic Pathology, The American Board of Pathology, 1972 -1975; Consultant in Laboratory Medicine, Bureau of Medicine and Surgery, Department of the Navy, 1975 – 1980; Member, Technical Advisory Committee for Firefighter Autopsy Protocol, United States Fire

Administration, Federal Emergency Management Agency, 1993 – 1995; Member, PL 103-160 Review Board, Office of the Inspector General, Department of Defense, 1996; Member, Working Group on Scene Investigations, U. S. Department of Justice, 1994 – 1996.

Difficult cases I have managed

Temporary duty at Harman Air Force Base U. S. Air Force Hospital to perform medicolegal autopsies on two servicemen who died at Thule, Greenland, and one who died a Keflavik, Iceland, 1963; medicolegal investigation and autopsies of Astronauts Grissom, White, and Chaffee following Apollo disaster at Cape Kennedy, FL, 1967; medicolegal investigation and autopsy following assassination of Senator Robert Kennedy and consultant to Chief Medical Examiner – Coroner, Los Angeles, CA; exhumation, investigation, and autopsy of serviceman at San Diego, CA; consultant in forensic pathology to Civil Rights Division, U. S. Department of Justice to conduct exhumation, investigation, and autopsy of man killed in Puerto Rico, 1974; consultant in forensic pathology, Naval Investigative Service, to participate in the investigation of the death of a military dependent, 1977.

Job related stresses, anxiety, and personal performance issues

I tried not to bring these home to my wife and children and as a military man and civil servant I was always in charge of my own performance.

Advice for forensic pathologists entering this field

Work hard. Remember that each case requires a pre-autopsy analysis including circumstances of death, medical and social history, and environmental factors, followed by autopsy, when indicated, including microscopic examination of tissues, laboratory tests for chemical agents, toxins, infectious agents, and drugs, and review of any photographs obtained at the scene of death or during autopsy. Determine that the death was caused by accident, homicide, suicide, or natural causes, the time of death if indicated, and the information which must be placed on the death certificate.

Has forensic pathology changed?

Although the training programs have improved during the years, the number of autopsies performed by hospital pathologists continues to decline from 80% in military hospitals to less than 5% in hospitals today. We still have a mixed bag as far as the coroner system and medical examiner system are concerned, and this has affected the need for increased numbers of forensic pathologists. In fact, some people serving as Chief Medical Examiner are not board certified!

Personal information

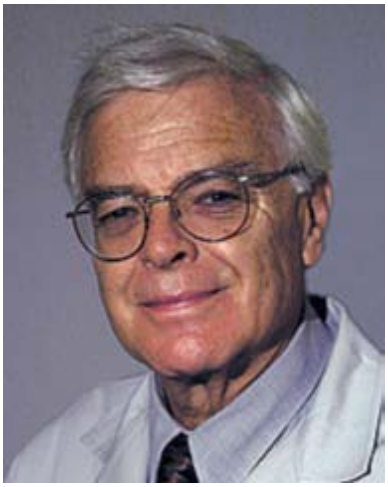
My wife, Ellen, and I married in 1954. We had three children, Charles, IV, Marcia, and Kim. When we met, Ellen was a RN at Jefferson. We liked to go camping, including our honeymoon and later distant places such as Nova Scotia, Prince Edward Island, the outer banks of North Carolina, and the far west. Later, Ellen and I visited most countries in Europe, as well as

Australia, New Zealand, China, Japan, Russia, Finland, Turkey, Greece, Italy, etc. By this time our children had married and had two children for each family.

Would I become a forensic pathologist again?

Yes. I had an interesting career in the Navy, Department of Veterans Affairs, and Armed Forces Institute of Pathology.

William Q. Sturner, M.D.



1934-2016
NAME President 1978-79
Chief Medical Examiner, State of Rhode Island (1974-1992)
Chief Medical Examiner, State of Arkansas (1992-2004)

July 2011

I chose Forensic Pathology as a career very early in Medical School at St. Louis University. A strong pathology department with a helpful faculty, along with staff members taking students to observe local medico-legal autopsies, played a significant role in my decision. There I met Dr. Rudy Gradwohl, the founder of the American Academy of Forensic Sciences. My mentors during residency for the next three years were Dr. John P. Wyatt, Chairman of Pathology, and a friend of the English forensic pathologist Donald Teare. They shared forensic positions at Queens Square Hospital in London; but more about him later. Other faculty included Dr. Henry Pinkerton and Dr. Drummond Bowden, a pediatric pathologist who was Director of laboratories at Cardinal Glennon Hospital. The staff also included Eugene Tucker, M.D., John Pfaff M.D. and George Gantner, Jr., M.D. a long time member of N.A.M.E. and the head of laboratories at Firmin Desloge Hospital. He was especially helpful to me in early research projects. One of the highlights of my residency was a visit by Dr. Lester Adelson, the chief of forensic pathology in Cleveland, Ohio. He lectured on infant and childhood murders, the precursor to "battered children." His article published in *The New England Journal of Medicine* in 1961 was entitled in part "The Slaughter of The Innocents." This work predated "The Battered Child Syndrome" literature by one year. My encounter with Dr. Adelson laid the foundation for my future research in the forensic field involving infants and children.

My fourth year of residency was as a Fulbright Scholar in forensic pathology at the University of London, England. My mentors were Professor Keith Simpson of Guy's Hospital and Professor R. Donald Teare of St. Georges Hospital. Professor Teare first described (and named) "Asymmetric

Hypertrophy" in 1958. The deputy pathologist at Guy's Hospital was Dr. Keith Mant and the assistant at St. George‘s was Dr. David Bowen. Both were very supportive during my stay in London as I continued my research in vitreous humor analysis and began measuring glucose in deaths of young diabetics. I also served a one month rotation at the Scotland Yard Police Laboratory in order to round out my training and experience. The year in London provided me with a unique dimension to my overall education in forensic pathology.

I returned to the University of Kentucky in Lexington for a fifth and final year of training with Dr. Rudolph J. Muelling. His unique training in chemistry and toxicology along with a medicolegal background made him a mainstay at the new medical school in Lexington. My rotation was partly in pathology and partly in toxicology and clinical pathology. Among many interesting studies that we con- ducted was the testing of "moonshine" for toxins, including lead and arsenic, in addition to methyl alcohol. This experience fore- shadowed my growing interest in toxicology throughout my career, which began in 1964.

My first staff position was at the Office of Chief Medical Examiner in New York City with the renowned Dr. Milton Helpern. My title was "Junior Medical Examiner" and the starting salary was $9,000 per year! However, it became a most enjoyable experience in my young career. Other staff physicians included Dr. Henry Siegel, Dr. John Devlin and Dr. Michael Lyons. Residents in training included Dr. James Luke and Dr. Michael Baden. Dr. Helpern usually made his rounds in mid-morning when autopsies were underway, with homicides being a priority and therefore done first. When leaving the autopsy room for the day, I saw a stretcher left in the hallway containing a blood stained female exhibiting many neck wounds and with a scissor blade lodged into the front of her neck. I had seen her earlier in the day and assumed that this was a homicide. When asking about the delay, I was told that the case was a suicide! History indicated that this young Asian woman had been distraught as her husband had left her, and I later learned that self-inflicted multiple sharp instrument wounds were common in her culture. Many of these wounds were superficial, and the total number- all in the neck - approached 60! A lesson was learned in the hallway that day.

Sometime later, I examined a young man who had died suddenly during a retrograde cardiac catheterization at a nearby hospital. I performed a complete and (I thought) a thorough autopsy, and found a "blood clot" obstructing an otherwise normal coronary artery. This seemed to me an adequate cause of death. Dr. Helpern came over to my table and inquired about my findings; however, after I told him, he immediately asked "where did the clot come from?" and suggested that I open the thigh and examine the femoral vessels. I then discovered a thrombosis to be present, thus the clot appeared to have originated from this location. More importantly, it was evident that both catheterizations had taken place at the same site with a 30 min. interval creating an ongoing repair process at the insertion site of the blood vessel. The tip of the catheter had loosened and detached a portion of the thrombus which then had passed up the femoral artery and into the coronary circulation. The findings in this case helped to change the procedures governing catheterizations, including banning sequential insertions at the same site, and coating all catheter tips with heparin-like medication.

Because of the many homicides, automobile accidents, and other conditions resulting in exsanguination, we began testing for alcohol in vitreous humor and any blood that was available. My colleague Dr. Richard Coumbis, a toxicologist, and I published the first study shooting comparable levels in both fluid specimens and paved the way for other substances to be similarly measured and compared.

One of the most interesting cases that I experienced during my stay was the shooting death of Malcom X. Following a speech from an auditorium stage to a large crowd, three adults rushed to the stage and opened fire with a shotgun and two handguns. He was instantly incapacitated and rushed to a nearby emergency room but was shortly thereafter pronounced dead. Large wounds of the chest and heart suggested buckshot ammunition had been used. Several hours later, the body was autopsied by Dr. Helpern, and I was his assistant. Close to dinner time, he suggested that we stop for the day. The next morning we were able to concentrate on the handgun wounds, apparently from .38 and.45 caliber weapons. Some of the bullets entered the bottoms of the feet and were recovered in the upper legs and pelvic area. The interpretation was that he was lying on the stage floor after the initial shotgun wounds to the thorax. There were 40 pieces of metal, including fragments, recovered during the autopsy. Subsequently when asked in court why he brought only 39 pieces as evidence, he said that his grandson had dropped a fragment behind his desk drawer and that nobody had been able to find it. This provided a lighter moment in an otherwise somber trial which some of the doctors, including myself, were privileged to attend. After the prosecution rested, one of the three defense attorneys stood up and loudly asked: "Dr. Helpern, you don't know who killed Malcolm X, do you?" The Chief stared at him and replied somewhat indignantly: " I don't know and I don't care; I'm interested in what did it, not who done it!" At that moment, I understood the role a doctor ought to assume in court- one of independence and impartiality. It was something that I always kept in mind during the rest of my career.

In early 1967, I ventured from the east coast to the Midwest. Chicago had at that time a large coroner system that was housed in the Cook County Hospital, and the Chief of the Coroner's Laboratory was Dr. Jerry Kearns I had hoped to have an opportunity to make a difference there, but I soon discovered that the training I had received in New York City was of little use in an office that was bent on following old-fashioned procedures. This office stood in contrast to the vibrant and highly respected pathology department at the University of Chicago Medical School, whose chairman was Dr. Robert Wissler. As an assistant professor in this department, I was able to collaborate with other staff members including Dr. John Esterly, a pediatric pathologist, who became a valued colleague and co-author.

At the end of two and a half years, I accepted an invitation from Dr. Charles Petty to join him in Dallas. Dr. Petty organized and created the Southwestern Institute of Forensic Sciences by merging the Criminal Investigation Laboratory with the Medical Examiner's Office at Parkland Hospital. We began training several young doctors including Dr. Faye Spruill, Dr. Larry Simson and Dr. Larry Minette. Our staff added Dr. Walter Hofman, and later, Dr. Vincent Di Maio. The

toxicology section, headed by Dr. Morton Mason, soon added Dr. James Garriott, who became one of my constant collaborators, in several research projects, including fatalities from the use and abuse of propoxyphene (Darvon®).

In 1974, following five productive years in Dallas, I accepted an offer to become the Chief Medical Examiner of Rhode Island. I was also appointed Professor of Pathology at Brown University. A medical examiner law had been in effect for many years, and Dr. Harold Beddoe as well as Dr. Joseph Palumbo were two physicians who had worked in the system. When I arrived, I began appointing young forensic pathologists to the staff, and the first to arrive was Dr. Faye Spruill. Autopsies at that time were performed at the old morgue which was located in the General Hospital area, several miles south of Providence. However, administration activities were undertaken at the newer Health Department building in town. During my stay, a new centralized facility was erected near the Health Department, which housed the medical examiner's office and the division of laboratories. It provided adequate refrigeration, a histology laboratory, secretarial offices and an increased storage capacity. This new facility was conveniently located close to Brown University and its "Program in Medicine." The Dean of medicine was Dr. Stanley Aronson, who originally was from New York and who also knew Dr. Helpern. He was a neuropathologist by training and was a strong supporter of academic pursuits. Together with Brown University, our office was able to organize and support one of the annual meetings of The National Association of Medical Examiners (NAME) at Newport, RI in 1978 and we also formed the New England Society of Forensic Pathologists with our nearby colleagues. Soon we began collaborations with some of the excellent physicians and scientists at Brown and elsewhere. One of my research interests was in sudden infant death (SIDS), and that project took me to the Massachusetts Institute of Technology where Professor Richard Wurtman worked. He and I both thought that melatonin, a hormone related to sleep, may have played a role in this condition.

We developed a series of evening lectures during the spring semester in "Forensic Medicine" with help and support from William J. Curran, Professor of Legal Medicine at Harvard. He usually gave the introductory lecture, and we occasionally finished with a "Mock Trial." One of our many students was Dr. Wayne Carver, Chief Medical Examiner of Connecticut. At the same time, we were training residents including Dr. Loren Mednick, Dr. Mary Ann Clayton and Dr. Richard Callery. Other staff additions were Dr. Arthur Burns, Dr. John Grauerholz, Dr. Kristin Sweeney and Dr. Frank Garrity. Dr. Frank Peretti, a native of Rhode Island, was a scene investigator as part of his experience to become a forensic pathologist.

Eventually, a “budget crunch" forced us to cut staffing, and it became more difficult to function as we had in the past. Moreover, the political environment continued to be unfavorable, and after 17 years of service, I decided to resign my Rhode Island position. Subsequently, I moved to Arkansas, where I became Chief Medical Examiner as well as a Professor of Pathology at the Medical School.

When I arrived in early 1992, I replaced Dr. Fahmy Malik, who left the previous year. After he resigned, autopsies were performed mostly by part time pathologists. Our working space was extremely small, but portions of the basement morgue, autopsy areas, business offices, histology and DNA laboratories were eventually modernized. The Director of the State Crime Laboratory was Jim Clark, a member of the law enforcement community, and a statutory Board, which had been responsible for hiring the Chief Medical Examiner, each provided oversight in the daily functioning of the office.

During my tenure of nearly 13 years, other experienced forensic pathologists joined our office, including Dr. Frank Peretti, and Dr. Charles Kokes who became the Chief when I retired in 2004. Both doctors had significant training and experience in the Baltimore Maryland Medical Examiner's Office. Dr. Stephen Erickson, a graduate of the Arkansas Medical School and their Pathology training program, joined our staff after a fellowship year with Dr. Vincent DiMaio in San Antonio. The number of cases and autopsies increased over the next several years, but staffing remained essentially the same. The pathologists were often burdened by having to travel long distances in order to provide expert court testimony, which sometimes could take a full day. A similar situation existed for the morgue staff, which had to provide transportation of decedents back to the Crime Laboratory in Little Rock. Police departments were generally proficient, and Arkansas State Police were always available to assist in suspicious cases and potential homicides.

One of the outstanding consultant groups supporting our office was the Arkansas Children's Hospital, which included our consultant pediatric pathologist, Dr. David Parham. A monthly conference was organized to discuss and resolve interesting and difficult cases. Together, we published individual case reports as well as group fatalities. Other doctors lending support were Dr. Jerry Jones, an expert in child abuse, and Dr. Jimmy Valentine, an expert in Pediatric Toxicology. We all enjoyed the interchange of ideas in the pediatric population.

One of the compelling reasons for my attraction into forensic pathology was the opportunity to practice medicine in an exciting and unusual way, and be able to benefit society by contributing to the administration of justice. My desire to perform individual and collaborative research could be fulfilled in unique ways at many levels. The publication as author or co-author of many scientific articles over a 45 year span represented exciting travels into the scientific unknown (or misunderstood) as well as feelings of accomplishment that were rewarding and long lasting. Public Health issues were always addressed following specific forensic findings and investigations. We also shared concerns with physicians in other fields which took place on a regular basis. Collegiality in an academic setting should be one of the cornerstones of any medical practice, especially as a forensic pathologist.



From the left, Dr. John Devlin, Dr. Michael Baden (in street clothes with back to camera), Dr. William Q. Sturner and Dr. Milton Helpern (1960s)



Dr. John Devlin, NYC (1960s)

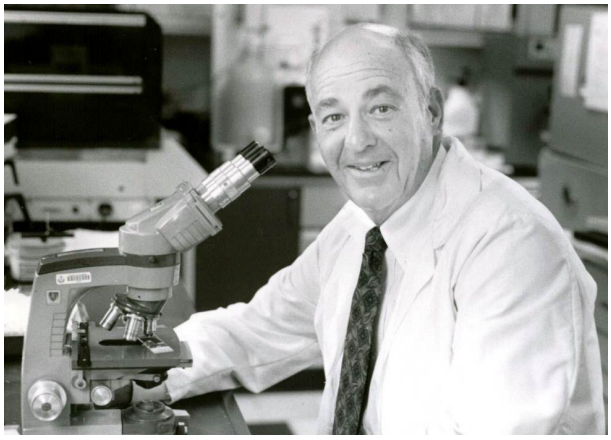


William Q. Sturner, M.D. in the Office of New York City Chief Medical Examiner (1960s)



In 1974, I accepted an invitation from Dr. Charles Petty to join him in Dallas. Dr. Petty organized and created the Southwestern Institute of Forensic Sciences by merging the Criminal Investigation Laboratory with the Medical Examiner's Office at Parkland Hospital.

Cyril H. Wecht, M.D., J.D.



February 2016

Why did I select forensic pathology as a career?

In my junior year of medical school, I made a decision to obtain a law degree following graduation from medical school and internship. I did not want to simply be a general practitioner in both law and medicine and thought of an appropriate medical specialty that would have significance and frequent interplay with law. I quickly came to realize that the specialty most frequently involved with legal matters was forensic pathology.

Places and times I served as Chief Medical Examiner

I was the Coroner of Allegheny County (Pittsburgh and surrounding communities) for twenty years, 1970 – 1980 and 1996 – 2006. I had been Chief Forensic Pathologist in that office for four years from 1966-1970.

As Coroner, I functioned essentially as a Chief Medical Examiner.

The office was officially converted to a Medical Examiner's Office as of January 1, 2006, and I was appointed as the first Chief Medical Examiner of Allegheny County on January 1, 2006.

Major accomplishments as Chief Medical Examiner

I developed a complete forensic scientific operation with a Ph.D. forensic epidemiologist, a forensic neuropathologist, and four full time Board Certified forensic pathologists, and a complete forensic toxicology program headed by a Ph.D. forensic toxicologist.

I established academic programs in forensic pathology, forensic science and legal medicine at the University of Pittsburgh and Duquesne University.

Efforts on behalf of forensic pathology and the forensic sciences

I established a four year Bachelor of Science program at Carlow University for the training of students to become Autopsy Technologists with a forensic scientific background. To my knowledge, this is the only such program anywhere in the world.

I have contributed extensively to the literature and lectured thousands, of times to students from elementary to post-graduate school level, as well as to all kinds of community, professional, business, governmental, and other organizations in my community and throughout the United States and in several foreign countries.

Recollections of places I have trained and worked

I did my training in forensic pathology at the Office of the Chief Medical Examiner of Maryland under Dr. Russell Fisher, 1961 - 1962. I returned to Pittsburgh and became an Assistant District Attorney and Medical-Legal Advisor to the District Attorney of Allegheny County, 1964-65. I then became Chief Forensic Pathologist in the Allegheny Coroner's Office in January 1966.

Comments about people who trained me and from whom I have learned

I trained under Dr. Russell Fisher. His top assistant was Dr. Charles Petty. The Forensic Neuropathologist was Dr. Richard Lindenberg, and the Forensic Toxicologist was Dr. Charles Freimuth.

Recollections about people I have trained

I established a fellowship in forensic pathology at the Allegheny County Coroner's Office that was visited and approved by Dr. Alan Moritz in 1971. During my 20 years as Coroner, several people trained with me who went on to become medical examiners in various jurisdictions throughout the United States.

Major controversies and frustrations in completing my responsibilities

Major controversies have included conflicts with the District Attorney's Office which was unhappy with my conducting Open Inquests in all police-related deaths. For the most part, I did not encounter any other significant controversies or major frustrations. I was always able to obtain funds for all my budgetary needs from the County Commissioners and County Executive.

Academic involvement through research, education, and training

I hold several academic positions. Two faculty positions at the University of Pittsburgh, three at Duquesne University, one at Carlow University, and one at Aristotle College of Law.

2007-Present – Adjunct Professor of Forensic Science, Medicine, and Pathology, Lagos State University College of Medicine, Ikeja, Lagos State, Nigeria

2011-Present – Adjunct Professor of Forensic Science, Medicine, and Pathology, Nnamdi Azikiwe University 9UNIZIK, Awka, Anambra State, Nigeria

I have engaged in numerous research projects. Several have resulted in published papers.

Legislative change in which I was involved

As President of the American Academy of Forensic Sciences, I testified before the United States Congress, Pennsylvania State Legislature, and other governmental bodies. I was also on a special committee to select a Chief Medical Examiner of New York City following Dr. Milton Helpern's death, and I served on a similar committee for the selection of the first appointed medical examiner of Cook County (Chicago).

I played a role in legislative changes pertaining to organ transplantation in my state (Pennsylvania), and I contributed through testimony and communications my numerous comments and professional experiences that served as part of the basis for the National Academy of Science Report in February 2009 relating to the need for forensic scientists to be independent of prosecutorial offices.

My contributions to the field of forensic pathology

My contributions to the field of forensic pathology have been set forth in previous answers. I have been the author or co-author, editor or co-editor of numerous books in the fields of Forensic Pathology, Forensic Science and Legal Medicine. I have also written many papers that have been published in national and international journals dealing with these fields of professional endeavor.

I am the editor of Forensic Pathology in Civil and Criminal Cases, a revised, expanded edition of a book previously edited by Drs. Graham and Hanzlick.

Perspectives I gained as a medical examiner

As a coroner and medical examiner, I learned a great deal about the needs of hospitals, physicians, law enforcement, attorneys, public health agencies, and other segments of the community in relationship to the work performed by medical examiners and coroners.

Difficult cases I have managed

Among the most difficult cases I have managed are those relating to positional asphyxiation deaths associated with police restraints. Jonny Gammage and Charles Dixon can be googled for more details.

Among cases in which I have played a significant role as a consultant in different capacities have been the JFK, RFK, and MLK assassinations, the death of Mary Jo Kopechne, Elvis Presley, Klaus Von Bulow, Jean Harris, Capt. Jeffrey McDonald, Vincent Foster, Ron Brown, Waco Branch

Davidian fire, OJ Simpson, JonBonet Ramsey, Lacy Peterson, Phil Spector, Anna Nicole Smith and her son Daniel Smith, Jean Harris, Carole Gottbaum and others.

Other recollections

From 1965 to 1984, I organized international medicolegal/forensic scientific programs in more than 50 countries throughout the world. I had the opportunity and great pleasure to meet and collaborate with many of the most prominent experts in these fields on those occasions.

I have enjoyed discussing numerous, nationally publicized, controversial cases as a forensic pathologist on thousands of television and radio shows, and with print media writers, over the past 50 years.

I have had the special pleasure and professional opportunity to be a technical consultant to two movies, "JFK" and "Concussion", and to be a major interviewee in the documentary "Soaked in Bleach" (re the death of Kurt Cobain).

I have had the wonderful honor of being portrayed as myself by Albert Brooks in the movie "Concussion".

Advice for forensic pathologists entering the field

My advice for forensic pathologists entering this field of endeavor would be to maintain independence and scientific objectivity, and not allow yourself consciously or subconsciously to be utilized as a part of the prosecutorial team. Forensic pathologists are scientists and not prosecutors or homicide detectives.

How my work experience changed me, changed my life, and what I learned from my work

I would also advise forensic pathologists to learn something about civil and criminal legal processes. This does not require going to law school and obtaining a law degree. It can be acquired through appropriate contacts at the local law school, and by working with knowledgeable, experienced plaintiff and defense attorneys in civil cases, and prosecution and defense attorneys in criminal cases, and judges.

How has forensic pathology changed during my career, for the better and for the worse?

Forensic pathology has played a significant role in my career. As a medical-legal consultant in all kinds of cases, I am able to utilize my knowledge, experience and expertise as a forensic pathologist in analyzing all kinds of civil and criminal cases, and providing opinions and conclusions that lead to the resolution of the majority of cases prior to controversial trials.

Knowing what I do now, would I "do it again" under the same circumstances as when I began, or under today's circumstances?

Yes, I would do all of this again. I cannot think of any other medical specialty that I would prefer. I very much enjoy working at the interface of law and medicine, and there is no better vehicle for doing this than the practice of forensic pathology.

Personal information such as family, hobbies and interests

The most important thing in my life is my family. I have been married for 50 years. I have four children and their spouses along with eleven grandchildren.

I enjoy traveling to all parts of the world, and I maintain a keen interest in national and international political matters.

Ronald K. Wright, M.D., J.D.



May 2012

I first attended a NAME meeting in Atlanta in 1969. It was an Academy meeting and NAME meeting, and I believe it was the first to not be in Chicago.

George Gantner was there. I did not list George as one of my mentors, but I worked for him as the Deputy Chief of Clinical Chemistry from 1967 through 1971. I joined NAME in 1972 as I recall when I went to work for Stan Harris in Vermont.



I liked the University-ME Office concept that Weston and Gantner had popularized. So in 1980 I had the opportunity to start such a program in Broward County with the University of Miami School Of Medicine. It worked pretty well, but I really aggravated a prominent plaintiff's attorney who vowed he would see that I was not re-appointed by the governor, and he succeeded. I have been told he spent .25 M $ in public relations to get rid of me. The University-ME Office died when I was not re-appointed by the infamous ME Commission of the state of

Florida. Josh Perper was also recommended for the position and the Governor choose Josh. Josh was removed in the same process in 2012.

I trained: Larry Tate, Charles Diggs, Stan Kessler (While director of Dade ME Education Program)

Mike Bell, Dan Selove, Steve Nelson (At Broward)

Women in the History of the National Association of Medical Examiners



By Mary H. Dudley, M.D.

December 2012

Introduction

In the 20th century, very few women became physicians due to social, economic and political restrictions. Societal expectations of the woman's role were to marry, raise a family and support her husband's career. Women who entered into the medical field generally went into nursing. The women's rights movement of the 1970's opened the door for more women to enter medical school and other male-dominated professions. More women in those years became pathologists, forensic pathologists and members of the National Association of Medical Examiners (NAME).

Forensic Pathology as a subspecialty trailed behind other medical subspecialties with formal forensic pathology training and board certification only becoming available in the late 1950's. The first female to receive board certification in Forensic Pathology was Dr. Judith Lehotay in 1970. The professional organization of NAME was founded in 1966 and its first journal, The American Journal of Forensic Medicine and Pathology, issued in 1980.

The NAME began with a total of 24 male members in 1966. The first female member, Dr. Judith Gedney Tobin, forensic pathologist, joined in 1967. However, many other women were involved in death investigation and forensic pathology prior to and since the beginning of NAME.

This article will feature and honor the efforts of some of the many women who contributed to death investigation and forensic pathology in the early years and to the NAME organization for the first 25 years from 1966 to 1991. These women made significant and enduring contributions to the forensic field, elevated the status of women by opening new frontiers for women, and inspired others by their example.

Women in Forensic Investigation and Pathology

Several influential women who paved the way for women to enter forensic pathology careers included Frances Glessner Lee, Clara Raven M.D., Bonita Peterson, M.D., Judith Lehotay M.D., and Mary Fran Ernst B.S.


Mrs. Frances Glessner Lee

In 1945, **Frances Glessner Lee** started a series of one-week seminars at Harvard University for police and other investigators to learn about the application of pathology and medical science to the investigation of homicide. Mrs. Lee designed and built models of crime scenes used in the seminars. Mrs. Lee died in 1963. However, these seminars continued in the Department of Legal Medicine until Harvard closed the department in 1967. The seminars, entitled The Francis G. Lee Seminars in Homicide Investigation, moved to the Medical Examiner's Office in Baltimore, Maryland.


Dr. Clara Raven

Dr. Clara Raven, Chief Medical Examiner Emeritus of Wayne County, Michigan, was a true pioneer for the advancement of medical knowledge as well as for the achievement of women. After graduating from the University of Michigan with a Bachelor of Arts and Masters degree, she became the only female student in her freshman class at Duke University Medical School. She then transferred as a sophomore to Northwestern University Medical School under a quota system that allowed only four female students into the medical school. She graduated with a Doctor of Medicine degree in 1938. In 1943, Dr. Raven was among the first women physicians commissioned to serve in the U.S. Army and worked as the chief of laboratory services during WWII and the Korean War.

In 1958, Dr. Raven became the first female Deputy Chief Medical Examiner of Wayne County, Michigan. Her greatest challenge was her research into the cause of sudden infant death syndrome (SIDS) for more than 20 years. In the early '70s, Dr. Raven testified before the U.S. Senate Subcommittee to promote funding for SIDS research and counseling of the bereaved. In 1961, she became the first female physician to achieve the rank of full colonel in the Army Medical Corps. She received the Northwestern Alumni Merit Award in 1962. In 1987, she was inducted into the Michigan Women's Historical Center and Hall of Fame with areas of achievement in Math/Science and Medicine/Health Care. Dr. Raven died in 1994.


Dr. Bonita Peterson

In 1973, **Dr. Bonita Peterson** was the first Chief Medical Examiner/Forensic Pathologist in Kansas City, Missouri for Jackson County. Dr. Peterson attended medical school at Columbia University in New York City from 1950-1954 and did her one-year internship at the University of Kansas Medical Center in Kansas City, Kansas. She attended the Armed Forces Institute of Pathology (AFIP) in Washington, DC for 4 years of pathology residency. She received one year forensic pathology fellowship training at the Medical Examiner's Office in Baltimore, Maryland. In 1979, an evaluating team, including Dr. George Gantner, from the National Association of Medical Examiners came to examine the Jackson County Medical Examiner's office and found was that she was "overworked, understaffed, and without the laboratory facilities provided to most medical examiners in her position."

Dr. Peterson had extensive experience in managing mass fatalities during her ten years in Kansas City. During her service at Jackson County, there was a 5 year period from 1977 to 1981 where one disaster a year occurred in Jackson County, Missouri, including a flood, a hotel fire, abandoned bodies by a mortuary service, 157 heat related deaths and the Hyatt skywalk collapse that claimed 114 lives.

Dr. Peterson continues to do consulting in forensic pathology and resides in Kansas City, Missouri.

Dr. Judith Lehotay was the first woman to pass the Forensic Pathology Board Certification Examination of the American Board of Pathology in 1970. Dr. Lehotay served on the NAME Board of Directors in 1978.

Dr. Lehotay was born in Tapiosuly, Hungary and graduated from the Medical School of Pazmany University of Sciences in Budapest in 1956. In 1956, she and her husband fled Hungary, lived in Austria for six months, and then immigrated to the United States. She completed two years of residency training at Sisters Hospital in Rochester, NY. Dr. Lehotay was appointed pathologist for the Meyer Memorial Hospital in Buffalo, New York in 1966 and became the Chief Medical Examiner in Erie County, New York in 1972. Dr. Lehotay died at the age of 54 in 1981.


Mary Fran Ernst

Mary Fran Ernst joined NAME in 1981 and has been actively involved and dedicated to the advancement and success of NAME ever since. Mary Fran retired in December, 2011 after 40 years of service to Saint Louis University (SLU) as associate professor of pathology and director of medicolegal education and resides in St. Louis, Missouri. In 1965, Mary Fran worked as an assistant in the clinical laboratory department at the St. Louis University in St. Louis, Missouri under the mentorship of George Gantner, M.D., director of the program and chief medical examiner for St. Louis County. She earned her bachelor's degree in Organization Management at SLU. In 1975, she also became a medicolegal death investigator in the St. Louis County Medical Examiner's Office.

In 1977, at a time when there was no professional death investigation training available in the country, she recognized the growing need for training and, at the urging of Dr. Gantner, developed the Medicolegal Death Investigators Training Course at St. Louis University. She also developed and coordinated the Masters Level Conferences in Death Investigation, also offered at SLU. In 2002 she was honored as SLU Faculty Woman of the Year.

At the national level, Mary Fran has been particularly involved in the development of the death investigation field, including defining the role of a death investigator, and teaching on death investigation. In 1996, Mary Fran helped write the first textbook written on death investigation, which was later used to develop the national guidelines for the American Board of Medicolegal Death Investigators (ABMDI).

Mary Fran served as President of the Society of Medicolegal Death Investigators, a national organization devoted to educating and training death investigators and remains active in the NAME organization.

Pioneer Women: The Early Years of NAME 1966-1976

During the first 10 years of the NAME, from 1966 to 1976, there were only 5 female forensic pathologists in the NAME membership compared to 103 male members, representing less than 5% of the total membership. The early female members were influential in their contributions to the field of forensic pathology and to the NAME organization. The first five female members included Judith Gedney Tobin, Lorraine Roth-Moyo, Marcella Fierro, Sandra Conradi, and Eleanor McQuillen.


Dr. Judith Gedney Tobin

In 1967, the first female member of NAME was **Dr. Judith Gedney Tobin.** Dr. Tobin received her MD degree at Columbia College of Physicians and Surgeons in New York in 1952 as one of 12 women in her class of 120. Dr. Tobin became a female pioneer in the specialty of forensic pathology and continued to excel in the field while raising six children on her own after her husband's death in 1970. During her career, Dr. Tobin performed more than 5,000 autopsies over a span of 50 years. She demonstrated her leadership abilities as the Delaware Assistant State Medical Examiner from 1964 to 2009 and became the only woman to serve as President of the Nanticoke Hospital Medical Staff. In 2006, Dr. Tobin was recognized for her leadership and contributions to the discipline of pathology when the Delaware Department of Health and Social Services named the Southern Office of the Chief Medical Examiner building in her honor. In 2007, she was the recipient of the Athena Award for professional excellence, community service and for actively assisting women in realizing their full potential.

Dr. Tobin currently lives in Seaford, Delaware and was also inducted into the Hall of Fame of Delaware Women in 2010 for her accomplishments in Forensic Pathology.



Dr. Lorraine Roth-Moyo became the second female NAME member when she joined in 1970. She was active in the NAME's ethic committee. Dr. Roth-Moyo is board certified in Anatomic, Clinical and Forensic Pathology and Dermatopathology. She attended medical school at the University of Ottawa and graduated in 1967. She currently does forensic consulting work and resides in Rochester, New York.


Dr. Marcella Fierro

The third female NAME member was **Dr. Marcella Fierro** who joined in 1974. Dr. Fierro served as the 2nd female President of the National Association of Medical Examiners (NAME) in 1989-1990, and served on the Board of Directors in 1984, 1986, 1992 and 1995 and the Executive Committee of NAME in 1990 as Past President. Dr. Fierro served as Chief Medical Examiner for the Commonwealth of Virginia from 1994 to 2007. She also served as Professor of Pathology and Professor and Chair of the Department of Legal Medicine at Virginia Commonwealth University from 1994 to 2008.

Dr. Fierro is a Fellow of the American Academy of Forensic Sciences and was a member of the Forensic Science Board for the Commonwealth. She has served as a consultant to the FBI on the National Crime Information Center (NCIC) Unidentified and Missing Persons Files, and on federal panels and committees developing best practices in forensic identification and forensic medicine. Dr. Fierro served on the National Academies Committee on Science, Technology, and Law, which authored the report "Strengthening Forensic Science in

the United States: A Path Forward, Dr. Fierro serves on the Board of Directors of the Virginia Institute of Forensic Science and Medicine. In 1990, Dr. Marcella Fierro was the real life inspiration for the famous fictional female forensic pathologist, Dr. Kay Sarpetta, in Patricia Cornwell's crime novels.

Dr. Fierro has published in professional journals, has edited texts, contributed chapters to several books, and presented at national and international meetings. Dr. Fierro serves as a reviewer for the American Journal of Forensic Medicine and Pathology. She is also a diplomat of the ABMDI.

In retirement, Dr. Fierro continues to consult on forensic death-related matters with a special passion for reuniting the many unidentified dead in our nation with searching families. She consulted with the Office of the Chief Medical Examiner in Richmond, Virginia on a grant seeking to enter Virginia's unidentified dead into a national database that is linked to a database of Missing Persons, The National Missing and Unidentified Persons System (NamUs). She currently resides in Richmond, Virginia and remains an active member of NAME.



Dr. Sandra Conradi

Dr. Sandra Conradi, the fourth female member, joined NAME in 1974. She served on the Board of Directors of NAME in 1979, 1982, 1989 and was Vice President in 1990. Dr. Conradi served as the 3rd female President of NAME in 1991. Dr. Conradi graduated from the University of Cincinnati in 1963. Dr. Conradi served as the Chief Medical Examiner in Charleston County, South Carolina in 1992. She was elected as fellow of the College of American Pathologists. She was also appointed as Associate Professor of Pathology and Laboratory Medicine at the Medical University of South Carolina in Charleston, SC. Dr. Conradi continues to participate in NAME meetings and teaches forensic topics nationally. She currently resides in Mt. Pleasant, South Carolina.



Dr. Eleanor McQuillen joined NAME in 1976; she was the 5th female NAME member. She served on the Board of Directors in 1980 and 1983 and as Vice President in 1984. She was the first female President of NAME in 1985 and served as a Past President on the Board of Directors in 1986. She co-authored a timeless paper entitled "Pain and Suffering ... and Unconsciousness" with her husband, James McQuillen, M.D. in 1994. Dr. McQuillen shared a private neuropathology and forensic consulting business with her husband in Hardwick, Vermont until his retirement in 1998.

Progressive Women: 1977 – 1990

The number of female NAME members grew from 5 during the first 10 years to 80 by 1990. Several exceptional female members are featured here for their outstanding dedication, community achievements, and special contributions to forensic pathology and to NAME. Outstanding female NAME members of the 70's and 80's include Patti McFeeley, Mary Gilliland, Mary Case, Elizabeth Laposata, Corrie May, Elizabeth Balraj, Kanthi DeAlwis, Karen Gunson, Mary Ann Sens, Julie Goodin, Jan Garavaglia, Margaret Greenwald, Joni McClain, and Joye Carter.



Dr. Patricia McFeely

Dr. Patricia McFeeley joined NAME in 1977. She served on the Board of Directors in 1987 and 1990. She did her forensic pathology fellowship at the Office of the Medical Investigator, University of New Mexico in Albuquerque, New Mexico (OMI-UNM) from 1976 – 1977 and was later appointed as Deputy Medical Examiner for the OMI-UNM. While working in New Mexico, and eight months pregnant, she handled the prison riot fatalities in Santa Fe, New Mexico. She received training in Pediatric Pathology in Denver, Colorado. Dr. McFeeley also served as President of the AAFS. She has a special interest in SIDS and child fatality. She is board certified in anatomic pathology and forensic pathology.

Dr. McFeeley has special interest in hot air ballooning and sailing. She currently resides in both New Mexico and Florida.



Dr. Mary G.F. Gilliland

Dr. Mary G. F. Gilliland joined NAME in 1981 and served on the NAME Board of Directors from 1997 to 2003. She also serves on the NAME Scientific Presentations Awards Committee and the NAME Self-Assessment Modules Committee. She also serves as a NAME accreditation inspector.

Dr. Gilliland attended medical school at the Loyola University Chicago Stritch School of Medicine in Chicago, Illinois. She completed her pathology residency training at the Cleveland Clinic Foundation in Cleveland, Ohio. In 1979, she served her forensic pathology fellowship at the Case Western Reserve University in Cleveland, Ohio and the Medical College of Virginia in Richmond, Virginia in 1981. She worked as a Medical Examiner at the Southwest Institute of Forensic Science in Dallas, Texas from 1981 to 1989. She was also a licensed pilot from 1983 to 1999.

Since 1989, Dr. Gilliland holds a faculty position at the Brody School of Medicine, East Carolina, Department of Pathology and Laboratory Medicine.


Dr. Mary E.S. Case

Dr. Mary Case joined NAME in 1981 and served on the Board of Directors in 1993, 1996 and 2001-2003. Dr. Mary Case is a graduate of the University of Missouri, Columbia, Missouri and St. Louis University School of Medicine. She did her residency training in pathology at St. Louis University Health Sciences Center and is board certified in anatomical pathology, neuropathology and forensic pathology. Dr. Case is a Professor of Pathology and Co-Director of the Division of Forensic Pathology at St. Louis University Health Sciences Center. She serves as Chief Medical Examiner for St. Louis, St. Charles, Jefferson and Franklin Counties. Dr. Case's primary practice of medicine is forensic pathology. She has special interests in the areas of children's injuries and head trauma.


Dr. Elizabeth Laposata

Dr. Elizabeth Laposata joined NAME in 1983. She served on the Board of Directors of NAME in 1987 and 1990. Dr. Laposata completed her medical education at the University of Maryland School of Medicine in Baltimore, Maryland where she obtained her MD in 1979. She completed her internship and residency in Anatomic Pathology at Johns Hopkins Hospital in Baltimore and her subspecialty fellowship training in Forensic Pathology at St. Louis University School of Medicine in St. Louis, Missouri. She has held faculty appointments at the University of Pennsylvania, School of Medicine in Philadelphia, PA and established the Forensic Pathology Fellowship program at the City of Philadelphia Medical Examiner's Office. She has worked as an Assistant Medical Examiner for the City of St. Louis, the City of Philadelphia, and the State of Delaware. From 1993 to 2005 she served as the Chief Medical Examiner for the State of Rhode Island. Dr. Laposata was honored as Woman of the Year in 2003 by the Rhode Island Commission on Women.

In a federal investigation that lasted over two years, Dr. Laposata managed the examination and identification of over 5,000 fragmented human remains of victims recovered from the crash of EgyptAir 990 off the coast of Massachusetts. In 2003, she ran an around-the-clock operation to complete the autopsies and identifications of 96 victims recovered from a tragic night club fire in West Warwick, RI. She currently holds faculty positions as Clinical Associate Professor of Pathology & Laboratory Medicine at Brown University School of Medicine and as Adjunct Professor of Biomedical Forensic Sciences at Boston University School of Medicine where she teaches forensic pathology and medicolegal death investigation.

Dr. Corrie May joined NAME in 1983 and served on the Board of Directors for NAME from 1999 to 2004. Dr. May graduated from the Louisiana State University School of Medicine in New Orleans in 1976. She completed her pathology residency training and forensic pathology fellowship at the Office of Medical Investigations, University of New Mexico in Albuquerque, New Mexico. She worked as a medical examiner in New Mexico, Texas, and New Jersey. She

was appointed District Coroner in Wichita, Kansas in 1990 and Chief Medical Examiner/Director of Forensic Laboratories of the Sedgwick County Regional Forensic Science Center from 1992 to 2000. Dr. May was responsible for bringing modern forensic pathology and forensic science services to Wichita, Kansas by designing and overseeing the building of a state-of-the-art forensic science center, housing the forensic pathology, toxicology and crime laboratories.

Dr. May currently does forensic consulting and resides in Shawnee, Kansas.


Dr. Elizabeth Balraj

Dr. Elizabeth Balraj joined NAME in 1985. Dr. Balraj served on the Board of Directors for NAME from 2005 to 2010. Dr. Balraj was born in Salem, India and studied medicine at the Women's Christian College and Christian Medical College Hospital in Vellore, India. Upon immigrating to the United States in 1966, Dr. Balraj trained in Anatomic Pathology at Akron General Hospital and St. Luke's Hospital, Cleveland, Ohio. She did her fellowship in Forensic Pathology at the Cuyahoga County Coroner's Office in 1972. She is board certified in Anatomic Pathology and Forensic Pathology.

In 1972, Dr. Balraj began her work in the Cuyahoga County Coroner's Office, as Deputy Coroner and Pathologist. She was appointed Assistant Professor in Forensic Pathology at Case Western Reserve University School of Medicine in 1973 and served as Director of the Forensic Pathology Fellowship Program at Cuyahoga County Coroner's Office. Dr. Balraj served as Coroner of Cuyahoga County from 1987 to 2010 as the first woman and first board certified forensic pathologist elected coroner. Dr. Balraj is credited with moving the Coroner's Office to the twenty-first century including acquiring a state of the art building for the Coroner's Office and Crime Laboratories, including Toxicology and Trace Evidence Departments, establishing the DNA Departments, and the Grief Counseling Program. She also serves on the Violence against Women's Act Subcommittee and the Child Death Review Committee.

Dr. Balraj retired as CME in 2010, currently does forensic consulting, and regularly attends NAME meetings.


Dr. Kanthi DeAlwis

Dr. Kanthi DeAlwis joined NAME in 1986 and has served as the Chief Medical Examiner of Honolulu since 1985 and Associate Clinical Professor of Pathology at the University of Hawaii School of Medicine from 2001 to 2009. Dr. DeAlwis received her medical degree from the Faculty of Medicine, University of Sri Lanka in Colombo, Sri Lanka. She completed an Obstetrics/Gynecology and Internal Medicine internship at the General Hospital in Sri Lanka. She also completed an Anatomic/Clinical Pathology Integrated Pathology Residency Program at the University of Hawaii. She is board certified in anatomic and forensic pathology.

Dr. DeAlwis has published and presented on such topics as mass disasters, drug-related deaths, elder abuse and neglect, and head trauma in children. She is known for her extensive experience in mass disaster operations and has responded to such mass disasters as the 1989 crash of a Molokai Air plane, the 1999 Sacred Falls rock slide, the 1999 Xerox murders and the 2001 recovery of victims of the sinking of the Ehime Maru. Dr. DeAlwis' diligence and service was commended by U.S. Navy Admiral Thomas Fargo in 2001. Dr. DeAlwis was honored for her contributions to pathology by the Honolulu Women in Law Enforcement.

Dr. DeAlwis retired as Chief Medical Examiner in 2009 but continues to work part time at the HMEO and is a national consultant in forensic pathology.



Dr. Karen Gunson

Dr. Karen Gunson joined NAME in 1987. She has served on the Board of Directors for the National Association of Medical Examiners for six years from 1999 to 2004 and Executive Committee for three years from 2002 to 2004. She received her undergraduate degree at Whitman College, Oregon State University and medical degree from the Oregon Health Sciences University. She is board certified in anatomic, clinical and forensic pathology. She has served as the Oregon State Chief Medical Examiner since 1999.



Dr. Mary Ann Sens

Dr. Mary Ann Sens joined NAME in 1987 and was elected President of NAME in 2011 as the 5th female President in 44 years of the NAME organization. She served on the Board of Directors from 2007 to 2012, and the Executive Committee in 2009 and Chairman of the Board in 2012. Dr. Sens served as chair of Pathology at the University of North Dakota School of Medicine and Health Sciences (SMHS) in Fargo, North Dakota since 2002. She serves as the Grand Forks County Coroner and the medical examiner for 4 counties in Minnesota.

Dr. Sens is also active in Undergraduate Medical Educators Section (UMEDS), the pathology medical education committee for the Association of Pathology Chairs. Locally, Dr. Sens has served on the Internal Advisory Board for the Indians Into Medicine program (INMED), has chaired the Student Performance and Recognition Committee, and served on the University Senate.

She has published over 110 scientific articles, written numerous national continuing medical education modules and earned the University of North Dakota (UND) Foundation/McDermott Award for Excellence in Teaching, Research or Creative Activity and Service and received nine Outstanding Block Instructor Awards at the UND-SMHS.


Dr. Julia Goodin

Dr. Julia Goodin, Iowa Chief State Medical Examiner joined NAME in 1988 and served on the NAME Board of Directors for 6 years from 2001 to 2006. Dr. Goodin received her B.S. in Biology and Chemistry from Western Kentucky University and an M.D. from the University of Kentucky in Lexington. She trained in both anatomic and clinical pathology at Vanderbilt University Medical Center followed by a one-year fellowship in forensic pathology at the Maryland State Office of the Medical Examiner in Baltimore, Maryland. She was Assistant Medical Examiner, Office of the Chief Medical Examiner in Baltimore, Maryland; Assistant Medical Examiner and later Acting Chief Medical Examiner, Office of Chief Medical Examiner in Nashville, Tennessee; Associate Medical Investigator, State of New Mexico, Health Sciences Center; and a State Medical Examiner, Alabama Department of Forensic Sciences, Mobile Regional Lab, Mobile, Alabama. She also served six years on the Board of Directors for American Academy of Forensic Sciences (AAFS) and is a member of the Association of Military Surgeons of the United States and the Iowa Medical Society. She is a Captain in the Navy Reserve. She has a special interest in Cardiovascular Pathology and Sports Related Sudden Deaths. Dr. Goodin has served as Chief Medical Examiner for the Iowa State Medical Examiner's Office in Ankeny, Iowa since 1999. In 1999, she was appointed Associate Professor of Pathology with the University of Iowa and Adjunct Associate Professor with Des Moines University.


Dr. Mary I. Jumbelic

Dr. Mary I. Jumbelic joined NAME in 1988. Dr. Jumbelic attended the University of Maryland, Baltimore County in 1979. She completed her fellowship at the Union Memorial Hospital and Northwestern University, Cook County Office of the Medical Examiner in 1987. She is board certified in anatomic, clinical and forensic pathology. In 1995, Dr. Jumbelic became Deputy Chief Medical Examiner for Onondaga County OME and became Chief in 1998. Dr. Jumbelic was active in the disaster management field and a member of DMORT. She worked Hurricane Katrina and the Thailand tsunami in 2005, World Trade Center terrorist attacks in 2001, KAL Flight 801 in Guam 1997, and TWA Flight 800 on Long Island in 1996.

Dr. Jumbelic retired as Chief Medical Examiner of Onondaga County, New York in 2009.


Dr. Leah Bush

Dr. Leah Bush joined NAME in 1989 and served on Board of Directors from 2001 to 2013. Dr. Bush received her medical degree from the Medical College of Virginia, School of Medicine and forensic pathology fellowship in Richmond, Virginia from 1988-1989. She is board certified in anatomic, clinical and forensic pathology. She was appointed Chief Medical Examiner for the Commonwealth of Virginia following Dr. Marcella Fierro's retirement in 2007.


Jan C. Garavaglia

Dr. Jan C. Garavaglia (aka "Dr. G") is the Chief Medical Examiner for the District Nine (Orange-Osceola) Medical Examiner's Office in Florida. She joined NAME in 1989. Dr. Garavaglia served on the NAME Board of Directors from 2005 to 2010. A graduate of the St. Louis University School of Medicine, Dr. Garavaglia completed her fellowship in forensic pathology at the Dade County Medical Examiner's Office in Miami, Florida. She is board certified in anatomic, clinical and forensic pathology. Prior to joining the office in Florida, Dr. Garavaglia was a medical examiner at the Bexar County Forensic Science Center in San Antonio, Texas, for 10 years. She also served at the University of Texas Health Science Center at San Antonio as a clinical assistant professor for the department of pathology, and as a member of the Graduate Faculty Council for the Graduate School of Biomedical Science.

Dr. Garavaglia is a member of the National Association of Medical Examiners and the American Academy of Forensic Sciences, and is a recipient of the Hidalgo Award, presented by the Bexar County Commissioners Court in Texas for "outstanding work assisting agencies and providing forensic science services during a multi-jurisdictional capital murder investigation". In 2004, she starred in the T.V. show "Dr. G: Medical Examiner" filmed at her office which featured real life pathology cases and gave national visibility to forensic pathology as a career. Dr. G has served as Chief Medical Examiner in Orlando, Florida since 2003.



Dr. Margaret S. Greenwald joined the NAME in 1989 and served on the NAME Executive Committee as Secretary/Treasurer from 2003 – 2004. She was appointed to the Maine State Chief Medical Examiner Office in 1997 as the Deputy Chief Medical Examiner, and in 1998 she was appointed Maine's third Chief Medical Examiner. Dr. Greenwald received her undergraduate degree from Michigan State University in 1973 and medical degree from Ohio State University Medical School in 1976.

Dr. Greenwald's post graduate studies included an internship in Internal Medicine at Los Angeles County-USC Medical Center, residency in Anatomic Pathology at St. Vincent's Hospital and Medical Center in New York City, residency in Clinical Pathology at Mercy Hospital and Medical Center in San Diego, and a fellowship in Forensic Pathology at the Department of Chief Medical Examiner- Coroner, Los Angeles County from 1984 -1985.

Before coming to Maine, Dr. Greenwald served as a Medical Examiner for the Commonwealth of Massachusetts, as well as in the Counties of San Francisco and San Diego, California. She has been a faculty member for the Seminar for Forensic Sciences at Colby College for the last 12 years and is a Faculty Associate at the University of Maine for Issues in Forensic Investigation of Death and Injury.


Dr. Joni McClain

Dr. Joni McClain became a NAME member in 1988 and served as the 4th female President in 2002. Dr. McClain graduated from the University of Oklahoma Medical School in 1983 funded by a scholarship from the US Air Force. She completed a four-year residency in Anatomic and Clinical Pathology at the University of Oklahoma Health Sciences Center in Oklahoma City and Forensic Pathology fellowship at the University of Indiana in Indianapolis, Indiana. Following her fellowship, she needed to repay the Air Force for her medical school scholarship and was stationed at the Armed Forces Institute of Pathology (AFIP) in the Forensic Pathology Division. She is board certified in anatomic, clinical and forensic pathology.

Dr. McClain was also involved in investigating numerous accidents and other forensic investigations. The Air Force also sent her to flight surgeon school at Brooks AFB, San Antonio, Texas. Dr. Joye Carter and Dr. McClain were the course directors for the Forensic Pathology Course at the AFIP. While at the AFIP, she was involved in setting up the Disaster Mortuary Operations Response Team (DMORT) program. She also worked on the Oklahoma City bombing case trough DMORT. Dr. McClain started working at the Medical Examiner's Office in Dallas in 1992 when the Chief Deputy Medical Examiner in Dallas was called to active duty. She has served as Chief Deputy Medical Examiner for Dallas County since October 2004.


Dr. Joye Carter

Dr. Joye M. Carter joined NAME in 1990. Dr. Carter first made history when she became the first graduate of Howard University to achieve board certification in Forensic Pathology. She became the first African-American to be appointed a Chief Medical Examiner in the United States in 1992 when she became Chief Medical Examiner for Washington, D.C. She became the first female to be appointed Chief Medical Examiner in the history of the state of Texas where she served as Chief Medical Examiner of Harris County in Texas from 1996 until 2002.

Dr. Carter is currently the Chief Forensic Pathologist to the Coroner in Indianapolis, Indiana.

Denise McNally started her journey with NAME in 1979 and has demonstrated confidentiality and integrity while being responsible for the daily operations of the administrative and management functions related to the professional, financial public relations, continual organizational development, and its membership. In 1979, Denise was an Administrative Assistant at St. Louis University, Department of Pathology and Division of Forensic & Environmental Pathology in St. Louis, Missouri under George Gantner, M.D. In 1990 – 1999, Denise worked for Mary Case, M.D. as her Medicolegal Death Investigator, Administrator and Custodian of Records for the St. Charles County Medical Examiner's Office, Jefferson County Medical Examiner's Office and the Franklin County Medical Examiner's Office. In 1990, Denise has received certification as a Qualified Mortuary Disaster Coordinator with the Federal Emergency Management Agency and was the Disaster Service Representative of the St. Charles County Emergency Management Agency, Office of Civil Defense. She also performed administrative duties for Michael Graham, M.D. and the National Association of Medical Examiners. In 1991 to present, Denise has been a full time employee for NAME as the Executive Director. From 1990-1998, Denise received a Certificate of Leadership with the YWCA. Denise has and continues to serve on many committees within the National Association of Medical Examiner's.



Ladies Luncheon

As the female membership grew, the women of NAME formed friendships and common interest and met for lunch at various restaurants during the annual NAME meeting.
In the mid and late 70's there were very few women in NAME. Dr. Sandra Conradi and Dr. Marcella Fierro found one another because they were the only young women doctors at the meetings at that time and met for lunch. A year or two later, they invited Dr. Corrie May to join them for lunch.

As new women doctors came to the NAME meeting, they were invited to the ladies' luncheon. As the group grew larger, it became difficult to find a restaurant without a reservation. At some point, female investigators and administrators were also invited to the luncheon. In the 90's, Mary Fran Ernst came to the lunch and added to the NAME program the "Femme Fatale Luncheon" and reserved a room for the group at the host hotel.

In the mid 80's the group invited a guest "token male" to join the ladies luncheon.
Some male guests included Dr. George McCormick of Louisiana, Dr. William Sturner of Arkansas, Dr. Ed Donoghue of Chicago who prepared a speech, and Dr. Kris Sperry of Georgia, who displayed his interesting body art. However, this tradition ended when the "token male" guest relayed opinions regarding female pathologists that insulted and embarrassed the group. Dr. Fierro was speechless, but Dr. Case was on her feet immediately and gave a spirited rebuttal. This halted the annual invitation of our male colleagues. Currently, the Femme Fatale

luncheons are still a popular, well-attended, annual event and open to any attendees who wish to come.

Conclusion

The first 25 years of NAME showed an increase in female membership from only one member in 1967 to 75 female members and 349 male members in 1990. In 2012, there were 375 female members and 717 male members. Throughout the early years of NAME, including an increased growth of female membership in the 70's and 80's, more women became physicians, pathologists, and forensic pathologists. The female pathologists in NAME became more involved in the organization by serving as President, members of the Board of Directors, and presenting papers and posters at the scientific programs. More women forensic pathologists were appointed chief medical examiners, forensic pathology training directors, and supported NAME accreditation standards for their offices, and contributed to forensic pathology scientific research.

Many of the women portrayed here were trailblazers for future women working in pathology, forensic pathology and other male-dominated fields. Many women worked extremely hard to achieve success and recognition while balancing work and family responsibilities. The exceptional female professionals have come a long way since the early days and serve as mentors and role models for the profession. They have paved the way for the next generation of female forensic pathologists to follow in their footsteps and embrace the journey into the future with new challenges and opportunities. This article only focused on a few of the many outstanding women who contributed to forensic pathology and the NAME organization with intent to honor the importance of their achievements.

Obituaries and Memorials

Karen E. Chancelor, MD – Memorial



KAREN ELIZABETH CHANCELLOR, M.D.

September 4, 1957 – September 10, 2021
Memphis, Tennessee
Karen Chancellor joined NAME in 1994

Dr. Karen E. Chancellor, who served as Shelby County's medical examiner for nearly 14 years, died unexpectedly Friday, September 10, following a car crash on Sam Cooper Boulevard. She was 64. While scholarship and medical excellence were the underpinnings of Karen's public life, she was so much more. Karen was a loving daughter and sister, a doctor, a scientist, a tireless sleuth, a woodworker, a kite builder, a harmonica player, and one of the kindest and most unassuming human beings to grace our earth. Karen was born in Memphis, the daughter of the late Elizabeth and Earl Wynne Chancellor. At an early age Karen showed her penchant for scholarship. After graduating from Overton High School, she became one of the first students to graduate from the University of Memphis with an undergraduate and master's degree in mathematics at the same time. She graduated from Duke University School of Medicine in Chapel Hill, North Carolina, and had planned a career in medical research. Her plans changed however while she was a forensic pathology resident at the University of Kentucky. She came across what was to be a routine case: a man found dead in a recliner with the television on and a remote control in his hand. During the autopsy, Karen found evidence of a murder and became fascinated by the investigative work a doctor could offer. Karen returned to Chapel Hill where she earned board certification in forensic pathology and neuropathology. She served as the Associate Chief Medical Examiner for North Carolina before being appointed in 2004 as the Chief Medical Examiner of Shelby County. In this role, she felt that her mission was to speak for those who could no longer speak. While in Memphis, Karen worked on more than autopsies. She served as Deputy Chief State Medical Examiner for Tennessee and was a professor of pathology at the University of Tennessee Health Science Center. She was instrumental in merging the county's Medical Examiner's office with the University of Tennessee Health Science Center - a move she believed would encourage medical students to pursue careers in forensic pathology. Karen spent countless hours trying to educate the public about Shaken Baby Syndrome and she forewarned others about the rise of the opioid crisis in Shelby County. In

2012 she was awarded the University of Memphis' Outstanding Alumna Award. Although pathology was her passion, Karen had many interests. In recent years she became very involved with ham radio operation and taught remote courses in Morse code. Karen is survived by her sisters, Carol Wynne Chancellor of Memphis, and Faye (Stasiek) Sylwestrowicz of Gdansk, Poland; two nephews, Daniel Sylwestrowicz of Kansas City, Mo., and Michal (Kaja) Sylwestrowicz, and a great-niece, Eunice, of Gdansk; and a niece, Esther Sylwestrowicz of Gdansk. Karen also leaves behind the many students she taught who carry on her legacy of medical excellence. A memorial service will be held at 2 p.m. Monday, September 20, at Family Funeral Care, 4925 Summer Ave. The Chancellor family asks that you remember Karen with a donation to St. Jude Children's Research Hospital or a charity of the donor's choice.

Roy J. Dames, ABMDI - Memorial





February 24, 1944 – January 23, 2020
LaGrange, Illinois
Roy Dames joined NAME in 1988, was on the Board of Directors from 1997 – 2003
he was granted Emeritus status in 2008

Roy Dames passed away January 23, 2020 after a short illness. Roy was the retired past Chief Administrator of the Cook Co ME Office and was retired long-time Affiliate Member who became a Deputy Coroner of Cook County under the Coroner Dr. Toman, and soon became Assistant Chief Coroner. He helped Cook County transition to a M.E. system when Dr. Stein became the first Chief Medical Examiner in 1976 and served with Dr. Edmund Donoghue as his chief administrator until Roy's retirement in December 2000. His accomplishments were many and his services to his community, the medical examiner community, and NAME were great and numerous. He and his wife Elsa were always at the annual NAME meetings and you could tell when Roy was in a room. Roy was a great mentor with sound advice always and knew how to deal with Cook County Government like no one else. A reprint from the NAME Newsletter from 2004 spotlighting Roy is below.

NAME Newsletter ~2004

NAME Spotlight on - Roy Dames, ABMDI

In keeping with this month's affiliate theme, we spotlight a recently retired Chief Executive Administrator of the Cook County M.E. Office, member of the NAME Board of Directors and Finance Committee, and one who never shied away from the controversies or challenges that beset medical examiners offices, Roy Dames. In 1971 Roy left the Chicagoland securities and insurance business to become a Deputy Coroner of Cook County under the Coroner Dr. Toman, realized he had found his calling, and was quickly promoted to Assistant Chief Coroner. He helped Cook County transition to a M.E. system when Dr. Stein became the first Chief Medical Examiner in 1976, and Roy became the office's Administrative Assistant responsible for the budget. Through 1980-81 Roy coordinated the arrangements and plans for transfer to the new

and current M.E Office from the old coroner facility. From 1983 to 84 Dr. Stein stepped down as Chief, Dr. Donoghue stepped up, and in 1985 Roy became the office's Chief Administrator until his retirement in December of 2000. But even retired he still holds certificate #13 from the ABMDI. During his professional tenure he helped the Office through the fatalities of the O'Hare crash of Flight 191 with 273 victims, the Midway Airport United Airlines plane crash, the Illinois Central train crash of 1973, the dramatic "L" train derailment and fall, the Paxton Hotel fire in Chicago, and assisted other counties in the Quincy runway plane collision and the Kankakee Amtrak-truck collision. The scariest disaster for Roy was managing the Tylenol-Cyanide poisonings where he and Dr. Donoghue went out on a limb in a press conference to tell everyone not to take Tylenol to prevent further deaths. For his abilities, Roy was awarded the Superior Public Service Award twice, in 1988 and 1999, competing against the large pool of other Chicago and Cook County municipal employees. During these times Roy also served as president of the Berwyn-Cicero Council on Aging with the current IL State Treasurer and established the La Grange Adult Day Care Program in the suburb in which he lives with his wife of 30 years, Elsa. Roy has two sons, Brian and David, recent graduates from University of Illinois at Chicago and Western Illinois University. In his retirement Roy continues to serve on the County's Child Death Review Committee Team B, the La Grange Police Committee, and as an elder in his church. Roy might now have a little more time to enjoy his boat, fishing, books, and travel. On his way to the San Jose NAME meeting, Roy and Elsa traveled 8300 miles exploring and photographing 16 National Parks by RV.

Finally, ask about Roy and you learn that he is the administrator who took the time and effort to learn about forensic pathology and to understand what medical examiners need to do their job. In Roy fashion, he sums up his Chief Administrator duties as keeping the boss M.E. out of trouble, not being a "yes man" and making sure the Chief M.E. isn't flying it alone through the numerous professional and political perils, essentials for a successful M.E. Office. Thanks, Roy, for sharing your experience and wisdom in this NAME Spotlight.

Scott Denton, M.D.
Cook County, IL

William Gamm Eckert, M.D. – Memorial



1926-1999

NAME President 1980-81
Founding Editor, American Journal of Forensic Medicine and Pathology

By Thomas Noguchi
American Journal of Forensic Medicine & Pathology:
December 1999 - Volume 20 - Issue 4 - pp 388-389

December 1999

After a long illness, William Gamm Eckert, M.D., passed away in New Orleans on Friday, September 17, 1999, at the age of 73 years. His passing is a great loss to the field of forensic pathology at large and, more specifically, to those of us who had the fortune to call him friend.

Bill Eckert was born in Union City, New Jersey, in 1926. He attended New York University School of Medicine, where he obtained his Doctor of Medicine degree in 1952. He completed his internship at the Public Health Service Hospital in Staten Island, New York; served briefly in the Coast Guard Air Sea Rescue Unit; and then served at the Public Health Service Hospital in Brighton, Massachusetts. He completed his Pathology Residency in 1958 at Tulane University and was subsequently appointed as a Fellow in Forensic Pathology at the State Medical Examiner's Office in Norfolk, Virginia. Bill Eckert became certified by the American Board of Pathology in Anatomic and Forensic Pathology in 1959 and in Clinical Pathology in 1960.

I first met Bill Eckert in 1962 when I presented a paper on scuba diving fatalities at the ASCP meeting and he congratulated me on the presentation. Our friendship began then and continued to grow through the years until his demise.

Bill Eckert served for many years as a pathologist for the St. Francis Hospital in Wichita, Kansas, and worked as a forensic pathologist in the surrounding coroner's offices. He was a Clinical Associate Professor of Pathology at the University of Kansas Medical School; a member of the AMA and NAME; and Fellow of the CAP American College of Legal Medicine and the AAFS. He provided an active consultation service for many forensic cases and testified in numerous court proceedings.

Bill was always eager to share his knowledge with personnel working in the criminal justice system. During his tenure in Wichita, he established the annual Western Conference in Civil and Criminal Problems, inviting forensic medical colleagues to speak and present papers. I was invited to speak at the conference, along with many other colleagues. To honor his professor, Bill went on to establish the Milton Helpern Center, a forensic reference library service. The Center was supported mostly by his own personal resources, with the dedicated assistance of his wife, Haroldine, a registered nurse, and their two children. Today, the Center is housed in Jefferson Parish, Louisiana.

Bill Eckert was a pioneer in international forensic communications. In 1966, at the IAFS Meeting in Copenhagen, Denmark, he founded and launched INFORM, the International Reference Organization in Forensic Medicine. For years, he published and mailed newsletters to his international colleagues. In addition to his work with INFORM, in 1966 he organized the first international exchange in forensic medicine between the United States and the then U.S.S.R., leading to meetings between U.S. forensic scientists and their Soviet counterparts in Moscow and St. Petersburg. He served as an adviser to the establishment of the Indo-Pacific Association of Legal Medicine and Science (INPALMS), which met for the first time in Singapore in 19983 and held its sixth meeting in Kobe, Japan, in 1998.

Bill was very active in the early phases of the National Association of Medical Examiners (NAME), served as president of the organization, and was the founding editor of its official publication, The American Journal of Forensic Medicine and Pathology, commonly known as the orange journal.

During 1978, Bill served as President of the International Association of Forensic Sciences (IAFS) and hosted its triennial meeting in Wichita, Kansas. In 1987, he hosted a meeting of the Pan American Association of Forensic Sciences simultaneous with the first meeting of the World Association of Police Medical Officers (WPMO). The WPMO held its eighth meeting this past August in Vancouver, Canada.

Bill Eckert was instrumental in establishing the active international communication system in forensic medicine in place today. In addition to the newsletters he published, he served as co-editor of the three-volume set Forensic Medicine, published in 1977, a standard text and reference book found in medical libraries throughout the world. Another of his books, Introduction to Forensic Sciences, second edition, published in 1997, is a popular text-book used in many criminal justice training programs.

Above all, Bill Eckert was a family man and a natural lover of people, animals, and sports. He was a champion of rights for the needy and the afflicted. He played varsity football during his years at NYU and later found time to coach several children's sports teams, often going to work at 4:00 a.m. in order to have the afternoons free to coach. His generosity extended to anyone in need, and I too was a recipient of this generosity. Bill's home was always open to me, and I found a happy and loving atmosphere there. Bill was also a civic leader and was active in the Rotary Club, Masonic Lodge, and other civic organizations.

Bill Eckert was an extraordinary physician, husband, father, and friend who dedicated his life to the advancement of the forensic sciences. He is survived by his loving wife, Haroldine; his daughter, Mary Ellen Potucek; his son, William H. Eckert; four grandchildren; three birds; and his two faithful dogs. We will surely miss him.

Robert Mayo Failing, M.D. - Memorial



ROBERT MAYO FAILING, M.D.

October 20, 1928 – September 1, 2018
Montecito, CA
Dr. Robert Mayo Failing joined NAME in 1967 and was granted Emeritus status in 1998

Robert "Bob" Mayo Failing was born in Ann Arbor, Michigan, the son of Joseph Henry Failing, MD and Virginia Mayo Neely. He attended Starr Commonwealth School in Albion, Michigan, graduating in 1946 at age seventeen. He moved to Murphy, North Carolina and took a job with the Anglo-American Lumber Company. He entered Western Carolina Teachers College (now Western Carolina University) in 1948, graduating in 1951. He attended Duke University School of Medicine and received his MD degree in 1956. He spent the next five years at the Los Angeles County General Hospital in a one year rotating internship and a four year anatomic and clinical pathology residency. During that same time he moonlighted as an Emergency Room physician, St. Luke Hospital, Altadena, California, and as a Deputy Medical Examiner for the County of Los Angeles.

Bob joined Santa Barbara Cottage Hospital's pathology department in 1961 and worked there until he retired in 1996. During the same period he served as a principal forensic pathologist for the Santa Barbara County Sheriff/Coroner's Office, Medical Director of Tri-Counties Blood Bank, Chief of Laboratory Services Santa Ynez Valley and Pinecrest Hospitals and was a founding director of Medical Group Pathology Laboratory, Inc. Because of his forensic expertise and story-telling skills, he frequently consulted with author Sue Grafton for her "alphabet series" detective novels. Ms. Grafton dedicated "Q is for Quarry" to Bob because one of his unsolved cases gave her the idea for the book.
Once settled in Santa Barbara, Bob's dormant love of wilderness and mountains re-awoke. Through a close friendship with William Hansen, then Supervisor of the Los Padres National

Forest, he explored the vast San Raphael Wilderness, leading several youth student groups on week-long camping trips through its remote terrain. In the late 1960's and early 70's, he became a "river rat" running the Stanislaus, Yampa, Green and Snake rivers. In 1968 he ran the 230 mile section of the Colorado River through the Grand Canyon which at that time had been attempted by fewer than 2500 people. Bob joined the Los Padres Search and Rescue Team as its team physician, serving terms as director and president. This turned his interest towards mountains.

At age 49, and for the following 18 years, mountains were Bob's love. He was the ninth person of record to summit all fifty state high points - from Florida's 345' Britton Hill to Alaska's formidable Denali at 20,237'. He reached the top of six continents: North America (Denali-20,237'), South America (Aconcagua-22,834'), Africa (Kilimanjaro-19,340'), Europe (Elbrus-18,510'), Australia (Kosciuszko-7,310') and Antarctica (Vinson Massif-16,066'). He scaled the high points of over 45 nations on the world's six inhabited continents. Ararat, Fuji, the Matterhorn, Olympus, Popocatepetl, Sinai, and many lesser known mountains of Central and South America, Europe's Alps, Pyrenees, Tatars and Carpathians, Asia's Caucasus, North America's Sierra, Cascades, Rockies, Appalachians - all were explored, hiked and climbed. One of his partners would often welcome his return from a mountain adventure with, "So, another suicide attempt failed"! The low point of his travels, the Dead Sea.

His last major climb (1994) was the first assent of Antarctica's Mt. Vaughan, (87 degrees south latitude) with eighty-nine year old Norman Vaughan, for whom the mountain was named by Admiral Byrd. Vaughan was the chief dog "musher" on Byrd's 1928-30 Antarctica expedition. Bob was the master of the slide-show, sharing incredible photos of his adventures and supplementing them with his patented stories.

Bob was a long time director and past president of the Community Arts Music Association. A lifetime Episcopalian, member of All Saints by the Sea, he served his church in various capacities: vestryman, diocesan delegate and convocational member of the diocesan department of missions. A loyal alumnus of Western Carolina University, he served on its Foundation Board for over a decade.

His proudest non-mountaineering feat began at age 62. Each year on his birthday, for 12 consecutive years, he would walk, carry his clubs and play the number of holes as his age. At age 72, he walked and played 72 holes (more than 15 miles), and carried his own bag with 14 clubs. He completed the rounds in 9 hours, 25 minutes, monitored by one or more club members. Nobody at his country club has come close to matching this achievement!
Bob was a member of the Valley Club of Montecito, the Santa Barbara Club, the Mount Vernon Country Club (Golden, CO), the American Alpine Club, The Explorers Club, California Mountaineering Club, and founding director and member of the High Pointers Club.

He is survived by his wife of 41 years, Nancyann, and children Robert Mayo Failing, Jr., Lee Scheuermann, and Margaret Wrath-Esposito, step-daughter Carol Crego, step-son Stephen

Raber, six grandchildren, and three step-grandchildren. He was pre-deceased by his daughter, Sarah Gronna.

John Roque Fernandes, M.D. - Memorial





JOHN ROQUE FERNANDES, M.D.

May 2, 1956 – April 18, 2019
Hamilton, Ontario, Canada
Dr. John Fernandes joined NAME in 2001

FERNANDES, JOHN ROQUE Passed surrounded by his beloved husband Don, family and friends at sunrise on April 18, 2019. He passed in his most prized place on earth, his home and sanctuary on Lake Erie which he created with Don. John was born in Georgetown, British Guiana, raised in Scarborough, Ontario. John received his Medical Degree from McGill University and followed with specialties in Obstetrics and Gynaecology, and many years later he specialized in Forensic Pathology in Richmond, Virginia. John spent 18 years in post-secondary education and was devoted to all of his career choices. He finished his life as Chief of the Hamilton Regional Laboratory Medicine Program at Hamilton Health Sciences and Director Hamilton Regional Forensic Unit. John's proudest career achievement was his Professorship of Pathology and Molecular Medicine, Faculty of Health Sciences, McMaster University. John will be sadly missed by his husband, Don Schell. Predeceased by his father Gaston, he will also be missed by his mother, Elvera, sisters, Liz (Bill), Rosie (John), Suzie (Danny); nieces and nephews, Sean (Jenna), Alex, Nicole (Mike), Lizzie (Kordan) Laura, Leslie and Andy; great-niece and nephew, Elle and Harrison; John and Don's family: Bill, John Joseph, William and Paula (Danny) and also his large extended family of cousins, aunts and friends. John adored his dogs Tucker, Bentley and Maeze who stood by him to his final moments. John performed many volunteer jobs; he donated meals to the homeless and provided free medical care to those less fortunate. John will also be remembered for the epic dinner parties he hosted with Don as the executive chef. Countless people were invited to share in delicious food (prepared by Don) and his

generous hospitality and spirit. John was so very proud of Don and their home and he took every opportunity to share that with his family and friends. John's words to live by were: Civility = Being kind; A great attitude becomes a great mood, which becomes a great day, which becomes a great year which becomes a great life. Services will be held on Wednesday, April 24, 2019 at 11:00 a.m. at the Laidlaw Memorial United Church at 155 Ottawa Street, Hamilton, Ontario. John requested that attendees wear color to his funeral service and in lieu of flowers, donations may be made to Mission Services of Hamilton.

Richard C. Froede, M.D. – Memorial



1929-2011

By Scott Denton

April 2002

Richard C. Froede, M.D. felt the attraction of a career in medicine at an early age. Inspired by his father, Herbert E. Froede, MD, and his father's colleagues, Richard came to the Marquette University School of Medicine after completing undergraduate work at Ripon College.

"I thought being a doctor would be very interesting, and very much a challenge," he said. Judging from his career, Dr. Froede has yet to encounter a challenge he was not equal to.

The influence of his pathology professors and former biochemistry chairman Armand J. Quick, MD, steered him toward anatomy and clinical pathology. Immediately upon graduation, Dr. Froede began a 21-year career with the U.S. Air Force. Assignments took the Milwaukee native to England, Florida, Germany and ultimately Washington, D.C., where he served as Chairman of the Department of Forensic Sciences at the Armed Forces Institute of Pathology (AFIP) before retiring in 1976 with the rank of Colonel. During his military service, Dr. Froede acted as a consulting pathologist for NASA's Project Gemini.

Dr. Froede was Professor of Pathology and Chief of Forensic Sciences at the University of Arizona from 1976 to 1987. At the same time, he was Chief Medical Examiner for Pima County and Medical Examiner for eight other Arizona counties.

His research has centered on interpretive and epidemiologic studies in substance abuse, patterns of death and injury in traumatic cases, and investigation of mass disasters. For more

than 20 years, he has been involved in the education and training of medical, dental, legal and law enforcement personnel.

In 1987, he returned to the AFIP as a civilian Distinguished Scientist in Forensic Sciences. The following year he was named the country's first Armed Forces Medical Examiner, and continued in that position until 1992. During that time, Dr. Froede was involved in prominent events, including the invasion of Panama, operations Desert Shield and Desert Storm, and the magazine explosion aboard the battleship U.S.S. Iowa. He considers his time as Armed Forces Medical Examiner to be his most challenging and rewarding experience.

"We saw almost absolute cooperation from everybody, even civilian authorities in different countries," he said. He has since served on an oversight committee that investigated Bosnian war crimes for the United Nations World Court at The Hague. His decorations are many. Ripon College gave Dr. Froede its Distinguished Alumni Award in 1991, the same year he received the Meritorious Civilian Service Award from the Secretary of Defense. The Drug Enforcement Administration, the Air Force, Navy and FBI have cited him for his achievements in forensic pathology. He is a Distinguished Fellow and past president of the American Academy of Forensic Sciences (AAFS) in 1989-1990.

CAP Fellow honored by American Academy of Forensic Sciences

Richard C. Froede, MD, FCAP, was presented with the RBH Gradwohl Medallion at the recent annual meeting of the American Academy of Forensic Science (AAFS). The Gradwohl Medallion, the highest honor awarded by the AAFS, is conferred upon only those persons who have attained exceptional distinction in the advancement of forensic science, who have given outstanding service to the AAFS over a long period of time, and who have achieved outstanding recognition in a public position through service to the forensic science profession.

Dr. Froede has been a member of AAFS since 1970. He has accepted more than 40 AAFS assignments, including the chair of several committees. Dr. Froede served as president of the AAFS in 1989-1990.

Dr. Froede has also served on several CAP committees, including chair of the Forensic Identity and Forensic Pathology committees. He received the ASCP/CAP Joint Distinguished Service Award in 1999.

George E. Gantner, Jr., M.D. - Memorial



1927-1988

NAME Secretary-Treasurer 1976 to 1988

By Mary Case

January 2016

Dr. Gantner was born June 7, 1927 in St. Louis, MO. His father was an attorney and survived his son a short time following Dr. Gantner's death in 1988. Dr. Gantner went to high school at St. Louis University High and in 1985 he received the Anna Backer Award for Outstanding Alumnus. He was in the US Naval reserve as an electronics technician following high school for one year. Dr. Gantner graduated from St. Louis University with a BS in biology in 1949 where he was a Phi Beta Kappa and went to medical school at St. Louis University where he graduated in 1953. He did an internship in surgery at St. Mary's Hospital in Clayton, MO and then did a residency in pathology at St. Louis University which he completed in 1957. Dr. Gantner then joined the faculty at St. Louis University School of Medicine where he remained the rest of his life. He became a Professor of Pathology in 1969. He served as a Pathologist and Director of Laboratories at St. Louis University Hospitals from 1958 to 1975. He served as Chairman of the Department of Pathology at St. Louis University School of Medicine from 1977 to 1979. Dr. Gantner created and served as Chair of the Division of Forensic and Environmental Pathology at St. Louis University School of Medicine from 1975 until his death. Other roles that he played at the School of Medicine/University Hospitals included Director of the Medical Technology Program, Executive Committee of the Faculty, Admissions Committee, Medical Educations Policy Committee, Medical Center Computer Committee, Promotions Committee, and the

President's Council. Dr. Gantner provided a Forensic Pathology 10 week two lecture hours/week elective for medical students and law students.

Dr. Gantner's interest in forensic medicine was initiated by Dr. John Wyatt, a pathology professor at St. Louis University who had trained with Scotland Yard. Dr. Wyatt served as Chief Coroner's pathologist in the 1950s and had forged the connection between the St. Louis County and St. Louis University pathologists in doing the coroner autopsies. From 1958 to 1968, Dr. Gantner served as a Coroner's pathologist for St. Louis County. Autopsies were performed at the old St. Louis County Hospital where St. Louis University provided pathology services to the hospital. The Coroner was Ray Harris, an attorney. In 1968, Dr. Gantner and Ray Harris worked with St. Louis County to change from a Coroner system to a Medical Examiner system which happened January 1, 1969. This change was the result of a new state statute defining coroner/medical examiner jurisdictions in MO. Dr. Gantner became the first St. Louis County Chief Medical Examiner and Ray Harris became the first Chief Investigator. Dr. Gantner served as the Chief ME in St. Louis County until his death in November 1988 when Mary Case, M.D. became the second and current Chief Medical Examiner.

In 1977, the City of St. Louis became a Medical Examiner system and Dr. Gantner became the first Chief Medical Examiner and served until his death when Michael Graham became the second and current Chief Medical Examiner.

Dr. Gantner was board certified in anatomical, clinical, and forensic pathology. His forensic board examination was awarded in 1974.

Dr. Gantner was a member of several professional organizations and was particularly active in the CAP, AAFS, and NAME. Activities in the CAP included memberships on numerous committees involving nomenclature and classification of diseases as well as on committees involving computerization in the laboratory.

In NAME, Dr. Gantner's activities included Board of Directors 1974 to 1977; Chairman of the Nomenclature Committee; Board of Inspectors; Secretary-Treasurer 1976 to 1988.

In the American Academy of Forensic sciences, Dr. Gantner's activities included Board of Governors 1975 – 1978; Chairman of Nomenclature Committee; Program Chair 1977; Executive Committee 1979 – 1982; Program Chair 1982; Vice-President 1981; President Elect 1982; President 1983.

Dr. Gantner published 75 scientific articles; 24 abstracts; 8 books; 6 book chapters and at the time of his death had a book in preparation and had 5 articles submitted for publication. Dr. Gantner was an early enthusiast for computerization of medical examiner data and use of computers in the medical examiner's office. Other deep interests included death certification and coding systems.

One of the remarkable aspects of his career was his association with Mary Fran Ernst. Mary Fran came to work for Dr. Gantner at the St. Louis University Hospital in the Pathology Department. Dr. Gantner recognized Mary's intelligence and drive and encouraged her to become a death investigator. Mary became the first female medicolegal death investigator in St. Louis County where she started in February 1977. Dr. Gantner and Mary worked together to create the St. Louis University Medicolegal Death Investigators Course (MLDIC) which began in 1978 and has continued to the present day providing three five day long courses yearly and presenting lectures on every topic of death investigation and death. The MLDIC has become the major training ground for lay death investigators and has trained over 13,000 people. In 1986, Dr. Gantner and Mary Fran created the Masters Death Investigation Course which provided four days courses encompassing advanced death investigation information. The Masters is presented every other year with a different faculty each course and is now in its 17th season. In 1978, Dr. Gantner developed a forensic pathology fellowship program and the following were fellows in the program under Dr. Gantner's supervision: Lee Thomas, M.D., Raj Nanduri, M.D., Michael Graham, M.D., Elizabeth Laposata, M.D., Phil Burch, M.D., and Song Wong, M.D.

Julia C. Goodin, M.D. - Memorial



JULIA C. GOODIN, M.D.

March 10, 1957 – April 12, 2019
Nashville, TN
Dr. Julia Goodin joined NAME in 1988 and was on the Board of Directors 2001 - 2006

Dr. Julia Goodin died suddenly from a rapidly progressive undetermined illness on April 12, 2019. She was born on March 10, 1957 in Columbia, Kentucky, and made the most of her 62 years. She traveled the world, became a captain in the U.S. Naval Reserves, and recently retired as the State Medical Examiner for the State of Tennessee.

Dr. Goodin received an Associate of Arts degree from Lindsey Wilson College, a Bachelor of Science degree from Western Kentucky University and a Doctorate of Medicine from the University of Kentucky College of Medicine. She completed a four years residency at Vanderbilt University School of Medicine and a one-year fellowship in forensic pathology at the Office of the Chief Medical Examiner in Baltimore, Maryland.

In addition to her most recent position, Dr. Goodin's career as a forensic pathologist included serving as the Chief State Medical Examiner for the State of Iowa, the Alabama State Medical Examiner, Assistant Medical Examiner in Nashville, and Associate Medical Investigator for the State of New Mexico. These positions included university faculty appointments where she taught medical students, residents and forensic fellows at Vanderbilt University School of

Medicine, University of New Mexico School of Medicine, University of South Alabama School of Medicine and University of Iowa. She authored several papers and made numerous presentations on subjects such as “Sports Related Sudden Death.” She performed more than 4,000 autopsies and supervised many more. As an expert witness, she testified in more than 150 court cases in Tennessee, Maryland, Kentucky, New Mexico, Alabama and Iowa.

She loved ballroom dancing, old movies, books, art, music, the Rolling Stones, being outdoors, working out, running/walking and tennis. She was in perfect shape and then all of a sudden, she wasn’t. Very sad for her and for all who loved her.

And she loved her husband, Dave Haugen, who preceded her in death, as did her father, Vitus Jack Goodin. Survivors include her mother, Geneva Goodin, brother Jackie Goodin (Barbara), two sisters, Cindy Lawrence (John) and Vicky Goodin, and her best friend, Susan Garcia. Plus, she had friends who loved her all over the United States, particularly in Des Moines, Nashville, Baltimore, Albuquerque, Louisiana, Oregon, Florida and Kentucky. She made all of our lives better.

William “Bill” Haglund, Ph.D. – Memorial



April 26, 1943 – June 16, 2021

Seattle, Washington
Bill Haglund joined NAME in 1983, was on the Board of Directors from 1989 – 1995

Bill Haglund's professional life was a quest to bring dignity and justice to the dead, while comforting their survivors.

In a career that spanned five decades, he ferried thousands of souls beyond the realm of the living, first as a mortician, then as a death investigator and forensic scientist. After a life dedicated to studying this terrifying journey toward the ultimate mystery of existence, Bill has made the crossing himself. He died Wednesday, June 16, after a long, cruel battle with dementia. Bill was 78.

He leaves behind a grieving family, colleagues, and friends, who knew him as a musician, writer, war crimes investigator, snake collector, teacher, insomniac and inveterate prankster.

Bill was born in Duluth, Minnesota, in 1943. His parents separated before he was born, and he spent his early years surrounded by alcoholism, violence, and poverty. By age 11, his mother had sent him on a two-day journey by train, alone, to live with his grandparents in Baker, Oregon.

While in high school, Bill was kicked out of his grandparents' home, stayed with a series of friends and, for a time, was homeless. While he was in his late teens, his mother was stabbed to death in a Duluth bar. He would later talk of his mother's killing as an impetus for his calling.

One day, a local funeral director in Baker found Bill sleeping in the movie theater where he worked. He correctly guessed that the high school student had nowhere to stay and made a proposition: There was an extra room at the funeral home, but he'd have to learn the business.

That encounter would set Bill's career in motion.

Immediately after graduating from Baker High School, Bill moved south to attend the California College of Mortuary Science.

While working in the undertaking business, Bill continued his pursuit of science, and earned a bachelor's degree in biology from U.C. Irvine.

For much of the '70s, Bill traveled in bohemian and intellectual circles. As a graduate student helping teach a mythology class at Cal State Long Beach, he made many lifelong friends. For years, he and his wife, Claudia, hosted popular Tuesday-night music parties at their Long Beach home. On vocals, guitar and harmonica, he played a mix of folk, bluegrass and related musical styles.
In 1979, Bill moved to Washington state and landed a job as a death investigator with the King County Medical Examiner's Office. Under Dr. Don Reay's leadership, Bill would play a role investigating some of the most tragic chapters in the region's history, among them the Wah Mee Massacre and the Green River serial murders.

Then, as always, Bill was infamous for his erratic sleep schedule. He was known to catch investigators napping on graveyard shift and scare them awake by dropping a stack of textbooks near their heads.

His intensity could drive co-workers nuts. Once, a fellow death investigator half-jokingly threatened to nail Bill's shoe to the ground to stop his nervous foot-tapping.

While working at the ME's office, Bill earned a Ph.D. in forensic anthropology from the University of Washington under the mentorship of Daris Swindler.

Bill's experience with death investigation, and academic credentials, drew him into consulting work that took him around the globe.

In the early 1990's Bill started applying his knowledge to the field of international human rights. Through Physicians for Human Rights, where he later headed the organization's International Forensic Program, he worked as a consultant to mobilize a team of forensic scientists and investigators supporting the search for the missing and documentation of evidence of war crimes for the UN in Bosnia during the early days of the war, and later in Honduras searching for the disappeared.

In 1995, he left the Medical Examiner's Office in Seattle to become a senior forensic advisor to the United Nations' International Criminal Tribunals, documenting mass killings in the former Yugoslavia and Rwanda.

In 1998, Bill began serving as director of Boston-based Physicians for Human Rights' international forensic program, from which he retired in 2006. He continued to consult in the years that

followed. He testified in The Hague at the trials of accused Bosnian war criminals Radovan Karadzic and Ratko Mladic, both of whom were convicted by the International Criminal Tribunal for the former Yugoslavia for war crimes, crimes against humanity and genocide. At the time, the mass graves whose exhumations Bill led were the largest graves ever investigated for forensic purposes.

His work took him to Afghanistan, Iraq and East Timor, Sierra Leone, Somaliland, and Sri Lanka, Grenada, Abkhazia, and many other locales ravaged by armed conflict and human rights violations.

Stefan Schmitt, who later took over Bill's job at Physicians for Human Rights, remembers a reporter asking his colleague what the most important thing was to take along on all those trips.

"A return ticket," Bill quipped.

"Bill had a tremendous respect for the dead, and an innate empathy for the ritual of death - in any cultural context." Schmitt said.

Bill grew especially attached to the families he met in Cyprus, where he led teams trying to identify people killed in the 1974 conflict between Turkey and Greece, and in Nigeria, where he helped locate and exhume the remains of Ken Saro-Wiwa and other executed environmental activists.

Bill's best-known academic contributions involved forensic taphonomy, the study of the body's decomposition after death. Marcella Sorg, a research professor at the University of Maine, collaborated with Bill on a series of books on that subject. She admired her co-author's busy and productive mind.

"If he wasn't making music, he was thinking about his research," Sorg said. "He'd call me in the middle of the night sometimes, from whatever country he was in at the moment, to talk about a chapter we were working on."

Bill is survived by his daughter, Kim; son, Noah; daughter-in-law, Olga; two grandsons; two granddaughters; ex-wife, Ginny; sister Heidi; and brothers Frank and Bennie.

He was preceded in death by his wife, Claudia; a sister, Rita; and a brother, Wende.

Bill's family always remained in awe of his work ethic, as well as the amazing friends and colleagues.

Randy Lee Hanzlick, MD



January 22, 1952 – October 25, 2021

Chapin, South Carolina/Atlanta, Georgia
Randy Hanzlick joined NAME in 1983, was on the Board of Directors from 1990 – 1996; 1998-1999, Vice-President in 2000, President in 2001 and granted Emeritus status in 2018

Randy Lee Hanzlick, age 69, of Chapin, South Carolina passed away on Monday, October 25, 2021. Randy was born January 22, 1952.

Randy was honored at the 2021 Annual NAME meeting in West Palm Beach, FL on October 16, 2021, with a special event remembering his live and illustrious career sponsored by the NAME Foundation. He had given immense time and dedication to the Foundation since its formation in 2006. His contributions to NAME, Medical Examiners, death investigation and the forensic sciences are vast and are documented in many locations elsewhere in this e-book.

Randy Lee Hanzlick, M.D., a board-certified forensic pathologist, Emeritus Professor Forensic of Pathology at Emory University School of Medicine, and retired Chief Medical Examiner for Fulton County, Georgia, passed away October 25, 2021 from pancreatic cancer. Born January 22, 1952, in Salem, Ohio, he graduated from Salem High School in 1970, and in 2014 was recognized as the Salem High School Honored Alumnus of the year. Dr. Hanzlick received his B.S. and M.D. degrees in six years from The Ohio State University. He also completed his anatomic pathology residency at Ohio State and his Forensic training through Emory University. He was board certified in both Anatomic and Forensic Pathology. He was a Past President of the National Association of Medical Examiners and former Pathology/Biology Section Officer for the American Academy of Forensic Sciences. Dr. Hanzlick was active on numerous committees of professional organizations and

multiple federal panels and projects related to death investigation and death certification, such as the CDC Guidelines for Investigation of Sudden, Unexplained Infant Death, and the NIJ Guide for Death Scene Investigators. Dr. Hanzlick was the author of Death Investigation Systems and Procedures and the co-author of three editions of Forensic Pathology in Criminal Cases. He was also the author/co-author of several manuals, multiple chapters in textbooks, and over two hundred professional journal publications. Dr. Hanzlick's areas of interest included the development of professional guidelines, improvement in death investigation practices, death certification and mortality data, electronic data system development, and research. He was a primary developer of the original NamUs System for unidentified deceased individuals. He received multiple awards, including The National Association of Medical Examiners' Lifetime Service Award, the Milton Helpern Laureate Award, and the American Academy of Forensic Sciences Distinguished Fellow Award.

In 2016, Dr. Hanzlick was appointed as a Commissioner on the U.S. Department of Justice's National Commission on Forensic Science. For decades, Dr. Hanzlick served as the program director of the forensic pathology fellowship at the Fulton County Medical Examiner's Office and trained many forensic pathologists. Most of them are still practicing in medical examiner offices and pathology departments in the United States and Canada. Just before his death, the National Association of Medical Examiners established the Randy Hanzlick Persistence Award to be given to a forensic pathologist under fifty who has worked to advance and improve forensic pathology and death investigation. Dr. Hanzlick was also an accomplished musician and songwriter who garnered some notoriety for his music. In addition, he was a talented carpenter and inventor of multiple implements he called "Hanz-O-Matics." Finally, he was a tremendous fan of the Ohio State Buckeyes, dressing in Ohio State apparel for all their football games and cheering them on from his home.

A quote from one of the hundreds of speeches he gave through the years and two lines from one of his songs sum up his life: "Take some risks. Try to make things better. In trying, you will find your reward." and "While you're still a mortal, make love what you achieve; time will fade your epitaph but not the love you leave."

Donations can be made in Randy's honor to the National Association of Medical Examiners Foundation, 1544 Chinnereth Est., Savannah, Missouri 64485.

Fond memories and expressions of sympathy may be shared at www.caughmanchapin.com for the Hanzlick family.

Thomas F. Hegert, M.D. - Memorial



9/30/1928-8/29/2010

NAME President 1988-89

By Julie Hegert

July 2014

After completion of medical school at the University of Nebraska, Tom and his young family came to Orlando, FL for his internship at Orange Memorial Hospital, now known as Orlando Health. In 1955, when the Office of the Medical Examiner for Orange County was established by legislative mandate, he was asked to fill that role and to attend death scenes and thereby became the first medical examiner for Orange County. The system had been that of a coroner/justice of the peace before then. As a general practitioner, he continued to attend death scenes, and then the autopsies as well, and became interested in pathology, completing his Pathology Residency in 1967, and then devoting his practice to Forensic Pathology. It was in 1967 that he also became a member of NAME. He continued to do all of the Orange Memorial Hospital autopsies and to teach the pathology residents autopsy and forensic pathology. During his residency, he was trained by two previous AFIP pathologists, Dr. Ben Willard and Dr. Ed Johnston, who were the members of the Willard and Johnson, PA pathology group that was employed by Orange Memorial Hospital for its pathology work. It was about that time in Florida that the Medical Examiner System was coming into being, whereby in 1970 Florida established a State Medical Examiner system and divided the state into Medical Examiner Districts following its judicial districts, with population and death rates in mind, with some Medical Examiner Districts being composed of one or more judicial districts. After creation of the Florida Medical Examiner system, Tom was then the Chief Medical Examiner covering not only Orange County, but then also Osceola and Seminole Counties until Seminole County became a separate district, District 24, the last formed district, due to population and death rate increases.

He and law enforcement worked hand in hand at death scenes, teaching each other their own areas of expertise. Tom was highly esteemed at death scene investigation, having an amazing ability to decipher activities that occurred there, both criminal and noncriminal. Tom felt that the purpose of the medical examiner system was to provide services to the living by proper examination of the dead, which he strongly felt began by attending the scene of death. Blood spatter analysis intrigued him, understanding how, with proper interpretation, it could lead you through activities at a crime scene. He supported and worked with those who became experts in the field of blood spatter analysis by performing various experiments with blood to determine how patterns were produced from various actions and activities.

Tom was a pioneer in supporting and encouraging organ and tissue donation in medical examiner cases to extend the services of his office to the living. He and others met in Baltimore to formulate guidelines for the role of organ and tissue donation in medical examiner cases, believing that donation could be accomplished without loss of forensic evidence if the two groups would work together and respect each other's goals. For years he was the NAME representative to UNOS where he tried to continue to foster relationships and keep the lines of communication open between the various organizations.







After years of working out of the hospital morgue, the County granted funding to build a separate free standing Medical Examiner Office within the campus of Orlando Health. He

designed what would become the state of the art medical examiner building for its day in Florida. From the beginning blueprints to the final touches, he painstakingly devoted many hours to the project. He had his own hard hat for the onsite inspections, one of which proved most beneficial as he noted that they were building a wall where one of the cooler doors was supposed to be. The building, which opened in 1984, was well known for its "Bat Cave" garage. It was given that name because when a medical examiner, police, or funeral home vehicle drove into the garage, it would park on a turntable. By pressing a button, the vehicle could be turned on the turntable so as to access a door to the investigations unit, the main morgue or the decomposed morgue, with the final 360 degree turn being to exit the garage. It was an amazing and fun invention!



Tom in front of Medical Examiner Office Under construction, 1984



New Medical Examiner Office, 1984



Tom at scene of plane crash

He was President of NAME for the 1988-1989 term. He so loved the organization and all it stands for.









In 1995, he retired from his position as Chief Medical Examiner of District 9, after 40 years of service to Orange County. He continued to work with the pathology residents performing adult hospital autopsies at Orlando Health and teach forensic pathology to them until 2007. Forensic pathology was in his heart and blood until his death in 2010.

Personal

While his mother had come from a large family of twelve children, he had only had one brother. He was blessed with being the father of eleven children, one of whom, a son, tragically died at the age of two by drowning. He was a consummate Dad to his other six sons and four daughters. He was always Daddy to his girls. Later, 19 grandchildren, and to date, 16 great-grandchildren would come along. He so loved all the "little kids", and would gladly play with them on any level, being a natural with children. Even with the long hours he dedicated to his work, he still so enjoyed family time, whether it be boating, attending swim meets, basketball games, football games cheering the children on, taking them to the circus or the fair, movies, even rock concerts. Of course, if the movie was a comedy, they had to sit far away from others due to his infectious and usually very loud laugh. Being in the Scouts as a child, earning the level of Eagle Scout, his sons would also be in their troupe, and he participated with them in various activities, especially campouts, and was the physician for the area Scout troupes. The girls fondly remember him lining up their brothers to give them razor haircuts while they looked on with grand amusement. Days of the week had some special treats, whether it be sacs full of Krystal hamburgers, weekend mornings of Dunkin Donuts or popcorn and candy at the movies, but there was always time and room for ice cream, to fill in the nooks and crannies at Dairy

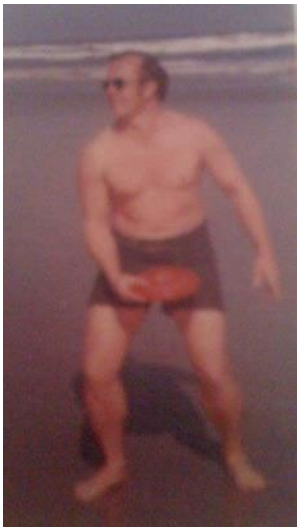
Queen, or on the way back from the beach at Frozen Gold. His four legged beloved daughter, Daisy, our yellow lab, especially liked the latter.



Tom at cabin 1993



Tom with Daisey



Tom at beach



Tom and four daughters



Tom and Korinne



Tom teaching grandson Nathan how to cut a turkey

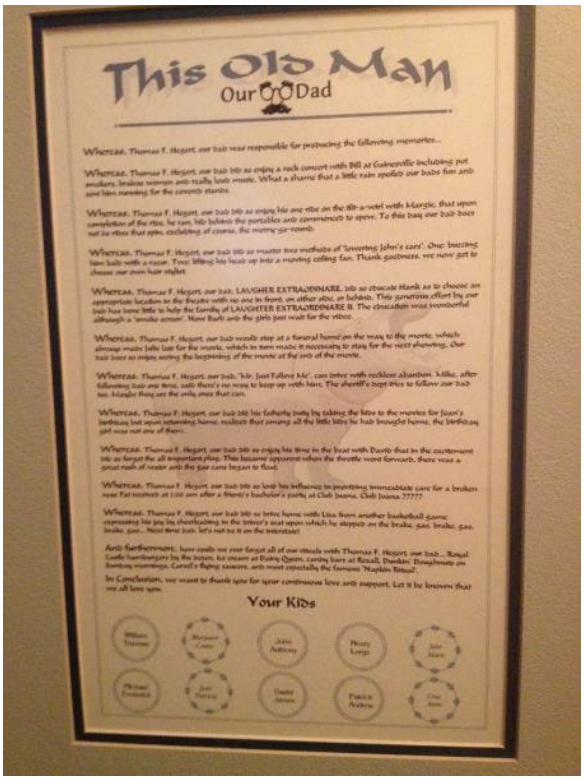


Hegert Skit



Reunion 2009

Tom had such a kind, loving and giving heart. He was an advocate for the abused, both living, for whom he conducted sexual assault and child abuse examinations, and deceased during his 40 year career as Chief Medical Examiner. Regularly he donated to numerous charities, in addition to the church. He also made time for the families of lost loved ones, would listen to their questions, try to help them understand what happened, or sometimes just be the ear or shoulder they needed. He was remembered fondly by others, we would rarely be out and not be stopped by someone saying, “Oh, Dr. Hegert, Do you remember me, I….”. As attorney once told me, “Tom was the only person I have ever known about whom I have never heard anyone say a negative word.” He was truly special, and we were blessed to have known him.



This Old Man

Our Dad

WHEREAS, Thomas F. Hegert, our bab was responsible for producing the following memories...

WHEREAS, Thomas F. Hegert, our bab bib so enjoy a rock concert with Bill at Gainesville including pot smokers, braless women and really loub music. What a shame that a little rain spoiled our babs fun and sent him running for the concert stanbs.

WHEREAS, Thomas F. Hegert, our bab bib so enjoy his one ribe on the tilt-a-whirl with Margie, that upon completion of the ribe, he ran, lib'bibing the portables and commenced to spew. To this bay our bab does not bo ribes that spin, excluding of course, the merry-go-rounb.

WHEREAS, Thomas F. Hegert, our bab bib so master two methobs of 'lowering John's cars'. One: buzzing him bab with a razor. Two: lifting his heab up into a running ceiling fan. Thank goobness, we now get to choose our own hair stylist.

WHEREAS, Thomas F. Hegert, our bab, LAUGHER EXTRAORDINARE, bib so educate Hank as to choose an appropriate location in the theatre with no one in front, on either bibe, or behinb. This generous effort by our bab has bone little to help the family of LAUGHTER EXTRAORDINARE II. The elucation was wonberful although a 'smoke screen'. Now Barb and the girls just wait for the viboo.

WHEREAS, Thomas F. Hegert, our bab would stop at a funeral home on the way to the movie, which always made John late for the movie, which in turn made it necessary to stay for the next showing. Our bab bibs so enjoy seeing the beginning of the movie at the end of the movie.

WHEREAS, Thomas F. Hegert, our bab, 'Mr. Just Follow Me', can brive with reckless abanbon. Mike, after following bab one time, said there's no way to keep up with him. The sheriff's bept tries to follow our bab too. Maybe they are the only ones that can.

WHEREAS, Thomas F. Hegert, our bab bib his fatherly buty by taking the kibs to the movies for Jean's birthbay, but upon returning home, realized that among all the little kibs he had brought home, the birthbay girl was not one of them.

WHEREAS, Thomas F. Hegert, our bab bib so enjoy his time in the boat with David that in the excitement bib so forget the all important plug. This became apparent when the throttle went forward, there was a great rush of water and the gas cans began to float.

WHEREAS, Thomas F. Hegert, our bab bib so lend his bilbeous to providing immeabiate care for a broken nose for another at 1:00 am after a friend's bachelor's party at Club Ivana, Club Ivana ?????

WHEREAS, Thomas F. Hegert, our bab bib so bring home with Lisa from another basketball game expressing his joy by shoehorning in the driver's seat upon which he stepped on the brake, gas, brake, gas, brake, gas... Next time bab, let's not be it on the interstate!

And furthermore, how could we ever forget all of our rituals with Thomas F. Hegert, our bab... Royal Castle hamburgers by the bozen, ice cream at Dairy Queen, candy bars at Rexall, Dunkin' Doughnuts on Sunbay mornings, Carol's flying saucers, and most especially the famous 'Napkin Ritual'.

In Conclusion, we want to thank you for your continuous love and support. Let it be known that we all love you.

Your Kibs

Milton Helpern, M.D. - Memorial

American Journal of Clinical Pathology, Vol 69, no. 6, 1978

In Memoriam

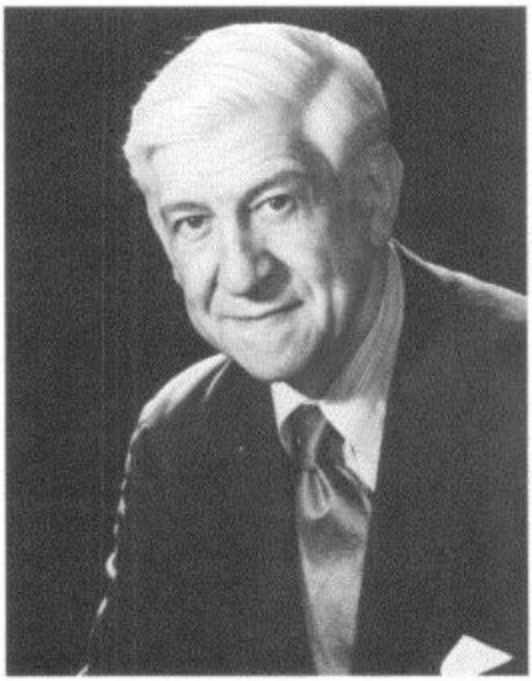
MILTON HELPERN, M.D.

A FEELING of personal and professional loss has befallen many of us. We have been deprived of a dedicated physician and colleague, a man of ultimate judgment and 40 years' experience in the busiest Medical Examiner's Office in the country. Those who were fortunate to know Milton Helpern as a preceptor and friend, or simply as a consultant or fellow pathologist, seem not to remember his "famous cases" and their attendant notoriety so much as his personal touch and warm demeanor. As a compatriot has said, "No matter how busy he was, he always seemed to have plenty of time for you."

His professional attributes are evident in numerous journals, to which he long contributed his work; they need not be repeated. For those who trained under his guidance, reminiscences and anecdotes are certainly more cogent, and perhaps more instructive to relate. For example, following a weekend of work (the "Chief" was at the office every day), he would set aside time on Saturday and Sunday afternoons for those staff members who had research studies or particularly difficult cases at hand, in order to review and discuss them at length in his own inimitable fashion. One need only remember his desks, viewed from any perspective, to appreciate the dozens of cases submitted from an international clientele for his review.

One incident is particularly worthy of recall: A man who "clutched his chest" and collapsed during a retrograde aortic catheterization was found at autopsy to have an occluded coronary artery. To the young pathologist expressing accomplishment at his finding, the "Chief" suggested that the case was still incomplete, since the origin of the clot was not clear. Following his advice, an incision at the femoral triangle revealed a bland thrombus, which had formed following an unsuccessful arterial injection 30 minutes earlier; a subsequent injection in the same area had dislodged this thrombus, which then adhered to the catheter tip, passing up to the aortic ring and finally into the coronary artery as an embolus. Doctor Helpern's ability to recognize such situations at a glance, in all types of medicolegal autopsies, aptly demonstrates the depth and breadth of his knowledge and experience. His was an uncanny knack of bringing order, of making sense, and of finding the truth.

His interest in medical education was no more evident than during his early years, when he taught biology at CCNY, his alma mater. In later life, he was an active New York State Delegate to the American Medical Association. Of all the societies in which he participated (and he was a Founding Member of many of them) the fledgling National Association of Medical Examiners was probably his principal joy, since he constantly strove to upgrade medicolegal death investigation, not only in his home area of New York City, but throughout the entire United States. An how appropriate, albeit poignant, that his terminal illness should coincide



MILTON HELPERN, M.D.

with his attendance at the annual Forensic Meetings held in San Diego in February 1977.

His passion for integrity, his zeal for thoroughness, and his striving for fairness are but a few of the qualities that set him above and apart. His choice of words in commenting on a discussion or a scientific paper at a meeting was always worthy of documentation. An answer he once gave during cross examination at a trial seems particularly appropriate: "I'm interested in what did it, not who done it!"

That he has been able to imprint his hallmark on so many and so much is remarkable; there is much of Milton Helpern in medicolegal systems, techniques of forensic pathology, and most of all, its practitioners, a legacy that will prosper for generations to come. Those of us who were fortunate enough to have served apprenticeships with him are among his most grateful beneficiaries.

WILLIAM Q. STURNER, M.D.
Office of Medical Examiner
Department of Health
State of Rhode Island
75 Davis Street
Providence, Rhode Island 02908

Gordon Ross Hennigar, M.D. – Memorial



1919-1998

By Sandra Conradi

August 2015

Dr. Hennigar was a "giant" not only in stature, but also in intellect, and in determination. He was born in Halifax, Nova Scotia, graduating from Dalhousie University School of Medicine in 1945 after completing an internship. He became a naturalized citizen of the United States when he relocated from Canada to Baltimore, MD in 1946. His appointments in the United States included Johns Hopkins School of Medicine (Resident), Medical College of Virginia (Associate Professor of Pathology) 1950-1957, and the Medical School of the State University of New York Downstate Medical Center Professor of Pathology 1957-1965. While in Downstate New York University medical center in Brooklyn, New York, he met Dr. Dominick DiMaio, Chief Medical Examiner of New York City. The morgue was located in the basement of the Kings County Medical Center. He became a designated pathologist in the New York City ME system.

In 1965, Dr. Hennigar was appointed Professor and Chairman of the Department of Pathology of the Medical College of South Carolina. When Dr. Hennigar arrived in South Carolina to assume the chairmanship of the Department of Pathology and Laboratory Medicine at the Medical College of South Carolina, he must have been shocked at the primitive nature of the medico-legal death investigation system in place. Coroners were elected officials with no necessary training to prepare them for their task. Many were funeral directors but others were hair stylists, restaurateurs, or other non-medical professions. Two were blind. Many Coroners routinely assigned the cause of death to "heart failure" or "natural causes" often in young people with no autopsy much to the consternation of the public health officials. One Charleston county coroner even determined the cause of death to be cancer of the semicolon!

True to his character Dr. Hennigar fought tooth and nail starting in the late 1960's to establish a state medical examiner system. His plan to eliminate the coroners was stymied when it was

found that a voter referendum would be required, since a coroner is mandated for every county according to the SC state constitution.

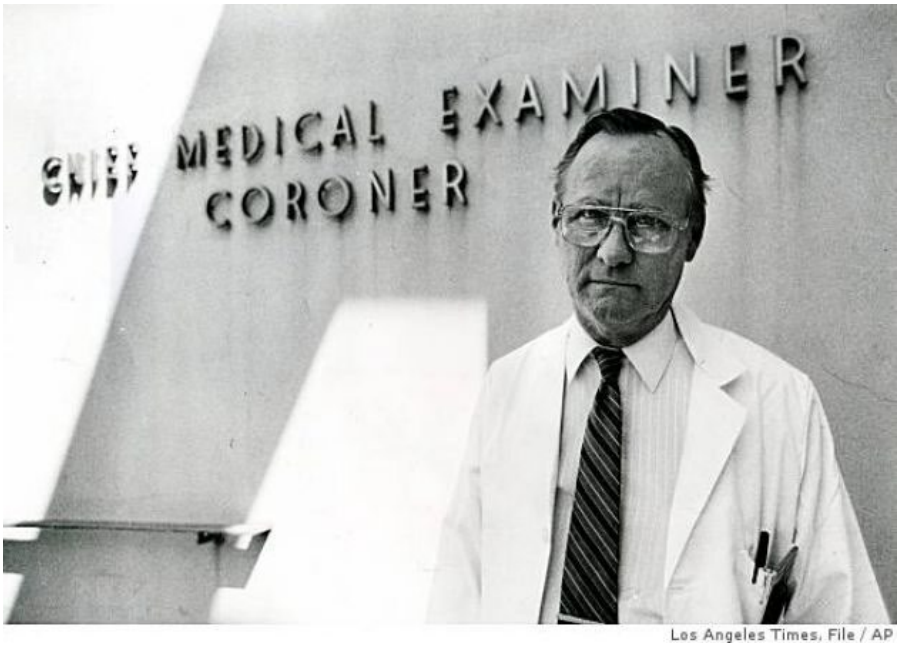
For over 30 years, Dr. Hennigar, with the backing of the South Carolina medical and bar associations tried to entice the legislature to pass a state medical examiner bill, allowing coroners to retain public relations and investigative duties but with physician medical examiners performing the medical functions and signing the death certificates. The coroners in South Carolina however are a very powerful political group, who are the only ones who can arrest the Sheriff! Throughout the years, they staunchly opposed the state medical examiners system. Not surprisingly and with some reason, they feared loss of their powerful positions, and eventually the loss of their jobs entirely. Most argued that a medical examiner system would be superfluous since the coroners could perform their jobs adequately. Moreover, the state could not afford paying expensive doctors. One coroner indicated he would agree to an ME system only if the medical examiner was designated a technical assistant to the coroner!

The medical examiner system did succeed in two of the 46 counties: Greenville (1968), and Charleston (1972). The Charleston County ME system was dropped in 2001, but the Greenville County system is ongoing.

Under Dr. Hennigar's watch, extensive forensic teaching opportunities were provided. Medical University pathology residents were required to spend three months in the forensic pathology section (later reduced to one month). In addition to lectures to Pharmacy students in our university, forensic pathologists presented at the State Law Enforcement Academy, the Coroners' Association and to various civic groups. A very popular 2nd year medical school elective course consisted of 12 weekly lectures covering the major forensic pathology topics. This lecture series was videotaped, and marketed successfully throughout this country and abroad. In cooperation with the University of South Carolina Law School, a yearly presentation was given to the law students, and reciprocally the law students were invited to the Medical University in Charleston to tour the facility and attend a presentation of medicolegal interest. In addition, police departments in the area were allowed to send an officer for a month long training course in the forensic department. These officers attended scenes of death, autopsies, were required to view the videotaped lecture series, and pass an examination at the end to obtain credit for the course.

Dr. Hennigar's legacy lives on in the numerous students, residents and colleagues he taught, and counseled over the years. As a student of Dr. Hennigar's, and Professor of Pathology at the Medical University of South Carolina expressed it, he was a mentor, an academic father figure and a hero. He was gruff, loud, and demanding ruling his department with a heavy, but fair-minded hand. His over 30 year struggle to establish a state medical examiner system against overwhelming opposition is an example of his steadfast determination. Someday his dream may be fulfilled.

Ronald N. Kornblum, M.D. – Memorial



Los Angeles Times, File / AP

12/5/1933 to 9/23/2008

Los Angeles County Coroner 1982-1990

By Lakshmanan Sathyavagiswaran

August 2013

Dr. Ronald N. Kornblum was born in Chicago on Dec. 5, 1933.

Dr. Kornblum was a Phi Beta Kappa graduate of UCLA who earned his medical degree in 1959 at UC San Francisco. He worked in Saigon, now Ho Chi Minh City, as a Navy medical officer from 1960 to 1961.

When he returned from overseas, he pursued his medical residency at Santa Clara County Hospital, where he discovered that he enjoyed diagnosing illnesses more than treating them. He decided to specialize in pathology, eventually narrowing his interest to autopsies. He moonlighted for the Santa Clara County coroner's office.

In 1966, he accepted a job working under Baltimore's top forensic pathologist, Dr. Russell S. Fisher. There he presided over the autopsy of Yosef Alon. He was Maryland's deputy chief medical examiner in 1974, when he moved to California. In November 1973, Kornblum was named Ventura County's first full-time Chief Medical Examiner-Coroner after the county adopted a new system. He took office on January 1, 1974.

In 1980, Noguchi hired him as Los Angeles County's chief of forensic medicine. He also introduced new efficiencies to cut in half a backlog of 300 to 400 bodies awaiting autopsies. In 1982 Noguchi was demoted to physician specialist for speaking too freely to the media, moonlighting, and alleged mismanagement. Kornblum was appointed acting coroner in 1981. In 1987 he was appointed to the job outright after the Supreme Court of California declined to hear Noguchi's legal challenge of his demotion and thus was formally appointed after Dr. Noguchi's legal appeals for reinstatement failed.

Dr. Ronald Kornblum was the third Chief Medical Examiner-Coroner for Los Angeles County between 1982 through 1990. In June 1990, Kornblum resigned as Los Angeles County Coroner after an independent audit found that staff shortages and a high homicide rate were leading to unsanitary conditions, including dead insect larvae in the morgue and a body that had decomposed because it had been misplaced, and poor oversight of employees that had allowed for a double-billing scam to take place. Kornblum stated that he agreed with most of the 154 changes called for in the audit and had begun to implement some, but certain changes were impossible due to the "limited sized of the department's budget and the overwhelming workload".

Dr. Kornblum conceived and executed the once a year West Coast Seminar in 1988 to further educate and train anyone interested in the field of Forensic Medicine. Dr. Kornblum would say “you cannot do today’s work with yesterday’s knowledge”.

Dr. Kornblum was a strong supporter of graduate medical education and the LA County MEC continues to have a fully accredited Forensic Pathology residency program. During his tenure the autopsy room was remodeled and expanded. He was the recipient of the highest Productivity and Quality commission award for that year. He developed many of the policies and procedures that are still being used in the Department. He was instrumental in expanding the laboratory to include criminalistics. His chief was Mr. Siglar. The first Coroner Physical Evidence Manual was written under his direction. The 1986 Cerritos Air crash tragedy was handled efficiently under his leadership.

Dr Kornblum implemented the career path for the medical staff by creating Senior Physician ordinance items.

The Public Information Officer position in the Coroner’s office was solidified under his leadership.

During his tenure, Dr Kornblum was recognized for his knowledge of Sudden Infant Death Syndrome and fatalities involving Conductive energy devices (Taser). He frequently consulted as an expert on chokehold deaths.

He testified in the so-called Preppie Murder case involving the 1986 strangulation of a young woman in New York's Central Park.

Dr Kornblum handled a number of high-profile autopsies, including those of actors William Holden, John Belushi and Natalie Wood, singer Karen Carpenter, writer Truman Capote, Ron Settles, and Warren Oates.

Dr. Kornblum's passion for his work brought him to the office as a teaching consultant even after retirement until he had a stroke in late 1997.

Dr Kornblum passed away on September 23, 2008 at his home in La Cañada Flintridge, California.

Dr. Kornblum loved his family and his nieces especially Liz and Jennifer. He always looked forward to his weekend trips to Solvang. He rarely took vacation. The only 1 month long vacation he took was in 1989 to Europe.

Dr Lakshmanan was appointed by Dr Kornblum as the first Senior Deputy Medical Examiner for LA County in 1986 and late became Chief of Forensic Medicine in 1987 and Chief ME-Coroner in 1992.

References:

1) Personal contact knowledge
2) Excerpts from LA times article September 27, 2008

Nobby C. Mambo, MBChB - Memorial



NOBBY C. MAMBO, MBChB

July 1, 1944 – November 18, 2018
Texas City, TX
Dr. Nobby C. Mambo joined NAME in 1997

Dr. Nobby Chipo Mambo, 74, passed away on November 18, 2018. He was born on July 1, 1944, in Harare, Zimbabwe, the first born son in a family of five boys and one girl. As a young boy he served in church and was once a Sunday school teacher. He was truly a humble, responsible and respectful child whom everyone admired.

He completed his primary education at Mbizi Primary School and Tsungai Primary School in Highfield. He completed "O" level secondary school at St. Augustine's Mission in the village of Penhalonga in Manicaland, and "A" levels at Goromonzi High School, in the Goromonzi district. He studied medicine at the former University College of Rhodesia and graduated with Bachelor of Medicine, Bachelor of Surgery degrees from the Huggins School of Medicine.

He immigrated to Canada, and while there and in the United States, he furthered his medical education, completing the requirements and certifications needed to become a Forensic Pathologist. During his career he published 17 research publications in various fields of medicine. At the time of his death, Dr. Mambo was a MD Associate Professor in the Department of Pathology at the University of Texas Medical Branch. He was also Deputy Chief Medical Examiner at the Galveston County Medical Examiner's Office. Dr. Mambo loved teaching and was very dedicated to his colleagues and career. He inspired many students over the years. He was still teaching and working well into his illness.

In his early forties Nobby took up golf. In a short period of time, he became passionate and accomplished at the game, forging many lasting friendships through his love of the sport. The Wednesday Busch League during his time in Saskatchewan and his annual trip to Waskesiu

Lake, for the Men's Lobstick Tournament, were two of the golfing events he loved the most. The latter continued for nearly thirty years. The list of friends Nobby made through golf is extensive and far reaching. There will be a void created by his absence at these events in the future. He was also an avid tennis player. Cooking was also a passion of Nobby's. He was well known for his delicious short rib recipe.

Dr. Mambo was charismatic,fun-loving and worldly. He had numerous friends throughout the various places he lived and worked and will be missed by all.

He is survived by two sons: Kevin and Muchi.

Anthony Manoukian, MD – Memorial




ANTHONY MANOUKIAN, M.D.

May 21, 1952 – February 6, 2011
Wailuku, Maui, HI
Dr. Manoukian received a graduate degree in Public Health from the University of MN in 1983, his medical degree in 1987 from St. Georges University in Grenada, West Indies, and completed his Forensic Pathology fellowship in Baltimore.
He came to Maui in the early 1990's

Dr. Anthony Manoukian, Maui County coroner's physician who was known as much for his generosity and humility as his expertise in death investigations, is being mourned by friends, colleagues and family members.

Many remember the island's first forensic-trained pathologist for his expert testimony on autopsies he conducted in connection with murders and other criminal cases in 2nd Circuit Court.

After being diagnosed in November with Creutzfeldt-Jakob disease, Manoukian died Sunday, Feb 6, 2011. He was 58.

Fellow pathologist and longtime friend Dr. Barry Shitamoto said Manoukian's loss will be felt keenly by Maui's medical community and beyond.

"Whoever Tony was friends with, they all felt like they were his best friend," Shitamoto said. "Tony had a knack for making people feel that way. He had many best friends."

In 1997, Manoukian served as chief of the medical staff at Maui Memorial Medical Center. He was a passionate supporter of the hospital, serving on various committees, Shitamoto said. And members of his family said Manoukian's favorite charity was the Maui Memorial Medical Center Foundation.

Shitamoto said Manoukian served as a teacher and mentor for high school students and police officers.

"Tony's influence on youth, students, new police officers (and) others was enormous," he said. "There are more than several students that are following their dreams in the forensic sciences due to Tony's mentorship. His professional legacy may live through these professionals and serve our Hawaii communities."

Another longtime friend, attorney Tony Takitani, said he met Manoukian more than a dozen years ago when, while he was working for a client, he had a conversation with him about an autopsy.

He said Manoukian was an "impressive guy," and he felt nervous talking with him.

But Takitani's uneasy feeling quickly evaporated when he found how personable Manoukian was.

"He was the nicest, easiest guy to talk to," he recalled. "He didn't talk down to anybody. He could explain things in a simple, clear way. ... You'd never guess he's one of the most capable professionals in America.

"So many people felt like he was their best friend," he said.

According to a biography provided by his family, Manoukian was born May 21, 1952, in Chicago, where he started a lifelong love affair with the Cubs. In 1960, the family moved to the San Francisco Bay area, and Manoukian eventually attended the University of California at Davis, earning a bachelor of science degree in zoology in 1974.

He received his graduate degree in public health from the University of Minnesota in 1983 and his medical degree in 1987 from St. George's University School of Medicine in Grenada, West Indies.

"Tony excelled in anatomy, becoming a teaching assistant and preparing tissue specimens that would be used to train future students," his family's website said.

His studies in Grenada were interrupted by the U.S. invasion of the island in October 1983. He was evacuated with other students but later returned to complete his medical degree.

Following a pathology residency at the Kaiser hospital in Honolulu and a one-year forensic pathology fellowship in Baltimore, Manoukian came to Maui in the early 1990s to work as one of the few forensic pathologists in the Pacific basin.

A doctor in general practice had been doing autopsies on Maui. But after the state Legislature passed a law requiring that autopsies be done by a pathologist, Manoukian became the first permanent resident forensic pathologist for Maui County. He also did autopsies on Kauai and the Big Island and in other parts of the Pacific.

As assistant to the medical examiner, Burt Freeland worked with Manoukian for 18 years, doing about 200 autopsies a year.

A few years ago, the two hiked to the top of a mountain in Waihee to perform an autopsy on a body that was too fragile to move, Freeland recalled. They had to make sure the man hadn't been shot or otherwise met with foul play. The man, a military deserter, had been camping in the area before running out of food and living off the land, Freeland said. He said an investigation determined that the man may have poisoned himself.

Manoukian worked with the Hawaii Disaster Medical Assistance Team and the Federal Disaster Mortuary Operational Response Team to provide assistance after disasters, including a tsunami in Samoa, Hurricane Katrina and the earthquake in Haiti.

Freeland, who is also part of the federal mortuary team, said volunteers in those situations sometimes must live in tents.

"You've got to be able to really rough it and get used to eating MREs when they don't have kitchen facilities," he said. "Even though you're not doing armed combat, it gets a little rough. But he and I both enjoyed serving our country that way."

Manoukian was deputy commander of Region 9 of the Federal Disaster Mortuary Operational Response Team.

"We were pretty close friends," Freeland said. "We had good times. He was a lot of fun.

"Anybody can become a great pathologist, but Dr. Manoukian wasn't known to be just in the morgue. He got out in the community and did a lot of things.

"I just remember him as a really happy guy, and all of a sudden he's gone. He'll be missed."

Acting Maui County Prosecuting Attorney John D. Kim said attorneys in the office worked closely with Manoukian on many cases.

"He was just the best," Kim said. "He knew everything, and he explained it so we could explain it in layman's terms. He was always there. He'd give you his direct line when nobody else would.

"It's a very big loss for the county."

Manoukian testified about his autopsy findings at many murder trials, including those of convicted double-murderer Daniel Kosi in 1999 and Michael Arlo Pavich in 2005 for strangling to death an 82-year-old Kihei man.

"He was able to speak for the deceased or the victims and tell their story," said First Deputy Prosecuting Attorney Robert Rivera, who handled many of the high-profile cases during Manoukian's tenure. "That's how we got a lot of the evidence.

"The thing that stood out about Dr. Manoukian was he explained it in a way that the layperson could understand."

Rivera said jurors he talked to after trials would mention how Manoukian's testimony was "extremely helpful and insightful."

"He captivated them," Rivera said. "It made it easier for them to come up with a decision.

"He had his quirkiness and his long hair. That just endeared him even more to the jury. He wasn't stuffy."

For a time, Manoukian was owner of Molina's bar in Wailuku. He purchased the business in 2000 before later selling it.

"He was a proud bar owner," said Rivera, who was a deputy corporation counsel when the liquor board reviewed the matter.

Rivera said he appreciated how Manoukian would make himself available to testify in cases, even when hearings were delayed and he would have to return to court more than once.

"Although he was the expert, he would come back," Rivera said. "He's one of the nicer persons."

When he headed the Maui police Traffic Section, retired Capt. Charles Hirata worked closely with Manoukian in the investigation of traffic deaths.

"I enjoyed his friendship both on and off the job," Hirata said. "He's one of the few that took the time to teach others as he went about his job. I pass on some of his lessons when I teach car seat safety. We actually learn a lot from the dead, which helps us to protect the living."

Manoukian was instrumental in planning a new forensic facility that will move the county morgue out of its cramped quarters, said police Assistant Chief Larry Hudson.

Manoukian was there for the blessing of the new facility Dec. 28.

"In dealing with him, he was humble," Hudson said. "He would talk to anybody. He didn't care about where you were in life. He treated everybody exactly the same.

"He was a super intelligent man who would listen, who was compassionate. He was just a likable guy.

"He was a good man. The community is much less because he's gone."

According to his family, beginning last autumn, Manoukian had difficulty speaking and needed to type his pathology reports by hand instead of dictating them. Later, he was diagnosed with Creutzfeldt-Jakob disease, a rapidly progressive and incurable neurological disorder.

Jerry Manoukian, an internal medicine physician in Mountain View, Calif., said family members don't know how his brother became infected with the illness, although it's possible he was exposed to it through his work.

The disease is rare, with about 300 cases reported in the United States each year, or about 1 in a million, he said.

In a day or two, family and friends plan to gather in California to have a barbecue and party in Manoukian's honor - no service, just friends and good food, his brother said.

"We'll mostly enjoy ourselves and remember him," he said. "It's very hard . . . It's very hard being without him."

Jerry Manoukian said he'd like to hold a similar event on Maui for family members to be with his brother's friends and colleagues here. But it was undecided when that might be.

Manoukian is survived by his wife, Downey, and brothers Pete, Jerry and Phil.

In a letter to the Maui County Council dated Thursday, Maui County Police Chief Gary Yabuta asked that Manoukian be recognized posthumously for commitment to his work in death investigations.

"What was further remarkable about the character of Dr. Manoukian was his ability to interact with every officer and employee of the Maui Police Department," Yabuta said. "He was a true friend to all of us.

"Through his professional findings, the families of the deceased were provided with personal closure. And, in the case of a criminal homicide, we were all given a sense of satisfaction that justice was served through the methodology and skills of Dr. Anthony Manoukian."

Eleanor Nicolai McQuillen, MD – Memorial

ELEANOR NICOLAI MCQUILLEN, M.D.



December 26, 1934 – May 30, 2021
Falmouth, Maine
Eleanor McQuillen joined NAME in 1976, was on the Board of Directors from 1980 – 1983, Vice-President in 1984 and President in 1985

Dr. Eleanor McQuillen, Vermont Chief Medical Examiner, 1978-1990, dies at age 86.

Eleanor Nicolai McQuillen, a trailblazing forensic pathologist who became the first female Chief Medical Examiner of the State of Vermont, died peacefully on May 30, 2021 with her daughters by her side.

Eleanor was born on December 26, 1934 to Mario and Eleanor (English) Nicolai, who raised her and her sister, Paula, in South Weymouth, Massachusetts, while operating the Pine Press printing shop in Dorchester. She graduated from the University of Massachusetts Amherst in 1956 and from Boston University School of Medicine in 1960 as one of three women in the graduating class. It was there that she met and married James B. McQuillen, her husband and best friend of 39 years. She and Jim had five children, the first born in August of 1960.

Eleanor and Jim interned together at Boston City Hospital and continued their respective careers in medicine, Eleanor's in pathology and Jim's in neurology, at the Robert Packer Hospital in Sayre, Pennsylvania. While working there, Eleanor was asked to consult on a murder case that turned on whether a boy had buried his friend alive. Building on overlooked toxicological reports, she refuted the New York medical examiner's testimony and showed that the victim was dead when he was buried. Her testimony helped save the defendant from a murder conviction and launched her career in forensic medicine.

Showing characteristic determination, she spent a year commuting to the University of Rochester School of Medicine for a residency in forensic pathology. With that accomplished, she and the family moved to Vermont where she served as Deputy Medical Examiner and then as Chief Medical Examiner. Eleanor came to appreciate the unique challenges of crime scene investigation in rural settings and particularly valued her partnership with local law enforcement and the Vermont State Police. She looked for opportunities to use the forensic sciences to inform public policy, advocating especially for the safety of children.

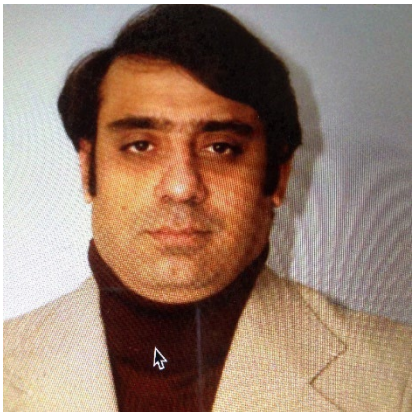
All the while she practiced the arts of Early American Decoration, stenciling and painting trays and furniture. She later turned her skilled hand to folk painting and did paintings of crime scenes, which can be viewed at https://charlesmcquillen.com/category/forensic-friday/ .She was avid about historic preservation and restored two historic schoolhouses in Hardwick and Craftsbury, Vermont, where she and Jim retired and where she lived for many years after his death in 1999. Not surprisingly, she also enjoyed reading murder mysteries.

She is survived by her sister, Paula Nicolai, of Abington, Massachusetts, her children Mary McQuillen, of Portland, Maine, Charles McQuillen, of Natick, Massachusetts, Kate McQuillen, of Cumberland, Maine, and Michael McQuillen, of Shorewood, Wisconsin. She is also survived by ten grandchildren, Eleanor, Sheila, James, Patrick, Hank, Maggie, Maura, Siobhan, Charlie, and Matthew. She is predeceased by her husband, Jim, and son, James Matthew.

The family is deeply appreciative of the care Eleanor received for nearly seven years at Legacy Memory Care in Falmouth, Maine. A Roman Catholic, she was grateful to all of those who kept her in their prayers, especially in her final years.

Haresh G. Mirchandani, MD – Memorial





HARESH MIRCHANDANI, M.D.

July 16, 1942 – April 25, 2021
Mumbai, India
Dr. Mirchandani received an M.D. degree from the University of Bombay in 1972 and completed his Forensic Pathology fellowship at the Wayne County Medical Examiner's Office in 1977.
Following his retirement as Chief in Philadelphia in 2006 he moved with his wife, Ila, back to Bombay where he struggled with Parkinson's Disease. His death was due to complications of COVID

The following was received from Ila Mirchandani in 2021.

EDUCATION:
1959-1961 - Inter Science - University of Bombay, India
1961-1967 - M.B., B.S. - University of Bombay, India
1968-1972 - M.D. - University of Bombay, India

POSTGRADUATE TRAINING AND FELLOWSHIP:
1967-1968 - Rotating Internship, Bombay, India
1969-1972 - Residency in Pathology, Bombay, India
1972-1974 - Residency in Pathology, Monmouth Medical Center, Long Branch, New Jersey
1974-1975 - Residency in Pathology, Medical College of VA, Richmond, Virginia
1975-1976 - Chief Resident in Pathology, Medical College of VA, Richmond, Virginia
1976-1977 - Fellowship in Forensic Pathology, Medical Examiner's Office, Wayne County, Detroit, Michigan

PROFESSIONAL APPOINTMENTS:

1988 – July 2006 Medical Examiner, City of Philadelphia
1988 - July 2006 Clinical Professor of Pathology – Drexel University School of Medicine
1989 - Adjunct Professor of Pathology - University of Pennsylvania
1989 – June 2006 - Director, Residency Training Program in Forensic Pathology, Philadelphia Medical Examiner's Office
1992 – 2003 - Member, Editorial Board, American Journal of Forensic Pathology and Medicine
1990-1996 - Member, Board of Directors, National Association of Medical Examiners
1985-1988 - Clinical Associate Professor, Wayne State University, Detroit, Michigan
1985-1988 - Associate Clinical Professor – Pathology Michigan State University, East Lansing, Michigan
1982-1988 - Deputy Medical Examiner and Director of Pathology Training Program, Wayne County Medical Examiner's Office, Detroit, Michigan
1978-1982 - Assistant Medical Examiner, Wayne County Medical Examiner's Office, Detroit, Michigan
1977-1985 - Clinical Assistant Professor, Wayne State University, Detroit, Michigan
1975-1976 - Medical Examiner-Investigator, Commonwealth of Virginia

SPECIALTY CERTIFICATION:
1976 Anatomic Pathology and Clinical Pathology
American Board of Pathology
1978 Forensic Pathology
American Board of Pathology

DR. ILA MIRCHANDANI'S MEMORIES OF HARESH

Haresh was born in Karachi, India (Now in Pakistan). After India's independence, came as refuge to India.

I met Haresh when we started our Post Graduation in 1968. Under Prof. R. k. Gadgil, MD. PhD. We were co-residents & then Lecturers. What attracted me about him was his Oratory skills with his lectures mix with sense of humor & great teaching style. We got married in 1971 after a long Courtship.

After passing our post Graduate degree (MD in Pathology), we moved to USA in 1972. In USA, we did Residency together & did AP/CP Boards in 1976. Then we changed our specialties . He got interested in Forensic Pathology because of Dr. Marcella Fierro in Richmond, VA during his residency. He persuaded Forensic Pathology with Renown Forensic pathologist, Dr. Werner Spitz in Wayne County, Michigan in 1976. His Knowledge & Teaching abilities helped him tremendously . After a short period of being Asst. Medical Examiner, He got the position of Deputy Chief as his predecessor, another Renown Forensic Pathologist, Dr. John Smilek, moved to become Chief ME in Baltimore. In Wayne County and subsequently in Philadelphia, he trained many budding Forensic Pathologists. We discussed very little professional cases in both

of our lives because of Privacy concerns. I usually came to know about cases from TV and News Media.

Highlights of one of his cases In Detroit:—This case comes vividly to my mind is when one Young Rookie Police Officer shot at a Criminal in Pursuit, Haresh's diagnosis of Suicide by the Criminal which lifted tremendous Guilt from the young Police officer. Of Course, a few days later, a Nun from the Church, collaborated with his diagnosis of Suicide.

Then we moved to Philadelphia, as he became Chief ME there in 1988. In his 18 years of leadership, he published, gave lectures in many hospitals, Universities , Funeral Directors, Police officers & some more. He got Professorships at most of those Universities. His Students, Residents & Fellows respected him & remember him Fondly. His achievements are many but to highlight a few: He started classifying cases as "Heat Related Deaths". The Philadelphia Inquirer started running stories on him saying that he is inflating figures, for his personal GLORY. CDC was called in to review and their conclusion, is well known in Forensic community that everyone should adopt his criteria." and he was vindicated. Also, this helped Senior Citizens, to get fans & air-conditioners to needy, & Children's & Neighbors watching Senior Citizens during hot summer months etc. His cases of "Passive Inhalations of Cocaine in Children" are also well known. His observation skills & thinking ahead of his time helped him. This helped parents to watch their children to avoid deaths due to inhalation of Cocaine by properly ventilating homes & authorities to take children away from those homes there by saving kids' lives. One example of his humor in everything & during teaching was evident to most. One Senior Physician at my hospital , in his comment wrote: "It's good that we got a great Forensic Pathologist, however, we lost a great stand-up Comedian"

Remembrances from his colleagues and friends

Dr. Ila Mirchandani
"I am writing this a very heavy heart but Dr. Haresh Mirchandani fought his Parkinson but could not fight Corona & he took his last breath on 25th. April, 2021 & went to Heaven "

Sawait Kanluen, MD Chief Medical Examiner (ret.),Wayne County, MI
Ila, We are so sorry to hear about Haresh. We have many good memories of him in Detroit and Sawait enjoyed working with him for over 24 years both in Detroit and Philadelphia. (Sent by his wife since he is not well).

Dr. Gregory MacDonald, Dean of the School of Health Sciences and is a professor and chairman of Forensic Pathology, Philadelphia College of Osteopathic Medicine (PCOM).
"He was truly one of the best human beings I have ever known". Dr. Mirchandani was a great mentor to me and was like another father. I haven't met such a great human being. Not only was he one of the best forensic pathologists I ever knew but also was a great teacher and friend. I would not be the person that I am today without him... I will always remember him…….(Former Fellow & Asst. ME in Wayne county).

Edward Lieberman, MD Asst. Medical Examiner, Philadelphia (Ret)
Mirch was a mentor to me as well as a surrogate father as I lost my father 1 year before my fellowship and 2 years before he hired me to work in Philadelphia. A true beacon of knowledge and wisdom. I miss that dearly. I find myself saying what would my father and Mirch tell me and then acting.

Robert A. Kurtzman, D.O. Montana State Chief Medical Examiner
Mirch was an extraordinary person who I first met in Detroit in 1983. I served my fellowship there (Detroit) while Mirch was Werner's Chief Deputy and it was in 1988 that he departed for Philadelphia to serve as Chief ME. Interesting times for sure. He always considered Ila (his wife) the smart one…she specialized in and practiced hematopathology for years!

Dr. Joseph Monforte, Chief Toxicologist.(Ret.), Wayne County MI
Ila: Below are my thoughts. Hope you are well. Joe.

I was working at the ME Office when Haresh was interviewed and then hired as a Resident. He was an absolute pleasure at work, always having a smile and a great sense of humor. He never raised his voice or expressed any form of anger, even when the office was experiencing difficult times. He was truly dedicated to his profession and clearly demonstrated his leadership capabilities when he assumed the position of Deputy Chief Medical Examiner for Wayne County.I am honored to refer to Haresh and Ila as true friends. We routinely celebrated holidays together, watched Super Bowl football games together, and often would get together even when there were no special occasion. I am grateful that our friendship continued after the Mirchandanis re-located to PA, and their eventual retirement in CA. We were fortunate to visit them in both locations whenever possible.

One of the most impressive memories of Haresh for me is when he met my Mother. He met her only one time, when he drove Pat and I to her home in NJ. My Mother was in her eightys. Haresh introduced himself with a warm hug, and was so friendly, cordial, and outgoing that my Mother never forgot him. After that meeting, every time I would visit Mom she would always ask the question "and how is Dr Mirchandani doing?" My Mother lived until she was 99½ years old.

James Gill, MD NAME President
Dear Mrs. Mirchandani, I am the current president of NAME and wanted to extend our condolences on the passing of your husband. We have shared the news with his colleagues and there have been many complimentary comments about him on our mail group. I never had the opportunity to meet him but I know he was a very well respected forensic pathologist.
His colleagues have commented:

Richard Callery, MD

Dr. Mirchandani hired me for an assistant ME position in the late 1980's for the Philadelphia Office. I accepted. But only for a matter of hours did I have the position. He rescinded the offer in a telephone call later that day telling me "Dr. Hameli wants you." No word from said Dr. Hameli, the then Chief of Delaware whom I had interviewed with about a month before. So I called Dr. Hameli. He confirmed he did indeed want me. So began an odd but ultimately pretty good career. I got to (partially) fill the shoes of the affable Dr. Jonathan Arden who left for NYC. I must say that these two men, Drs. Hameli and Mirchandani were at polar opposites in terms of personalities. I had cordial professional relationships with both from my perspective. Haresh was really a pretty good guy. Likable with a quick wit and he liked to laugh. At least with me. I distinctly remember how amazed he was that my Dad was fluent in Hindi. He had been an interpreter in the military and was a real polyglot. Hindi is not something Dr. Mirchandani apparently expected from an Irishman with a bit of a brogue in his English. They had quite the chat about India.

Junaid Shaikh, MD
I would see him at the NAME meetings and we would occasionally speak in "Sindhi". His family originally hailed from the province of Sind in Pakistan. Incidentally he went to the same medical school in India (Grant Medical College) as my dad but they never knew each other.

Ljubisa Dragovic, MD Chief Medical Examiner, Oakland County (Ret.)
Dear Ila: We are deeply saddened by the message of Haresh's passing. He was an outstanding professional & a friend with unsurpassed charisma that will always cherish in my memories. With condolences, Luby Dragovic & family

John Hain, MD Forensic Pathologist, Medical Examiner (ret.), Carmel, CA, USA
Dear Illa, I was sad to hear of Haresh's passing and hope he departed without great suffering. I feel very fortunate to have had him as a friend and mentor during my residency training both at MCV and again in Detroit. He was one of those rare individuals who was both brilliant and pragmatic and also relational - someone you could immediately trust and joke around with. An exceptionally good teacher and communicator, he inspired me to never settle for anything less than excellence, truth, and unswerving integrity.

Gregory Schmunk, MD Chief Medical Examiner, Polk County, Iowa (Ret.)
Mrs. Mirchandani, I was so very sad to learn of your husband's passing. He was a wonderful man and I wanted you to know that it was a lecture that he gave to our class while I was a medical student at Jefferson Medical College that planted the seed leading me to go into forensics. That was many years ago. I ended up transferring to the University of Southern CA for my final two years, graduating in 1983. But my wife and I (originally from CA) spent two memorable years at Jeff and in Philly. I just returned from spending a day at the Delaware County Medical Examiner Office in PA and met Dr. Bennett Preston, who spoke fondly of your husband during our time together.

Victor W. Weedn, MD, JD, Chief Medical Examiner, Office of the Chief Medical Examiner, State of Maryland
Ms. Mirchandani, I wanted to share with you my experience with your late husband. I led the effort to create a new inspection and accreditation program for the National Association of Medical Examiners (NAME). A small committee of about five members was formed to help me write it. Dr. Mirchandani and Dr. Donoghue made sure that they got on that committee in order to make sure that unrealistically high standards were not being created! We accomplished the task after one or two years and now that I & A program is a cornerstone of NAME. So, I can say your husband was an important force in the creation of the standards by which medical examiner systems in the U.S. operate today-- despite his deep skepticism of the project at the outset. Of course, Mirch was important to our community in many ways. I am sorry for your loss; you have my sympathies. Best, Victor Weedn I am so very sorry for your loss.

Mary G. Ripple, MD, Associate Medical Examiner, Volusia County Medical Examiner's Office, Daytona Beach, FL
I used to be the Deputy Chief Medical Examiner at the State of Maryland OCME for 20 years and I just moved to Florida last year. While at the OCME in Baltimore, I had the pleasure to see Dr. Mirchandani frequently when he taught at the HAPS conferences. And I also remember his close relationship with Dr. Smialek.....now I miss them both! Both were good men and great forensic pathologists. I will always remember his starting line to his lecture "Now I will tell you how they kill each other in the City of Brotherly Love".....he always got a round of applause. I also remember that he ordered the vegetable platter at Ruth Chris Steakhouse at the HAPS dinners….. Again I want to express my deepest condolences and hope that you cherish the memories!! Warmest regards, Mary Ripple

Dr. Vijay Joshi, MD -Prof. Of Pathology
Dear Ila, We tried to call you on your cell yesterday to convey our condolences on the loss of your life partner. But you couldn't pick up because you must have been busy with the family. His demise reminded me of many fond memories we shared. He was a jolly good fellow with a sense of humor. He was full of life. His Parkinsonism snatched much of his true effervescent character from him -- but whenever I met him during that period, I still remembered the good old days. I distinctly recall that we met for the first time in the rest area of NJ TNPK in 1973 or 74. When I learned that you guys are MDs from GMC and are doing residency in a private teaching hospital (Monmouth, NJ), I immediately suggested there and then to you that MDs from GMC should receive further training from an academic institution like MCV, Richmond, VA where I was a faculty member then. You agreed though you had to take a significant cut in your stipend -- that showed that you were truly academicians. He proved himself as an accomplished academically oriented Forensic Pathologist and you as an equally accomplished hematopathologist.

We had wet get-togethers in Richmond, once even with Sunandan Singh and his friends from NJ. If I remember correctly I sold you my old Chevrolet, Impala (an American 'luxury' car for Indian Americans then) when I left USA to return to India in 1975. I remember that car

because, several years later when Haresh and you became full-fledged staff members in Philly , I saw him driving a big new Cadillac which still remains a true American luxury car. We met once in Detroit when we drove from there to Chicago , I think. And then in San Diego many years later. Although our get togethers were few and far between , we always kept in touch with each other and remained close friends. The last time we met both of you was in your apt in Mumbai when you kindly invited for lunch . He barely recognized me then -- but it was still a joy just to see him. Pl take care of yourself in this period of pandemic. We hope to see you sometime , maybe in Mumbai if we remain fit enough to undertake the strenuously long journey from USA. Yours friendly, Vijay and Jayashree.

Dr. Richard Creech, MD -Chief of Medicine (Ret.), Jeanes Hospital, Philadelphia, PA
How do I remember Haresh Mirchandani?
Charlotte and I have many fond memories of Haresh and Ila at Jeanes Hospital in Philadelphia parties at their Frank Lloyd Wright house, at Hospital dances, and at Indian dinners in downtown Philadelphia. On one occasion, Haresh invited us on a private tour of his office as Medical Examiner of the City of Philadelphia. I was shocked at the number of unidentified people in the morgue, which predated the later surge of homeless people suffering from mental illness and substance abuse. I was unfamiliar with the activities of the Medical examiner except seeing Medical Examiner vehicles at crime scenes and notices of causes of deaths in high profile cases .Being used to seeing Ila at work, mostly peering into a microscope, Haresh let me know that he rarely used a microscope. Since I was unaware of the activities of the Medical Examiner's office, I thought inviting Haresh to give one of the lectures at the weekly Department of Medicine Grand Rounds at Jeanes Hospital would be enlightening for the staff. I told him he could pick any topic. I was surprised when he said he would like to discuss Lightning Strikes. On the day of the talk, Ila was out of town. The normally reserved Haresh proceeded to regale us with the funniest one liners interspersed with his uncanny knowledge of the effects of lightning on the human body. That lecture is the only one that I remember which was concluded with a standing ovation. After Haresh and Ila moved to Rancho Santa Fe, California, when we visited our daughter in San Diego twice a year, we always made a date to have lunch with Haresh and Ila at their favorite nearby Indian restaurants or at their home. We enjoyed catching up with each other's lives. However, it was distressing to witness the progression of Haresh's Parkinsonism, but reassuring to watch Ila taking such good care of him.

I prefer to remember Haresh standing at the lectern teaching and entertaining a gaggle of clueless physicians about lightning. Richard Creech, MD

Zoe Smilek (wife of Dr. John Smilek, MD, Chief Med. Examiner. Maryland)
Ila, John and I loved you and Haresh and I remember the so many times we ordered Bushemi's Pizza together in Grosse Pointe and then all the wonderful Indian dinners you made for us in Philadelphia. Haresh and John had similar professional views on death investigation and supported each other through the political hassles that medical examiners are exposed to on a daily basis. They were both independent forensic investigators despite the pressure to be otherwise. He was a bright light in our lives. I am sorry that he had to endure the physical

hardships of his last years but your amazing care kept him going for so long. I hope that his end was not too difficult. He is with John now. I wonder what stories they are sharing.

Melinda Smilek-Shelton (daughter of Dr. Smilek)
I am so sorry to hear that! - I am sure Haresh and my dad are catching up now / I am so sorry I didn't reach out to you sooner. I hope you are staying safe there in India - it is so sad to hear how the virus is hitting you all there. I will keep you in my thoughts and prayers.

Dr. Ramesh Mahapatro MD, AP CP & Forensic Pathologist, NJ
It has not been easy for those who loved Haresh to deal with his passing. He faced a long battle that not only tested him physically but which made life extremely difficult for his loved ones. I would prefer to remember Haresh as he really was: a smiling, caring soul who always made time to help others. At a personal level, I realized this when I came to Bombay and again when I came United States. On both occasions he was kind and considerate to advise me how to adopt to the new surroundings. Professionally, Haresh was a superb Forensic Pathologist. Besides being the Chief Medical Examiner of Philadelphia, he loved to teach and certainly inspired me to add in part, practice of Forensic Pathology to my general Pathology practice and lead to Forensic Pathology Board certification. Haresh was an intellectual and an avid reader. I have fond memories of his discussions on the works of Oscar Wilde and V.S. Naipaul among others, that we used to have in his Philadelphia living room, that stood on top of a live running creek. His memory will remain flowing through forever like the creek.

Paula Race--Haresh 's secretary for many years , Philadelphia, USA
I'm so saddened by this news! From the start Mirch treated me like family! Working for him for 18 years was truly my pleasure! Noelle and Nina loved coming to the office where he delighted in getting them treats from the vending machine and letting them run around having fun! I couldn't have asked for a better boss! He will be missed!

Kay Graham City of Philadelphia Senior secretary, USA
Dr. Mirch was one of the kindest people I has the pleasure to know. Down to earth and a caring human. He was a top notch medical examiner, yet always had time to acknowledge any and all the staff he encountered in the Philadelphia Department of Public Health. One of my best memories is when he invited us to visit you both at your home in Ranchos Santa Fe outside of San Diego. We were treated to a delicious lunch at a local restaurant. Watched some Bollywood entertainment in your home theatre. The best was Dr. Mirch taking us through the orange grove in your yard and telling me to pick as many oranges as I wanted. Never had such delicious fruit in my life! Invited us to stay in the guest house if we ever vacationed there again. I am so sorry his life on earth ended as a result of this awful Covid 19. May all your good memories help you through this time.

Kim Athanasiadis , Local President, 488, Philadelphia, PA
Dear Mrs. Mirchandani. I hope all is well with you. My heart is filled of sadness as I think about the passing of OUR FOREVER CHIEF, MIRCH! Not sure if you remember me, but I was the first

person who spoke at his retirement party. And I begged you not to take him away from us you just smiled at me. My name is Kim Athanasiadis. I'm a Forensic Technician at the MEO, in Philadelphia. I met "our Chief " in 1998. I was a volunteer worker for two years before I was actually hired. Once hired, I worked with him DAILY side by side until he resigned. I was fortunate enough to know his personality well. Through Dr. Mirch, I learned skills that the average Technician would never be able to compete with. Most Pathologists, don't train Technicians. Therefore, their skills are limited. If I had more time, I would share ONE MILLION hilarious stories about him. Daily he would do or say something to make Dr. McDonald and I laugh until our cheek would ache. But since I'm limited, I'll share just one. Dr. Mirchandani has a reputation of being the nicest, most caring, most intelligent, funniest, most liked Chief in the history of the Philadelphia Office. To the day, he still holds that title. He had solved many murder mysteries and was the best Forensic Pathologist at it. He was always willing to STOP and he made jokes and laughed hard at himself. One day after cases he left the room to go dictate. I was cleaning up and had expected that he was gone for the day. He came back down to ask a question and suddenly I heard him yelling my name. I turn to look at him with a water hose that was still in my hand. I was using it to spray as I cleaned. Before I knew it, I'd SPRAYED water all over our Chief. I was so nervous once I realized. But continued to spray him without thinking to turn it off. I was spraying water in his face and all over his body. He was soaked and his glasses hit the floor!!! This went on for about three seconds. For me, it was more like an hour!! Once my delayed brain said shut off the water, I screamed OMGGG! Chief, I'm so sorry! I was SO embarrassed and ashamed I began to cry. He looked at me with water dripping from his face reached down and picked up his glasses wiped them off and put them on his face and then paused. I thought...oh god, I'm fired!! He walked over to me slowly and said loudly.... "Well now I won't have to shower, Kim just gave me a bath" What a relief, he forgave me!!! Dr. Mirch wasn't angry! Dr. Mirch treated EVERYONE the same. He was a man of humility, dignity, and respect for others. He once told me that in his country the highest honor of respect was the touch of a person's shoes. On his retirement day, I got down on my knees and touched both of his shoes. He has and always will deserve the highest honor of respect. We all in Philadelphia have loved and missed him since the day that he left the office. And he will never be forgotten in my heart. I sincerely send my condolences to the Mirchandani family and friends. I'm hopeful that you read this email and it warms your heart knowing how much his Philadelphia family loved Dr. Mirch. And also, know that we still laugh and talk about his jokes often. I will NEVER forget my time knowing him. Rest well, Dr. Mirch "Our Chief".

Joshua A. Perper, MD, LLB, MSC - Memorial

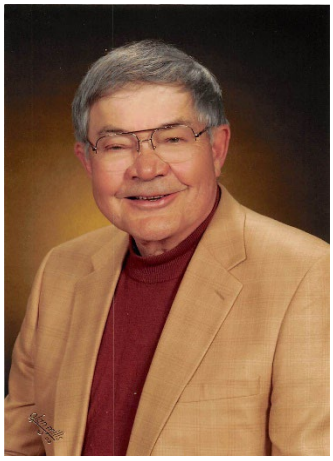


JOSHUA A. PERPER, M.D., LLB, MSC

December 17, 1932 – July 12, 2021
Boca Raton, Florida
Joshua Perper joined NAME in 1972

It is with great sadness that we announce the passing of Dr. Joshua Perper MD., LLb, Msc. Dr. Perper was married to Sheila Perper for 54 years. Survived by his three children Eddie Perper and his wife Leslie, Harry Perper and his wife Amy and Blanca Perper and her fiancé' David Shafman and his seven grandchildren Talya, Matthew, Doug, Sam, Josh, Leah and Elliot. He was born on December 17, 1932 in Bucharest Romania. He was a doctor, a lawyer, a published author of 8 books and over 500 medical articles and also a poet. He served as Coroner of Allegheny County in Pittsburgh and as Chief Medical Examiner of Broward County. The funeral service is open to the public and is Wednesday, July 14, 2021, 11:15 am: Gutterman Warheit Memorial Chapel, 7240 N. Federal Highway, Boca Raton, Florida. All who knew and admired Dr. Perper are invited to attend.

Donald T. Reay, MD - Memorial



DONALD T. REAY, M.D.

May 14, 1937 – November 10, 2018
Oak Harbor, WA
Dr. Donald T. Reay joined NAME in 1974, was on the Board from 1977 – 1985, Vice-President in 1986, President in 1987, Secretary-Treasurer 1986 and 1988 and was granted Emeritus status in 2007

Dr. Donald Reay passed away at his home in Oak Harbor, WA on Saturday, November 10, 2018. He was 81 years of age. Don was born May 14, 1937 in Rock Springs, Wyoming to Thomas and Mary Storey Reay. In his youth, his family moved to Price, Utah where he attended local schools but finished high school in Caon City, Colorado at The Abbey School, run by Benedictine monks. Following graduation, he attended the University of Notre Dame where he earned his Bachelor of Science degree in 1959. He entered medical school at the University of Utah and graduated in 1963. He completed his internship at the University of Utah hospitals followed by a residency in pathology. After his residency, he completed a fellowship in forensic pathology sponsored by the Cleveland Clinic.

In 1968 he entered active military service with the US Air Force and was assigned to the Armed Forces Institute of Pathology in Washington, D.C. He was a staff member at the AFIP until 1970 when he was then assigned to the Royal Air Force Institute of Pathology and Tropical Medicine in Buckinghamshire, England. In 1972, he returned to the US, at the Air Force Academy in Colorado, and was the director of laboratories at the USAF Academy hospital. He left the service in 1973 with the rank of Lt. Colonel.

After separating from the service, he came to Seattle and took the position of Deputy Medical Examiner for King County, Washington. In 1975 he became Chief Medical Examiner and was in this position until his retirement in June of 1999. While Medical Examiner, he also was a regular faculty member of the University of Washington, Department of Pathology, where he pursued

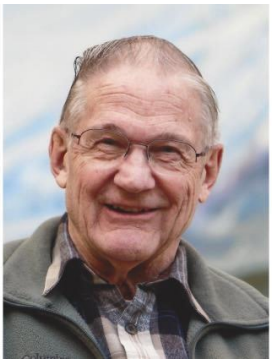
his investigative interests in asphyxia and deaths in custody. He authored and co-authored some fifty publications relating to forensic pathology and death investigation. While Medical Examiner, he established a forensic pathology fellowship training program for pathologists affiliated with the University of Washington and gave lectures and national seminars in forensic pathology. He was on the editorial board of two forensic journals. He separated from the University of Washington as Emeritus Professor at the time of his retirement from King County. He also earned a Master's degree in Public Administration at Seattle University in 1978.

While in King County, Dr. Reay participated in a variety of regional and national organizations. In 1984, he was appointed to the Washington State Forensic Investigation Council by Governor Booth Gardner and chaired the council until his retirement. He was past president of the Washington State Pathology Association, past president of the National Association of Medical Examiners and an active member of the American Academy of Forensic Science, the College of American Pathologists, Washington State Medical Society, King County Medical Society and the American Medical Association. Locally, he was past president of the Seattle First Hill Lion's Club and a member of the Knights of Columbus in Oak Harbor, WA.

Dr. Reay was actively involved in the US Army Reserve during most of his medical career in Seattle. He was a member of the US Army Reserve 50th General Hospital at Fort Lawton, where he was in charge of the hospital laboratory. In 1989, he became commander of the 6250th USAR Hospital in Tacoma. In 1990, his unit was activated for Desert Storm, and he was on active duty for 4 months supporting Madigan Army Medical Center. After completing this assignment, he was briefly commander of the 50th USAR General Hospital during its deactivation. He retired from the military in 1995 with the Legion of Merit citation.

Dr. Reay had a variety of interests including fishing and books. Throughout his life, he was interested in literature and philosophy, and in how things work. Following his retirement, he took classes in topics ranging from marine technology to New Testament history and interpretation. He is survived by his wife of 55+ years, Judith Reay (nee Pexton), an accomplished musician and artist; sons Brendon, Sean, and Laurence; daughter Elise, and five grandchildren.

Donald Robert Rogers, M.D. - Memorial



April 7, 1932 – October 9, 2019
Anchorage, Alaska
Dr. Donald Rogers joined NAME in 1969 and was granted Emeritus status in 1995

On Oct 9, 2019, Donald R. Rogers passed away peacefully at home in Anchorage, Alaska, at the age of 87, after a long battle with prostate cancer.

Don was born on April 7, 1932, to John Robert and Thelma Neely Rogers in Tacoma, Wash. He graduated from the University of Puget Sound and the University of Washington School of Medicine. After his internship, he joined the Navy, attended Flight Surgeon school and was stationed in Adak, Alaska. He especially enjoyed his time there and he found a lifelong home in Alaska. In 1967, after resigning his commission as a Lieutenant Commander and completing a Pathology residency, he moved his young family to Anchorage to set up the lab at Anchorage Community Hospital, which eventually became Alaska Regional Hospital. Don was the first Alaska State Medical Examiner, a position he held for 27 years. He assisted in the investigation and prosecution of many high-profile homicide cases in Anchorage and was portrayed in the movie "On Frozen Ground," a film based on one particularly notorious case.

Don loved flying and was a consummate pilot. His primary flight instruction came while he was serving in the Navy. Over the years, he owned and built many airplanes, starting with his beloved black and white Cessna 180. He built a Baby Great Lakes and a Prowler Jaguar, and he owned a Cessna 185, a Cessna 337, an Aero Commander 500S, a North American SNJ (with a group of friends) and a Douglas A-26. He donated the latter to the Planes of Fame museum in Chino, California, establishing a relationship with the founders of that museum including aviation legends Ed Maloney and Steve Hinton. He worked tirelessly to help establish the Alaska Aviation Museum and spent many, many hours "hangar flying" with his friends in aviation even after he was unable to continue flying.

Don had an unquenchable thirst for knowledge and had an expert grasp of many subjects, including medicine, aviation, firearms, coins, birds, astronomy, politics, WWII history, Egyptian history, and nearly everything else he encountered. He had a great wealth of friends from every walk of life and never went anywhere without running into a friend or two.

Don and his wife, Georgia, were married in 1956 and enjoyed 63 happy years of marriage. They raised a family and traveled the world together. They have two children, Steve and Julie.

Don considered himself a pessimistic agnostic, but if he was pleasantly surprised, he was met on the other side by his parents, John and Thelma; his sister, June; and many dear friends and loved ones. He is survived by his wife, Georgia; his son, Steve and his wife Nancy; his daughter, Julie and her husband Brad; his grandchildren, Ryan and his wife, Ashley; Lindsay and her husband, Michael; and Kevin and his wife, Lisa. He also has 8 great-grandchildren, Malcolm, Elliot, River, Reine, Ciel, Soleil, Hayden and Emmy. Don was a one-of-a-kind individual, dearly loved and will be missed by so many, including the members of the Alaska Aviation Museum, the Russian Jack Rotary Club, the American Cancer Society, the QBs, the Alaska Gun Collectors, and the Wednesday Night Club (which meets on Thursdays).

Charles J. Stahl, III M.D. - Obituary



1930-2016

U.S. NAVY'S FIRST FORENSIC PATHOLOGIST

Dr. Charles J. Stahl, III, age 85, passed away on the first of March 2016 in Johnson City, Tennessee after a progressive illness. He was of the Christian faith.

Son of Myrtle Esher Stahl and Charles J. Stahl, Jr, Dr. Stahl was born in Philadelphia. He was raised in Harleysville, PA where he was a lifeguard and the town's first Eagle Scout, and graduated from Souderton High School class of 1948. Dr. Stahl graduated from Ursinus College, Collegeville, PA in 1952 and graduated from Jefferson Medical College, Philadelphia in 1956 as a Doctor of Medicine.

Dr. Stahl was commissioned as an Ensign in the United States Navy, Medical Corps, in 1953 and served for 27 years, retiring as a Captain (06) in 1980. Dr. Stahl became the U.S. Navy's first Forensic Pathologist in 1962, serving at the Philadelphia Naval Hospital and on the Island of Guam. He became the Chief of Forensic Pathology, Armed Forces Institute of Pathology, Washington, D.C. where he led many medical-legal investigations including the deaths of the three NASA astronauts aboard Apollo I and the Robert F. Kennedy Assassination. An expert on ballistics, he consulted with federal, state, and local law enforcement agencies including the FBI, ATF, and NCIS. He was the Chairman of the Department of Laboratory Medicine at the National Naval Medical Center, Bethesda, MD. During his service, Dr. Stahl received many military honors, and decorations, including the Legion of Merit, the Joint Service Commendation Medal, and the Navy Unit Commendation. Dr. Stahl is honored at the Johnson City-Washington County Veterans Memorial, Johnson City, TN.

After retirement from the Navy, Dr. Stahl was appointed Chief of Laboratory Service at the Veterans Affairs Medical Center in Johnson City, TN; Assistant Chief Medical Examiner, State of Tennessee; and Professor of Pathology at the Quillen College of Medicine, East Tennessee State University. Dr. Stahl was honored for his service to law enforcement by Resolution of the

Johnson City Board of Commissioners and appointed an Honorary Captain with the Johnson City Police Department in 1985.

Dr. Stahl continued to serve the Department of Veterans Affairs as the Chief of Staff of the Veterans Affairs Medical Center in Dayton, OH, Deputy Medical Inspector for the Department of Veterans Affairs and concluded his forty-year career as the Armed Forces Medical Examiner, Washington, D.C. from 1992-1996. Dr. Stahl received the Department of Veterans Affairs Distinguished Career Award, the Helpern Laureate Award from the American Academy of Forensic Sciences (AAFS) in 1994, and named an AAFS Distinguished Fellow in 1995.
Dr. Stahl authored journal articles and served on numerous professional boards, panels, and associations during his career including the Board of Trustees, Thomas Jefferson University, past president of the National Association of Medical Examiners, and as a member of the American Academy of Forensic Sciences. He was inducted into the Souderton High School Hall of Fame in 2008 and recognized as the 2000 Ursinus College Annual Alumni Award honoree.
Dr. Stahl leaves his wife of 62 years, the former Ellen Carolyn Baran, one son: Charles and wife Janet, Johnson City, TN; daughters: Marcia and husband John Scott, Dagsboro, DE; Kim and husband Walt Dryfoos, Allentown, PA; and six grandchildren: Shane and wife Karine Scott; Troy Scott, Victoria and Joseph Stahl, Christopher and Nicholas Dryfoos; and a sister Joan Stahl Pusey, Palm, PA; nieces and nephews. Dr. Stahl will be interred following a graveside service with full military honors at Arlington National Cemetery, Arlington, Virginia.

Boyd Gerald Stephens, M.D. – Memorial



July 19, 1939 – April 2, 2005

(This photograph was taken on occasion of his retirement in July of 2004 and Mayor Gavin Newson of San Francisco proclaimed the day in honor of his many years of outstanding service to the community)

NAME President 1994-95

By Thomas Noguchi

July 2013

Dr. Boyd Stephens passed away on April 2, 2005, after a valiant battle with cancer, with his wife Diana at his side. Besides his wife, he is survived by three children. Dr. Stephens served as the Chief Medical Examiner-Coroner of the City and County of San Francisco for 33 years, from 1971 to 1994. He received his degree of M.D. from the University of California at Irvine, School of Medicine in 1967. He was Board Certified in Anatomic and Clinical Pathology in 1974 and in Forensic Pathology in 1976. He was appointed Clinical Professor of Pathology at U.C. San Francisco, School of Medicine and served until his death. He was an active member of the National Association of Medical Examiners (NAME), serving as a member of various committees, the Board of Directors, and the Executive Committee in various capacities. He and his committee members wrote the NAME position paper on certification of cocaine-related deaths and published in American Journal of Forensic Medicine and Pathology in 2004. He also became a member of the American Academy of Forensic Sciences (AAFS) in 1971 and in 1976, he was elevated to Fellow. In 1994 He served as President of the NAME 1994-1995 and in 2002 was selected to present the NAME Gantner Lecture at the September 2003 Meeting in San Jose, California, an Honor reserved for Outstanding Medical Examiner Scholars. In his Lecture, he spoke of his lifetime experiences as a Medical Examiner. The California State Coroners' Association, on September 21, 1999, also presented him with an award in recognition of his long years of services as member, educator, and lecturer. He was well known as a Medical Examiner, who was always willing to listen to individuals and educate the public by giving talks to lay groups. He has received many awards of recognition from civic groups in appreciation for

his services. On October 16, 1997, California State Senator Daniel E. Boatwright presented him with an Award for Extraordinary Public Service on behalf of the State. He also served in the U.S. Navy as staff pathologist and Chief of Autopsy and Forensic Pathology at the Oakland Naval Regional Center, Oakland, California and remained commissioned until 1994, retiring with the rank of Lt. Commander, USNR. As Chief Medical Examiner, he modernized the facilities and implemented advanced scientific procedures at the Office of the CME in San Francisco, and his Office was accredited by the NAME and by the State of California Department of Justice for its forensic laboratory facilities.

On a personal level, I knew Boyd Stevens for over 30 years. During my service as Chairman of the State of California Disaster Preparedness Commission on Medical Examiner/Coroners Committee in the 1970s, and as Chief Medical Examiner for the County of Los Angeles and member of the California Society of Pathologists, I had many occasions to visit San Francisco and meet with Boyd. On such occasions, in the evenings, I have been invited to his home for dinner and I was intrigued to learn of his interest in and hobby of wine making. He had a home winery set up, which produced sufficient wine to supply the family needs for the year. We also shared an early interest in SCUBA diving. During the 1970's, in both our jurisdictions, investigation of SCUBA diving accidents and deaths were a regular part of our work, so I became interested in taking up the sport, which, according to his wife Diana, stimulated Boyd to also take up the sport. The image of Boyd that remains vivid in my memory, indicative of his strong dedication to his work, occurred one year, in 1989, we were attending the Annual Meeting of the NAME in Sanibel Island, Florida on October 13-18. One day, he walked into an evening scientific session and urgently announced that he needed to return immediately to San Francisco. He had learned that a severe earthquake had struck the city, resulting in collapsed structures and deaths. We spent the next several hours locating and arranging a flight for him to take to an airport nearest to San Francisco.

For his wife Diana, one of the most precious and significant memento she has of Boyd is a white cotton handkerchief. The beautiful story behind this is indicative of Boyd's caring personality and dedication to justly serve each individual, who might be impacted by his professional services. A baby had died while in the care of a baby sitter, an older woman and the baby's family had accused her of killing the baby by possibly smothering the child. Boyd personally, thoroughly investigated the case, talking to everyone involved and finally concluded and ruled that the death was due to sudden infant death syndrome, exonerating the baby sitter. The baby sitter gave him the white handkerchief as a token of her appreciation for having listened to her side of the story. Boyd had kept that handkerchief all these years in a dresser drawer as a reminder to be impartial, to investigate thoroughly, and to hear all participants in a case. This concluding story is a fitting Memorial for Boyd Gerald Stephens, A Gentleman of Uncompromising Integrity.

Charles Victor Wetli, M.D. - Obituary

Charles Victor Wetli, 76, of Alpine, New Jersey, passed away on July 28, 2020 after a short but valiant struggle with lung cancer.

Born in 1943 in Green Bay Wisconsin, Charles spent his early childhood in Green Bay until his parents moved to Manhasset, NY. Even as a boy in high school, he knew he wanted to become a physician some day. He graduated from the University of Notre Dame in 1965 where he majored in chemistry and then went on to pursue a medical degree at St. Louis University.

As a result of the United States Berry Plan, Charles was able to defer military service during the Vietnam War era until after he graduated from medical school and completed the majority his residency in pathology. Charles served as a major in the U.S. Army Medical Laboratory Pacific in Japan, as the Chief of Pathology.

Upon return to the United States after military service, Charles embarked upon a career dedicated to forensic pathology. He spent nearly twenty years in the Dade County, Florida Medical's Examiner's Office and then over a decade as the Chief Medical Examiner for Suffolk County, New York. Throughout his storied career in forensic pathology, he published over 120 medical journal articles and authored numerous books and book chapters. Always valuing education, he taught at the University of Miami School of Medicine and then at the State University of New York at Stony Brook. He has left a lasting impact as a mentor to hundreds of young pathologists throughout the country. All through his career, he was an active member of NAME and contributed in various ways, including serving on its Board of Directors and Executive Committee.

Of all of his many accomplishments, he was most proud of his family. His wife, Geetha, was the love of his life. Together, they were able to travel the world, spending time in places as exotic as Vietnam, Cambodia, the Galapagos Islands and Machu Pichu. Although, in reality, it did not matter where he travelled as long as he was his precious Geetha. He treasured spending time with his seven grandchildren and was the most involved grandfather one can imagine.

Charles was predeceased by his parents, Mary (nee Carriveau) and Cletus Wetli. He is survived by his wife, Geetha; his children, Cletus, Carla (Philip), Kavita (Sean) and Vikram (Danielle); and his grandchildren, Luke, James, Nathan, Elizabeth, William, Julia and Caroline.

Due to the restrictions placed on public gatherings as a result of the COVID-19 pandemic, a private funeral will be held. In lieu of flowers, donations may be made in his name to the National Park Foundation. https://give.nationalparks.org/site/Donation

David K. Wiecking, M.D., LLB - Memorial



April 4, 1933 – July 22, 2011

NAME President 1981-82

By Denise McNally, NAME Executive Director

September 2013

David served as Chief Medical Examiner for the Commonwealth of Virginia.

David was born in Washington, D.C., and grew up in Alexandria, Virginia. He attended Episcopal High School in 1950 and Princeton University in 1954. After serving two years in the United States Navy, he entered Johns Hopkins School of Medicine graduating in 1960. While in medical school, he met Mary Jane Stoll, and they wed in August 1959.

He attended the University of Virginia's medical school residency program. David completed two years of surgical residency, followed by three years of Pathology residency, to become Board Certified in Anatomic and Forensic Pathology. While completing his medical residency, David also attended and graduated from the University's School of Law in 1969 and passed the Virginia State Bar.

Based in Richmond, David served as the Chief Medical Examiner from 1972 until 1993. Under his twenty-one year tenure, the office became one of the most respected state-wide medical examiner systems in the nation. Of particular note was his personal involvement in supporting the Division of Forensic Science in carrying out the nation's first successful DNA-based

prosecution for capital crimes. During his tenure, he also taught at the Medical College of Virginia, the Federal Bureau of Investigation and served on the board of the American Board of Forensic Science. He retired in 1993. Dr. Wiecking joined NAME in 1968, was a Board of Director from 1975 – 1979, Vice President in 1980, President in 1981, Chairman of the Board in 1982 and was granted Emeritus membership in 1995. He was a long time Fellow of the American Academy of Forensic Sciences.

He served as Chair of the Department of Legal Medicine at the Medical College of Virginia, Virginia Commonwealth University and was Clinical Professor of Pathology at MCV and the University of Virginia. He taught at every level of graduate medical and legal education throughout the Commonwealth. He was an invited speaker at the FBI, AFIP and other national medical and legal associations. He retired in 1993.

Dr. Wiecking was held in high esteem by colleagues and by the many prosecutors and defense attorneys who came to rely on his expert medical testimony. He built an enviable reputation for thoroughness, professionalism, and integrity.

Throughout his life, David enjoyed train travel, a passion which he shared with his wife, riding almost every passenger track in the contiguous United States. He was a voracious reader with a respected intellect and a deep passion for baseball and the Redskins - a fan to the end of his days. David was a man of great humor, generosity and compassion. He was beloved by all.

Educational Activities Committee NAME Member Profiles

The NAME-L Educational Activities Committee (EAC) was created by Dr. Sally Aiken and the NAME executive committee in May of 2020. The goal was to encourage younger members of NAME to participate on the NAME-L by providing professionally relevant content and directing constructive conversations in forensic pathology. The original committee was composed of three board-certified forensic pathologists (Dr. Reade Quinton (Chair), Dr. Theodore (Ted) Brown, and Dr. Nika Aljinovic), one forensic pathology fellow (Dr. Gregory Dickinson), two pathology residents (Dr. Fabiola Righi and Dr. Alicia Nickel), and one MD/PhD student (Daniel Kirsch). Eventually, the EAC materials reached distribution beyond the NAME-L, extending to several social media outlets including Twitter, Facebook, and Reddit. Weekly posts included interactive cases and NAME member profiles. These materials were also posted and archived on the NAME website.

The following profiles were provided by NAME members who the EAC considered to have a significant role in forensic pathology education.

Joseph A. Prahlow, MD



7/2/2020

Current position:
Professor and Vice Chair, Department of Pathology, Western Michigan University Homer Stryker M.D. School of Medicine; Deputy Medical Examiner; Kalamazoo, MI

Education history:
BS – Chemistry and Biology, Valparaiso University, Valparaiso, IN
MD – Indiana University School of Medicine, Indianapolis, IN
Anatomic and Clinical Pathology Residency – Wake Forest University School of Medicine, Winston-Salem, NC
Forensic Pathology Fellowship – University of Texas-Southwestern Medical School/Dallas County Medical Examiner's Office, Dallas, TX

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

I struggled during 3rd year of medical school regarding my choice of a medical specialty. It wasn't that I couldn't decide between a group of really great options. In fact, I had quickly ruled-out "surgical" and "medical" specialties, and, like most medical schools at that time, exposure to various "non-mainstream" specialties was not promoted much at IUSM. After I settled on pathology as a career choice (which is a story in and of itself), I participated in a 1-month elective in forensic pathology in Indianapolis, early as a 4th year student. Under the tutelage of Drs. John Pless, Mike Clark, and Dean Hawley, I was introduced to the wonderful world of forensic pathology. I was hooked. What a fascinating career choice! I decided that I would try to find a residency program that allowed me as much exposure to forensic pathology as possible.

WHAT ADVICE DO YOU HAVE FOR ASPIRING FORENSIC PATHOLOGISTS, INCLUDING RECOMMENDATIONS TO MATCH INTO A PATHOLOGY RESIDENCY PROGRAM AND ACCEPTANCE INTO A FORENSIC PATHOLOGY FELLOWSHIP?

First, to become the best forensic pathologist that you can be, you must first become the best pathologist that you can be; and, to become the best pathologist that you can be, you should strive to become the best physician that you can be. Second, recognize that not all pathologists (or pathology residency programs) recognize (let alone embrace) autopsy and/or forensic pathology as important aspects of pathology training and/or practice. You will need to be careful to balance your commitment to becoming an excellent pathologist with your enthusiasm for forensic pathology, recognizing that, in certain circumstances or at certain times, it may not be the best thing for your overall training to be outspoken about your desire to become a forensic pathologist. To a great extent, how this balance works-out for you will depend on how your residency program (and attending pathologists) view forensic pathology. Try to select a pathology residency program that accepts, or better yet embraces, forensic pathology as an important subspecialty of pathology. If possible, select a program that provides (or allows) abundant exposure to forensic pathology during your residency training. There are many available options in this regard. I was fortunate to participate in a 5 year AP/CP residency program where the hospital and ME autopsy services were conjoined and run by Board-Certified Academic Forensic Pathologists. By the time I had completed my residency training, I felt very well-prepared going into my forensic fellowship. Third, if at all possible, students and residents should get involved with professional pathology organizations, including the general ones (like CAP and ASCP) as well as the more specific forensic organizations (AAFS and NAME). If possible, attend the meetings and present papers/posters. It's a great way to "get a feel" for the specialty and to confirm whether or not the specialty is for you. Finally, regarding fellowship programs, it's probably never too early to contact programs that you might be interested in. As you know, certain programs fill years in advance, but it is also noteworthy that, every year, there are open "slots" available for forensic fellows. Every program has something excellent to offer, and I know that each program is staffed by outstanding forensic pathologists. If time and circumstances allow, a prospective forensic pathology fellow should try to make a determination regarding whether they want to train at a large, multi-fellow, busy office where the case volume is high versus a smaller to mid-size office with only a single fellow, where they are not as busy, but fellows may receive a bit more personalized attention. Each of these basic types of programs has its pros and cons.

WHAT IS THE MOST REWARDING ASPECT OF BEING A FORENSIC PATHOLOGIST?

Providing answers to grieving family members/loved ones, as well as others who require answers from us for public health and justice purposes. Ultimately, providing these answers is part and parcel of a more all-encompassing aspect of being a forensic pathologist… that of being a teacher.

WHAT IS THE GREATEST CHALLENGE OF BEING A FORENSIC PATHOLOGIST?

I think the greatest challenge for forensic pathologists mirrors one of the greatest challenges facing society in general. More and more people embrace a worldview that suggests that there is no such thing as an absolute truth. I am by no means suggesting that the answers that we provide in forensic pathology are necessarily "absolute." In fact, many of the findings we report and the opinions we render are merely our best efforts to provide the most likely explanation for a set of facts presented to us. However, in a medical/scientific arena where we strive to find and express the truth, the prevailing non-absolutist mentality that "my opinion is just as legitimate as yours" can sometimes lead to some disheartening, dare I say "unjust," outcomes. This is exemplified in certain legal "battles." -- More important and concerning, however, is a corollary to the above worldview statement, which essentially says "what I believe and/or report to be a truth about you is true," even if there is no evidence to support this so-called truth. Unfortunately, this mentality often results in vicious character assassination. The practice seems to have been perfected by certain members of the media, but unfortunately, sometimes even our own colleagues engage in such activity.

WHAT DO YOU THINK ARE THE MOST IMPORTANT ISSUES/CHALLENGES OF FORENSIC PATHOLOGY TODAY?

In addition to the issues related to "truths" and "untruths" as addressed in the previous question, I believe that the following items represent a list of other very important issues facing forensic pathology today: 1) Workforce shortage issues; 2) Attempts by certain entities (Government or otherwise) to regulate the practice of FP; 3) Lawsuits filed against FPs; 4) Lack of time, resources, workforce to perform FP research.

WHO IS YOUR ROLE MODEL AND WHY?

My father, August Prahlow, who was not a pathologist or a physician, but was a parochial school teacher. He was solid in his beliefs, unshakeable, and humble. He led by his actions. He was quiet, gentle, and loving, but stern when he needed to be. He was a beloved teacher and father.

WHAT ARE YOUR HOBBIES AND HOW DO YOU MAINTAIN A WORK-LIFE BALANCE?

While my professional focus is Forensics, my worldview, values, priorities, and free-time can be summarized by several additional "F" words: Faith, Family, and Friends. As a Christian with a Biblical worldview, I strive to live my life according to the values and principles espoused by Jesus Christ, including the very important practice of Forgiveness. Ultimately, it is my Faith that allows me to balance the stresses of work and life. My Family (including my wife, Tamara, our children, and our grandchildren) is another source of strength for me, as are my Friends, both at and outside of the work environment. Favorite hobbies include exercising (I used to say "running," but now it's better described as "jogging," biking, kayaking, walking/hiking), shooting, woodworking, and traveling. Finally, I'll end with a few more of my favorite "F" words: Fellowship, Fitness, Frisbee, Food, and Field, as in Wrigley Field.

Roger A. Mitchell Jr., MD



7/29/2020

Current position:
Chief Medical Examiner, Washington, DC

Education history:
MD – New Jersey Medical School, Newark NJ
Post-Sophomore Fellowship – NYU – Dept. of Pathology
Anatomic and Clinical Pathology Residency – The George Washington Hospital, Dept. of Pathology
Chief Resident – 2005-2006
Forensic Pathology Fellowship – NYC OCME
Masters of Divinity (candidate) – Fuller Theological Seminary

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

My interest in forensic pathology began at the Federal Bureau of Investigation. I was a forensic biologist when I did a tour of the DC Medical Examiner, where I was first exposed. I wanted to study violence prevention, and I thought the best way was to learn from the cases found within the Medical Examiner System. So I left the FBI to pursue a career in medicine.

WHAT ADVICE DO YOU HAVE FOR ASPIRING FORENSIC PATHOLOGISTS, INCLUDING RECOMMENDATIONS TO MATCH INTO A PATHOLOGY RESIDENCY PROGRAM AND ACCEPTANCE INTO A FORENSIC PATHOLOGY FELLOWSHIP?

My advice would be to make sure that you become not only a student of medicine and pathology but also a student of common sense. A good forensic pathologist can see things with a lens capable of articulating his/her findings with a common tongue. In other words, become well-rounded. As far as pathology programs, focus on both AP and CP. Find a residency program that gives you access to both didactic and practical experience. The program should have access to a busy medical examiner's office. As it relates to the forensic pathology fellowship, find a

program that is busy but also has a culture compatible with you personality. Make sure you rotate 1 month at the FP Program that you are interested in.

WHAT IS THE MOST REWARDING ASPECT OF BEING A FORENSIC PATHOLOGIST?

The most rewarding aspect has been being part of larger community that is interested in the prevention of disease and injury. In addition, I have thoroughly enjoyed helping to build and improve the OCME in Washington DC.

WHAT IS THE GREATEST CHALLENGE OF BEING A FORENSIC PATHOLOGIST?

The greatest challenge has been developing support from the larger local government to ensure proper funding.

WHAT DO YOU THINK ARE THE MOST IMPORTANT ISSUES/CHALLENGES OF FORENSIC PATHOLOGY TODAY?

The most important issue facing forensic pathology is recruitment. We are in great need to bring more pathologists into the sub-specialty.

WHAT HAS BEEN YOUR MOST MEMORABLE CASE AND WHY?

I have several memorable cases. I think the most memorable case was a young woman who was found in an oil drum, wrapped in plastic bag, and covered in cement. She was moderately decomposed, but had no injuries to speak of. This was one of the rare cases that was certified as COD: Homicidal Violence, MOD: Homicide.

WHAT HAS BEEN THE MOST UNEXPECTED FINDING YOU HAVE ENCOUNTERED DURING A CASE?

Recently I had a case of a man who had a perforated small bowel secondary to his purposeful ingestion of cigarette butts. A complex of pica.

WHAT DO YOU ENJOY MOST ABOUT WORKING WITH YOUR TEAM?

My team is diverse and comes from different forensic pathology fellowship programs. I appreciate the hark work, professionalism and dedication of my team.

WHO IS YOUR ROLE MODEL AND WHY?

I have many role models but I would say my Pastor, Dexter U Nutall, is one of my biggest role models. Largely because of his selflessness and his dedication to serving people with humility and courage.

WHAT ARE YOUR HOBBIES AND HOW DO YOU MAINTAIN A WORK-LIFE BALANCE?

I am a minister in the Christian Church. I play Golf and spend time with my family. Lastly, I enjoy cooking on the grill.

WHAT IS YOUR FAVORITE WORK SOUNDTRACK *AND WHY?*

I am a big fan of gospel music. Make Room by Jonathan McReynolds is fantastic. I like to keep my mind focused on what is important. Gospel music does that for me. I am listening to Frank Sinatra and PJ Morton right now as well.

WHAT IS YOUR MOST-LIKED MEAL AT YOUR FAVORITE LOCAL RESTAURANT?

My favorite meal is a bone-in filet mignon with fingerling potatoes and broccolini. Any good Steak House.

Laura D. Knight, MD



8/27/2020

Current position:
Chief Medical Examiner and Coroner, Washoe County Regional Medical Examiner's Office, Reno, NV
Associate Professor in Pathology and Pediatrics Departments, University of Nevada-Reno School of Medicine

Education history:
BS – Chemistry, Murray State University, Murray KY
MD – University of Louisville, Louisville KY
AP/CP Pathology Residency – Medical University of South Carolina, Charleston SC
Forensic Pathology Fellowship – Office of the Medical Investigator/University of New Mexico, Albuquerque NM

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

I read too many interesting books at an impressionable age, essentially. Tom Noguchi's "Coroner" for example, obtained from my high school library, left me with a fascination for the field. I read everything I could get my hands on regarding coroners and medical examiners, and I found the topics of anatomy and physiology the most interesting of my high school education. I also had a level of curiosity and inquisitiveness that impressed some of my instructors and annoyed others; I have found this trait to serve me well to this day. I attended medical school knowing I had a strong interest in forensic pathology, but kept my mind open to other specialties. I was nearly equally interested in High-Risk OB and Maternal-Fetal Medicine, and briefly considered choosing that field. But, when I finally was able to complete my elective in Forensic Pathology at the KY Office of the State Medical Examiner in Louisville, I was hooked!

Working with Drs. Tracey Corey, Donna Stewart, Barbara Weakley-Jones, Amy Burrows-Beckham, and their team was the highlight of my medical school career, and I also completed a research project (regarding infant deaths and bed sharing) with the office that I was able to present at the NAME meeting. These experiences were key in solidifying my commitment to FP, such that I knew throughout residency that I would be completing an FP fellowship and practicing FP for my career. I maintain special interest in maternal-fetal issues, obstetrical deaths, and sudden infant deaths to this day, which I credit to my medical school rotations and research project.

WHAT ADVICE DO YOU HAVE FOR ASPIRING FORENSIC PATHOLOGISTS, INCLUDING RECOMMENDATIONS TO MATCH INTO A PATHOLOGY RESIDENCY PROGRAM AND ACCEPTANCE INTO A FORENSIC PATHOLOGY FELLOWSHIP?

Seek out mentors in forensic pathology. As early as the first year of medical school, I wrote letters to prominent Chiefs asking their advice on choosing a pathology residency, and entering the field of forensic pathology. Connect with your local Medical Examiner/Coroner office, and take advantage of any lectures in the medical school pathology course given by forensic pathologists as an opportunity to meet them and ask for shadowing opportunities. Observe autopsies whenever you have the opportunity in medical school, whether by shadowing at the ME Office, attending hospital autopsies with residents or hospital pathologists during a pathology elective, and especially, attending the autopsy of any patient who dies during your clinical rotations as this is a critical learning opportunity. During medical school and residency, seek out opportunities for research or publishing a case report relevant to forensic pathology; present your work at the annual meeting of the National Association of Medical Examiners, a fantastic opportunity for networking. Attend the NAME meeting and AAFS meetings and become a member of both organizations. Apply to residency programs that have good availability of a large number of hospital and forensic autopsies for your education, and that have a forensic pathology elective rotation. Choosing a residency program that has an affiliated forensic pathology fellowship is not necessary, but could be beneficial if you have a family and would wish to stay in the same geographic location for the duration of training. Look for a residency program that has a solid reputation for both AP and CP, with excellent boards pass rates, and happy residents with a good esprit-de-corps. During residency, consider completing “away” rotations if available at potential fellowship programs to get a feel for what type and size of office might best suit you; every program has something to offer, it is just a matter of finding a match for your interests. For me, a larger number of cases for broad exposure, in a Medical Examiner (as opposed to coroner) setting was important, while not wishing to live in the largest cities.

WHAT IS THE MOST REWARDING ASPECT OF BEING A FORENSIC PATHOLOGIST?

Being able to provide answers to grieving families, and bringing science to bear in important legal matters, I find to be the most rewarding aspects of being a forensic pathologist. Solving a puzzle with highly refined skills and knowledge is also extremely satisfying.

WHAT IS THE GREATEST CHALLENGE OF BEING A FORENSIC PATHOLOGIST?

We are constantly in the public eye with high profile cases, and our opinions may be challenged publicly. We live in a time where even the most scientifically-proven concepts are routinely questioned, and even more so, scientific opinions. We are coming full circle from the "CSI Effect" in which juries thought forensic evidence nearly infallible, to a new era in which medical science is being scoffed at by some during a pandemic. It is my hope that as a society we may end up somewhere in the middle: with a healthy skepticism and intellectual curiosity, but continuing to value what science has to offer us.

WHAT DO YOU THINK ARE THE MOST IMPORTANT ISSUES/CHALLENGES OF FORENSIC PATHOLOGY TODAY?

The forensic pathologist workforce shortage, combined with increasing workloads, represents an unprecedented challenge to our specialty. We must retain those already in the workforce and recruit more students and residents to the field. A multi-pronged approach that addresses compensation, educational paths, incentivization, and the culture of our specialty is likely necessary to accomplish this.

Emerging toxicologic threats, such as illicit fentanyl and fentanyl analogs, and the opioid epidemic in general, have driven caseloads for the past decade in many locales. We can anticipate continuing evolution of synthetic opioids and other types of drugs, and must find ways to deal with waxing and waning caseloads; approaches include being flexible in our working models (full time vs. part time vs. locum tenens), and advocating for greater public funding for ME/Coroners and toxicology labs developing new testing.

Finally, vicarious trauma and burnout related to high caseloads, emotionally-charged incidents, mass fatality, and the otherwise sometimes stressful nature of this career are challenges that have not been much addressed until recently. I am heartened to see this unspoken truth being talked about, in presentations at the NAME meeting, and committees formed (including in NAME) to address these issues, prevent burnout, and keep our colleagues well and working rather than experiencing negative effects silently, retiring early or changing career paths.

WHAT HAS BEEN YOUR MOST MEMORABLE CASE AND WHY?

I have always had a hard time choosing a "favorite" of anything, whether it be favorite food, book, or movie. I feel the same way about my cases—many are memorable, for different reasons. In some it is the circumstances—the naked man found trussed in ropes around his torso and neck and hanging from the corner of the garage, a broken plastic chair just to the side of him, with a bloody great toe. He had not intended to die during his activity, and closer inspection of the scene revealed a strategically cut hole in the shrubs that allowed him to see into a neighboring home. In others, it is a unique and rarely seen medical finding or toxicological agent—like the two men who died of hydrogen sulfide toxicity after opening a manhole while surveying. One opened a manhole, yelled, and fell in; his work partner ran over to rescue him, and was also overcome and immediately fell in. Both died as they could not be

quickly removed from the toxic environment. In others, it is the challenging nature of the case—decomposed or charred bodies, which may turn out to have evidence of homicidal trauma, and in which I am still able to determine cause of death despite the condition of the body. A fire rapidly devoured a tent in a homeless encampment; the charred body of a man found inside came to my autopsy table, where I discovered depressed occipital skull fractures unrelated to the thermal damage on the skull, and a subsequent search of the scene yielded a weapon bearing apparent hair and blood.

WHAT DO YOU ENJOY MOST ABOUT WORKING WITH YOUR TEAM?

Being able to rely on talented, qualified colleagues is one of the great joys of a professional career. Having forensic pathologist peers to discuss cases with and obtain different perspectives is extremely valuable. Locum tenens pathologists also bring practical experience from other offices across the U.S., and often suggest new and interesting ways to look at things or to complete mission-critical tasks. There is also a certain camaraderie amongst pathologists and investigators in our office; all of us know the realities of death investigation and have a common experience to draw from. It makes for a very special peer group.

WHO IS YOUR ROLE MODEL AND WHY?

I have had many excellent mentors over the years, but specifically Tracey Corey, Kim Collins, and Erin Presnell are strong women forensic pathologists who helped shape who I am today as they guided my education and training. They each exemplify a way of being and professional demeanor that I admire. One of Kim Collins' best pieces of advice to me was to get involved in professional organizations as soon as possible, which I did as a resident; I now am a member of the Board of Directors and Executive Committee of NAME. Marcus Nashelsky, Jonathan Arden, and Sally Aiken have also been mentors and models to me in NAME, and helped to guide me to serve in committee chair roles and the Executive Committee; they have each demonstrated that leading is not ruling but rather serving, by their selfless dedication to NAME.

WHAT ARE YOUR HOBBIES AND HOW DO YOU MAINTAIN A WORK-LIFE BALANCE?

I enjoy being outdoors, whether in the forest or by a lake or ocean; I find a camping trip, beach vacation, or just a long hike restorative. I am an avid swimmer and enjoy swimming laps in quiet solitude. I am an intermittent exerciser in other modes—walking, jogging, yoga, cycling—going in phases as the mood strikes me, but always finding it mood-enhancing and balance-restoring. I recently tried stand-up paddleboarding for the first time and loved it. I listen to audiobooks and podcasts and read voraciously, enjoy cooking and entertaining, love Halloween and all things associated, collect (and enjoy) wines, play hand drums and other percussion, and am a singer and was in a small band (before the pandemic).

Nick Batalis, MD



12/14/2020

Current position:
Professor, Department of Pathology and Laboratory Medicine
Director, Pathology residency and Forensic Pathology fellowship training programs
Medical University of South Carolina

Education history:
B.S.: Butler University
M.D.: Indiana University School of Medicine
Residency: Medical University of South Carolina
Fellowship: UT Southwestern Medical Center/Southwestern Institute of Forensic Sciences

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

I initially became interested in the field of forensic pathology through exposure to the field during my second year medical school course, as I was extremely fortunate to have Dr. Joe Prahlow as my pathology professor for the entire course. While the general pathology material was somewhat interesting, I was intrigued by the forensic presentations that he would deliver when using our class as a test audience. Still, I did not fully entertain forensic pathology as a career option until my clinical years when I took a step back and realized those forensic lectures were the coolest thing I had seen in medical school.

WHAT ADVICE DO YOU HAVE FOR ASPIRING FORENSIC PATHOLOGISTS, INCLUDING RECOMMENDATIONS TO MATCH INTO A PATHOLOGY RESIDENCY PROGRAM AND ACCEPTANCE INTO A FORENSIC PATHOLOGY FELLOWSHIP?

I think finding a good mentor is the single most important thing for someone considering forensic pathology. Forensic pathology is such a small field without a lot of exposure in most medical schools, and even some residencies, so having someone you can rely on to show you the path is invaluable. I was fortunate enough to have Drs. Prahlow and John Pless introduce

me to the field in medical school, Drs. Erin Presnell and Kim Collins to foster my interest in forensics during residency, and several folks in Dallas during my fellowship to help shape me into the forensic pathologist I am today. I also consider myself fortunate to have several mentors that I've never worked with directly but know through committees including both Greg Davises and Steve Cina.

WHAT IS THE MOST REWARDING ASPECT OF BEING A FORENSIC PATHOLOGIST?

Certainly the roles we play in the judicial and public health systems, along with being able to help families in their worst of times, are important and rewarding, but for me the most rewarding aspect of being a forensic pathologist is being able to pay it forward by helping mentor medical students, pathology residents, and forensic pathology fellows. As I mentioned, I was fortunate to have many mentors and I want to be able to serve in that role for the next generation of forensic pathologists.

WHAT DO YOU ENJOY MOST ABOUT WORKING WITH YOUR TEAM?

Working side-by-side with folks from different backgrounds who all come together to accomplish the same goal. We have a great, hard-working team that is able to put aside any personal differences and/or institutional gripes and produce high quality work for the families, investigators, and coroners we work with, even though our caseload continues to climb and stresses the system. A steady stream of rotating students, residents, and fellows also helps to keep things fresh by continually provide new perspectives.

WHAT ARE YOUR HOBBIES AND HOW DO YOU MAINTAIN A WORK-LIFE BALANCE?

I like to stay active and my hobbies are basically anything sports related, whether it be watching, playing, or now coaching my sons' teams (ages 5 and 9). I'm happy that I'm able to share my love of sports with my sons and spend invaluable time with them while they still want to be around me. Having a good work-life balance was something I definitely valued and considered when choosing my career, and while it is tough to manage at times, forensic pathology has been a great fit.

WHAT IS YOUR FAVORITE WORK SOUNDTRACK AND WHY?

I definitely like to have the music going while in the autopsy room but I like to mix it up and don't have a 'go-to' album. Some days, I like it more laid back and may go with the Dave Matthews Band, while other days it is hard to beat a good AC/DC or Metallica playlist.

Mary Ann Sens, MD



12/14/2020

Current position:
Professor and Chair of Pathology, University of North Dakota
NAME, Executive Vice President

Education history:
College: Eastern Michigan University, BS, Chemistry
PhD: University of South Carolina, Physical Inorganic Chemistry; Nuclear Magnetic Resonance of Metals
Post-doctoral in microwave and Raman spectroscopy, Columbia, SC
MD: Medical University of South Carolina; Charleston, SC
AP: Medical University of South Carolina; Charleston, SC
FP (experience trained): Medical University of South Carolina

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

I put myself through medical school working various jobs. From class notetaking, to projectionist for weekend movies, to nighttime sitter / companion to a distinguished, elderly Charleston woman in one of the Charleston large mansions, where the first two floors were open to the public and the top floor was ours. Finally, I got a great job as an Assistant Forensic Investigator that was essentially a full time job done weekends and evenings. I became fascinated with the practice of death scene investigations and forensic autopsies, that job lead me into pathology and into forensic pathology. My husband of 49+ years had been with me, encouraging me throughout. We met in graduate school and have been a team since then.

WHAT ADVICE DO YOU HAVE FOR ASPIRING FORENSIC PATHOLOGISTS, INCLUDING RECOMMENDATIONS TO MATCH INTO A PATHOLOGY RESIDENCY PROGRAM AND ACCEPTANCE INTO A FORENSIC PATHOLOGY FELLOWSHIP?

I have never regretted my decision to go into pathology and forensic pathology. I stayed at the same school that I went to medical school for pathology training. This had some advantages

(knowing most people, having a house, knowing the town), but had some disadvantages in that everyone remembered you as a student. If you do not mind a move, seeing another residency or area of the country broadens your experience and perspective. It actually enriches your evaluation of cases since different perspectives and prospects are present in each office and each "forensic linage" has different practices and insights.

WHAT IS THE MOST REWARDING ASPECT OF BEING A FORENSIC PATHOLOGIST?

We give families and society answers they cannot get any other way in an objective and scientific framework. We are defined by diversity and inclusion- everyone will die, so the breath of people our practice consumes is the largest possible. Forensic pathology provides an unparalleled opportunity for truth through science. I find it most rewarding to find something that explains the death or circumstances, gives families information or addresses misconceptions. I feel it is one of the few professions that can advance social and other justice while delivering medical care and evaluation. I am most fortunate to work in areas where respect for forensic pathology and the necessary independence of forensic pathology are present among the people I work with.

WHAT IS THE GREATEST CHALLENGE OF BEING A FORENSIC PATHOLOGIST?

The greatest challenge is to remain independent. Increasingly, FP is viewed as an arm of police and the judicial system. Some states even have provisions where the Chief Medical Examiner serves at the pleasure of the Attorney General. There is increasing pressure to turn public health issues into criminal prosecutions. I also sense an increasing demand from families and potential for disruption and action directed toward an individual forensic pathologist. This has (is) happening to me from a case nearly a decade old. I am most fortunate to be strongly and unequivocally supported by our Counties, State and school – but others may not be so lucky.

WHAT DO YOU THINK ARE THE MOST IMPORTANT ISSUES/CHALLENGES OF FORENSIC PATHOLOGY TODAY?

1) Recruitment and growth of new talent.
2) Developing and delivering science in forensic pathology BY forensic pathologist – not another group, another profession or another entity –we should define our research needs and knowledge gaps to provide advancement. Funding should be available directly to us.
3) Maintaining independence.
4) Debt issues from school – although not unique to forensic. Being in academics, most of the outrageous tuition increases are for (IMHO) non-essential and duplicative administration, fees, and so many non-educational fluff within universities, in addition to excessive records, control from accreditations and the explosion of "for profit" colleges (or degree mills). Forgiveness of student loans must be coupled with some tough love to institutions of higher learning to trim fat and administration, and focus on education.

WHAT HAS BEEN YOUR MOST MEMORABLE CASE AND WHY?

There are so many. I remember being a medical student "reading" slides with a senior member of the department – I brought him an autopsy case I had, with some unique histology. He was very senior – having taken one of the first ABP examinations in pathology in 1940. He commented that he had never seen this particular findings, then pushed back from his chair and said "Pathology is the most fascinating and unique field. You learn something every single day – and few professions can say that. If you are not finding something unique every day, you are not looking or thinking hard enough." I must say that with so many unique forensic cases I have seen, the one I often tell students about was an elderly farmer, wanting to stay at his homestead, but with children and wife being gone and driving ability waning, that wish was in doubt. A family conference was held. He did not want to live with any of his children, although several would have welcomed him, and he did not want to live in "the big town" in an independent living complex. The key was he needed to drive to stay on the land. So he agreed to only drive during the day, drive only within his small community and let his family take him to physician appointments or other larger places. Finally, and most reluctantly, he agreed to use a seatbelt, although he said he never wore it on 70+ years of driving, did not like them, and thought they were hard to operate with his arthritis. A few months went by and he was discovered in his burned car in the middle of a field near his home. The body was charred, clothing and seat belt burned but the clip to the seat belt showed it had been in use.
The family was devastated. They imagined him rolling into the field then desperately trying to exit the burning car. They totally blamed themselves for this horrific death by burning. An autopsy demonstrated a massive pontine hemorrhage, likely related to hypertension. The family grief and guilt changed totally with this diagnosis – from grief and guilt, to the comfort of knowing he was doing what he wanted, when the massive stroke killed him, causing the car to run off the road into a field, and then catch fire in the underbrush. They were so happy for a natural death.

WHAT HAS BEEN THE MOST UNEXPECTED FINDING YOU HAVE ENCOUNTERED DURING A CASE?

- Child abuse that was not abuse, but had another explanation.
- Abuse / homicide proven when nothing suspicious was initially noted.
- Unsuspected natural disease that explains the death or that has family genetic implications.
- Identifying an acute public health hazard (leaking CO from furnace in housing project).

WHAT DO YOU ENJOY MOST ABOUT WORKING WITH YOUR TEAM?

Lots of good times all working for a goal, like building a facility and/or achieving NAME accreditation.
Right now, I am fortunate to have State, County, and school support to work toward establishing a future culture in forensic pathology with heavy use of physician extenders, modern data base entry, systems strongly tied to public health and database collection (Will be recruiting very soon – keep posted). I want everyone who works with me to advance to their full potential – I believe my greatest job is to smooth the way for that to happen.

WHO IS YOUR ROLE MODEL AND WHY?

Maya Angelo and Louise Erdrich– I love strong women, poetry and truth.

WHAT ARE YOUR HOBBIES AND HOW DO YOU MAINTAIN A WORK-LIFE BALANCE?

I love to travel and often enjoy needle arts – knitting, cross-stitch, etc. I love arts and music, although not particularly talented in either.

WHAT IS YOUR FAVORITE WORK SOUNDTRACK AND WHY?

Zeppelin – Especially Stairway to Heaven.
Anything and everything Motown (being a motor city girl when it all was happening).

WHAT IS YOUR MOST-LIKED MEAL *AT YOUR FAVORITE LOCAL RESTAURANT?*

Draft of beer and burger at an English pub with my husband (who avoids beer but likes a hard cider).

Ross Reichard, MD



12/14/2020

Current position:
Chief Medical Examiner, Southern MN Regional Medical Examiner's Office
Vice Chair of Quality, Department of Laboratory Medicine and Pathology, Mayo Clinic
Associate Professor of Pathology, Mayo Clinic Alix School of Medicine
President, American Association of Neuropathologists
Chair, CAP Forensic Pathology Committee

Education history:
College: Centre College, Danville, KY
Medical School: University of Louisville, Louisville, KY
Residency: AP/NP, UT Southwestern Medical Center, Dallas, TX
Credentialing year: Stanford University, Stanford, CA
FP Fellowship: Office of the Medical Investigator (OMI), Albuquerque, NM

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

Forensic pathologists (FPs) provided the introductory lectures of our 2nd year medical school pathology course, and they invited us to attend an autopsy. A friend and I attended our first autopsy, which turned out to be an exhumation of a potential child abuse case (from an adjacent state), because the mother had been accused of injuring another child. The team involved in the case included FPs, a forensic anthropologist, autopsy techs, and law enforcement. They found injuries that hadn't been previously appreciated and the importance of these findings was profound. The significant ramifications of FPs making hard decisions and the subsequent real-life consequences was the essence of my first autopsy experience. The importance of the profession of FPs to individual people and the greater community resonated with my career and life goals.

Once I was hooked on FP, any "spare" time I had during medical school was spent at the Medical Examiner (ME) Office. During the spring of my 2nd year of medical school, I had an afternoon off each week for a part of semester. Fortuitously, the afternoon off coincided with brain cutting which was followed by review of microscopic slides from the prior weeks. These interesting neuropathology cases were frequently a key component of the most challenging autopsy cases and coupled with my first autopsy experience set the hook, and I decided on pursuing a medical career in AP/NP/FP.

Of course, my truly incredible experiences as a medical school student would not have happened without a myriad of mentors, but in particular: Drs. Tracey Corey, George Nichols, Joseph Parker, Mark LaVaughn and Bill Smock. In addition, the importance of the support staff is often under-appreciated. The front office staff that welcomed a nervous medical student and the patient autopsy techs teaching evisceration also demonstrated why working in an ME office was a good place to be.

WHAT IS THE MOST REWARDING ASPECT OF BEING A FORENSIC PATHOLOGIST?

I walked out of the courtroom of a northern NM town and a woman walked up to me as if she knew me, said "thank you", and hugged me. I had no idea who she was until she elaborated that it was her daughter that I had just testified about. She appreciated that I had spoken for her daughter, regardless of the outcome of the trial. Talking with families and being the objective source of information to them is my FP north star.

WHAT HAS BEEN YOUR MOST MEMORABLE CASE AND WHY?

Before he was found deceased, the family had already created a website to stop carjacking and the TX Rangers were asking the public for leads. A no-show for a meeting in west TX and attempted use of his credit cards was their clue something was terribly awry. Found in the rural desert of NM, duct tape around his mouth, and a contact gunshot wound of the back of his head further raised concerns for a robbery and homicide. Oddly, a short distance from the body, a small gun attached to balloons was found caught in a cactus. Several investigative and autopsy findings suggested this was unlikely to be a homicide. The attachment of balloons to "hide" a gun was a part of a recent storyline in a CSI TV episode. Ultimately it was determined that this was an elaborate suicide staged to appear as a homicide. All reminiscent of the Sherlock Holmes story "The Problem of Thor Bridge".

WHAT HAS BEEN THE MOST UNEXPECTED FINDING YOU HAVE ENCOUNTERED DURING A CASE?

Most ME cases have an unexpected finding, which is what keeps the work intriguing and engaging. Sure, we have refined differential diagnoses in our minds before the autopsy that are often correct, but the unexpected findings that explain what happened to the person are the most rewarding. Just last week, for example, a 55 year-old-woman that left work because of feeling ill (ie. concern for COVID) was found dead at home. The autopsy revealed a ruptured berry aneurysm and we were able to provide an answer to her husband.

WHAT ARE YOUR HOBBIES AND HOW DO YOU MAINTAIN A WORK-LIFE BALANCE?

I am a life-long swimmer. In college I had a passion for distance races (e.g. 500 free and 1650 free) and during residency developed the hobby of marathon swimming. I participated regularly in marathon swims all around the world for about 10 years, culminating in swimming the English Channel. I still swim “more days than not” and a great day most often starts with a good swim. I have adopted the “get up earlier” strategy to help maintain my regular swimming, which keeps exercise as part of my daily routine.

Heather Jarrell, MD



1/29/2021

Current position:
Chief Medical Investigator, Office of the Medical Investigator
Associate Professor of Pathology, University of New Mexico

Education history:
Undergraduate Education: Bachelor's degree in Biology, Valdosta State University (Valdosta, GA)
Medical School: Mercer University School of Medicine (Macon, GA)
Residency Program: Anatomic Pathology, University of Virginia (Charlottesville, VA)
Fellowship: Neuropathology, University of Virginia (Charlottesville, VA)
Fellowship: Forensic Pathology, Virginia Commonwealth University, Office of the Chief Medical Examiner, Western District (Roanoke, VA)

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

I became interested in forensic pathology in the 10th grade of high school, when a teacher gave a "test" on character traits and strengths, and my result was pathology. A family friend, who worked at a veterinary diagnostic lab, lent me a book from their library on forensic pathology, which I read twice and decided that "this is for me." My dad was a Georgia State Trooper and I'd always had an understanding of law enforcement. Coupled with a love of science, hours of watching "Forensic Files," and listening to my dad's stories, forensic pathology just seemed like a good fit for me. Even today, I still occasionally watch Forensic Files, especially the New Mexico cases, and review the case findings to see whether I agree with the TV show's conclusions.

WHAT IS THE MOST REWARDING ASPECT OF BEING A FORENSIC PATHOLOGIST?

Those cases where you can give family members some peace of mind and answer their questions are the most rewarding. Occasionally, when a family member says, "Thank you for what you do," you get affirmation that you are helping people and making a difference.

Forensics is a challenging field to practice in for a long length of time, so I believe that we should hold on to these comments when we get them and remind ourselves of them when times are onerous.

WHAT DO YOU THINK ARE THE MOST IMPORTANT ISSUES/CHALLENGES OF FORENSIC PATHOLOGY TODAY?

As a forensic community in today's climate, we must acknowledge and focus on promoting wellness and prevention of burnout, so that we can also retain the forensic pathologists that we currently have, while attracting more physicians to our field. Being a forensic pathologist comes with a wealth of challenges, mentally and emotionally, so we are obligated to change the way that we handle our stressors and treat vicarious trauma. In the event that we can't repopulate the field with pathologists, we must reassess how we practice, as violent deaths and the opioid epidemic can easily overwhelm our already overburdened system.

WHAT HAS BEEN YOUR MOST MEMORABLE CASE AND WHY?

As a second-year resident at the University of Virginia, I had the opportunity to moonlight as a local medical examiner. Three months prior to my first week on call, a 20-year-old Virginia Tech student named Morgan Harrington, disappeared after she left a Metallica concert in Charlottesville, Virginia, in October 2009. Her skeletal remains were discovered on a farm, about 20 miles south of where she'd last been seen alive, and I was the local medical examiner who was on call that day. Morgan's disappearance had been high profile, having been featured on well-known media outlets including People magazine, and Metallica had offered a $50,000 reward for information. Arriving on scene, somewhat paralyzed by the droves of law enforcement officers, squad cars, and helicopters, I was escorted to her remains, where I made a few assessments of antemortem and postmortem injuries to law enforcement and then sent Morgan's remains to Richmond for an autopsy, which ultimately ruled her death to be due to homicidal violence of undetermined etiology.

I went on to finish my residency and fellowships and had started my position at the OMI in August of 2014, when a month later, another student disappeared. This time, 18-year-old Hannah Graham, a University of Virginia student, was found in a moderate state of decomposition 5 weeks after her disappearance. Autopsy examination ruled her cause of death to be homicidal violence as well. After reviewing video footage, Graham was linked to a suspect, Jesse Matthew, who was arrested after fleeing the state. Matthew was also linked to Harrington's murder, as well as a rape in northern Virginia. He was tried and convicted and sentenced to 7 life sentences without the possibility of parole.

For me, the crippling chapter of this story, is that I had had my own encounter with Jesse Matthew, unbeknownst to me at the time, which wasn't obvious until the news media showed Matthew's picture after Graham's disappearance, a few years younger with shorter hair, standing next to his yellow cab. I'd interviewed for residency at UVA in the winter of 2007 and upon completing my interviews, had to catch an early morning flight back to Georgia. The hotel

called a yellow cab and I was on my way to the airport, except I noticed that the cab driver was taking me through the woods, instead of the direct and busy route of highway 29. I dismissed this as the cab driver just attempting to collect more of a fare and he made casual small talk about my trip to Virginia. At some point the conversation became odd and I noticed him watching me in the rearview mirror, commenting on my "cute southern accent" and telling me that I was "pretty," except that his entire demeanor had changed. I can't adequately convey how the atmosphere changed or how my instinct was telling me that I was in trouble. I remember noticing some houses on the other side of the tree line, gripping the door handle, and thinking that when he started slowing down, that I would run. I remember him looking at me again, obviously noting the tears running down my cheeks, and he stopped talking and took me straight to the airport. I threw money at him, ran into the airport and called my dad, saying, "This guy was going to hurt me. I'm sure of it! But I can't complain to his company about giving me a compliment, can I? They'll just think I'm crazy."

Twelve years later, in some bizarre, unexplainable way, I feel a morbid connection to Morgan Harrington, having witnessed the remnants of her vicious murder, and having experienced a mere fraction of her fear as she fell victim to her murderer. As a medical examiner, we have to disconnect our own personal experiences with some cases, except that this will haunt me for the rest of my career.

WHAT DO YOU ENJOY MOST ABOUT WORKING WITH YOUR TEAM?

The OMI team is comprised of some of the most hardworking people I know, with an authentic caring nature and sense of altruism. I love watching how each person utilizes their strengths and talents to accomplish our goals. As far as the forensic pathologists, I love the comradery that we have with each other, the evening texts about certain TV shows, chatting about our family and running cases by each other. Perhaps the most endearing aspect of working at OMI is helping each other when we need that extra boost. I can speak from personal experience when my entire family, despite all the precautions, got COVID-19, with my son becoming ill first. By the time that my husband was ill, a week's worth of groceries had been dropped off at our front gate from the phenomenal FP ladies with whom I'm blessed to work with. This is one example of many, where we've stepped up to the plate to help each other.

WHAT ARE YOUR HOBBIES AND HOW DO YOU MAINTAIN A WORK-LIFE BALANCE?

My hobbies are piano, cooking, skiing, and sour dough bread baking and prior to COVID, included world travel and scuba diving. For me, knowing when I've reached that point in the day where my productivity diminishes is helpful, because that's when I call it quits for the day and go home to hug my children, listen to The Rock sing "You're Welcome" for the 1,000th time, and force my 5-year-old son to read with me, after which I run, row, and play pool in our game room.

WHAT IS YOUR FAVORITE WORK SOUNDTRACK AND WHY?

I always tease our autopsy technicians about their music selections. I'm generally an old soul, who appreciates when musicians could actually sing, and you could understand the words and the lyrics. Once, an autopsy tech asked what I wanted to listen to and I replied "oldies," thinking that she'd put something like Frankie Valli or Diana Ross. She put the 90s channel on. When I told her that 90s wasn't old, she put it on the 80s channel and Cyndi Lauper's "Good Enough" played. I belted out, "WHAT MOVIE?" for anyone to humor me. Of course, no one answered because no one had ever heard of "The Goonies." My music choice usually depends on the day, but you can't go wrong with oldies and rock-n-roll in general.

WHAT IS YOUR MOST-LIKED MEAL AT YOUR FAVORITE LOCAL RESTAURANT?

Back when life was simpler and we could actually sit in restaurants, I loved eating at El Pinto, the largest restaurant in New Mexico. The waiting area walls are full of photographs of famous people who've dined there, some likable and others not, but still fun to peruse the wall. You can't go wrong with their house margarita, guacamole, carne adovada burrito smothered in red chile, or the red chile ribs, and the finale of sopapillas with honey. Of course you can get takeout, but it isn't the same!!

Alfredo E. Walker, MB.BS, FRCPath, DMJ (Path)



3/1/2021

Current position:
Forensic Pathologist and Coroner – Eastern Ontario Forensic Pathology Unit
Director of Education and Vice Chair - Department of Pathology and Laboratory Medicine
Faculty of Medicine, University of Ottawa.

Education history:
Medical graduate of the School of Medicine, Faculty of Medical Sciences, University of the West Indies, St Augustine campus, Trinidad and Tobago (MB.BS degree), class of 1996
Histopathology (Anatomical Pathology) and sub-specialty training Forensic Pathology in the United Kingdom
Fellowship of the Royal College of Pathologists of the United Kingdom (FRCPath) and Diploma in Medical Jurisprudence (DMJ Path) by examination

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

I attended a brand-new School of Medicine of the Faculty of Medical Sciences of the University of the West Indies, St Augustine campus in Trinidad and Tobago where the problem-based learning (PBL) curriculum was introduced. This was a 5-year program in which anatomical pathology and laboratory medicine was introduced from year 1 and necessitated student attendance in small groups at postmortem examinations. This stimulated my interest in anatomical pathology, and two of my lecturers served as mentors. One lecturer then went on to pursue a fellowship in forensic pathology during my third year of medical training and was back in post as a forensic pathologist by the time I had graduated and was pursuing my 18-month internship. I chose to pursue my 3-month internship elective in forensic pathology and got the opportunity to work with that former lecturer again and that exposure solidified my interest in forensic pathology.

WHAT ADVICE DO YOU HAVE FOR ASPIRING FORENSIC PATHOLOGISTS, INCLUDING RECOMMENDATIONS TO MATCH INTO A PATHOLOGY RESIDENCY PROGRAM AND ACCEPTANCE INTO A FORENSIC PATHOLOGY FELLOWSHIP?

My best advice to undergraduate and medical students is to state your interest in pursuing a career in anatomical pathology from very early on. Reach out to the pathologists at your local anatomical pathology department/forensic pathology unit to establish links with staff pathologists there and express your interest in pathology, request a formal elective attachment, indicate an interest in undertaking research projects and volunteer to perform such under supervision, and select a mentor in that unit to guide you along how best to chart a suitable career pathway. It is best to get involved in guided scholarly academic activity under the supervision of a mentor (or others) from very early on and develop a very low threshold for delivering oral and poster presentations at professional meetings, academic writing and submitting articles for publication in peer-reviewed journals. You can start with simple interesting case reports. These activities will boost your curriculum vitae and increase your chances of getting into residency programs and fellowships.

WHAT IS THE MOST REWARDING ASPECT OF BEING A FORENSIC PATHOLOGIST?

For me, the most rewarding aspect of being a forensic pathologist is taking on a very challenging case in a head-on manner and doing an extremely good job with it in the interest of justice.

WHAT IS THE GREATEST CHALLENGE OF BEING A FORENSIC PATHOLOGIST?

For me, the greatest challenge of being a forensic pathologist is also taking on a very challenging case in a head-on manner and doing an extremely good job with it in the interest of justice.

WHAT DO YOU THINK ARE THE MOST IMPORTANT ISSUES/CHALLENGES OF FORENSIC PATHOLOGY TODAY?

The answer to this question must be region-specific. In US and Canada, the most important current issues in forensic pathology are (i) the ever-increasing caseloads from the ongoing opioid epidemic (with the US having less than half of the required number of forensic pathologists to undertake the annual workloads) and (ii) the inability for the US to correspondingly attract interest and increase recruitment of trainees into the specialty.
In low and middle income countries, the issues can relate to simply not having or having a few properly trained and qualified forensic pathologists.

WHAT HAS BEEN YOUR MOST MEMORABLE CASE AND WHY?

Two cases hold that title but for completely different reasons. Both cases were done in the United Kingdom by me whilst I was still very newly qualified.
The first case was a domestic homicide in which an estranged wife was smothered by her husband in an incident that was facilitated by the use of a volatile anesthetic agent (enflurane)

that was stolen from the hospital in which he worked in its pathology department as the chief biomedical scientist. The death was initially treated as non-criminally suspicious and a routine coronial postmortem examination was performed by an anatomical pathologist who did not have any forensic pathology training or qualifications and no anatomical cause of death was found at initial examination. Tissue samples were taken for histological examination and bodily fluids were sent for routine toxicological analyses as the only ancillary investigations which were indicated.

Subsequent to this examination, the police received three separate calls of concern in relation to her death on the day after the postmortem examination and as the on-call Home Office Registered Forensic Pathologist, I was asked to perform a second postmortem examination as the case was now being treated as criminally suspicious. One of the three calls of concern suggested that the decedent had been concerned that she was being chronically poisoned by her husband. Fast-tracking of the routine postmortem toxicological analyses yielded a blood concentration of ethanol that would have been associated with a moderate degree of intoxicant effect as the only positive finding.

My second postmortem examination was performed 6 days after the initial examination with the benefit of a signed draft report and verbal briefing from the anatomical pathologist who had performed the initial examination. Contrary to what was conveyed to me both verbally and in writing prior to my examination, the decedent had signs of mechanical asphyxia with fingertip grips marks on the upper limbs, a pair of discoid, fingertip-type bruises of the left and right parieto-occipital scalp and large areas of localized, deep intramuscular hemorrhages of the musculature of the back over the scapular and lumbar regions. Consideration of the husband's account of the circumstances of the decedent's death alongside the anatomical findings raised pathological concern that she had been smothered in a face down position on a sofa. Further toxicological analysis identified enflurane in her urine for which no medical explanation was possible. She had not received recent general anesthesia. Using this information, further investigative work by the police with the hospital revealed that a cannister of enflurane was unaccounted for and her husband eventually admitted to having taken it home. He was convicted of murder. This is a very memorable case for me as a murder could have gone undetected - https://www.dailymail.co.uk/news/article-511574/Hospital-scientist-jailed-life-murdering-wife-cushion.html

As an aside in this case, the signed draft postmortem examination report of the anatomical pathologist had indicated that layered dissection of the anterior neck structures had been performed and was unremarkable but the anterior neck structures and tongue were in situ and had not been eviscerated at the time of second examination. Weights for each lung had been provided in the draft report but the right lung was still attached to its main bronchus and the trachea and had not been weighed. Weights for both kidneys were also provided in the draft report but both kidneys were still within their cushions of perinephric fat and had not also been weighed The anatomical pathologist was referred to the UK medical regulatory body by the

head of department for his dishonest work and fraudulent report but only received a slap on the wrist.

The second case was a cannibalistic homicide - https://www.pinknews.co.uk/2008/10/09/former-mr-gay-uk-stabbed-victim-30-times-then-sliced-off-flesh-court-told/

WHAT HAS BEEN THE MOST UNEXPECTED FINDING YOU HAVE ENCOUNTERED DURING A CASE?

A fecothorax in a decomposed elderly man who had an incarcerated right inguinal hernia with massive semi-liquid fecal loading of his large intestine which had become adherent to the right hemidiaphragm and had somehow ruptured into the right pleural cavity which contained 2.5L of feces.

WHAT DO YOU ENJOY MOST ABOUT WORKING WITH YOUR TEAM?

Working in a collegial manner to get the job done whilst contributing to undergraduate teaching of medical, postgraduate training of residents, research and other scholarly academic activities.

Ross Zumwalt, MD



3/29/2021

Current position:
Medical Investigator, Office of the Medical Investigator, New Mexico

Education history:
Undergraduate Education – Wabash College
Medical School – University of Illinois School of Medicine
Residency Program – Southwestern Medical School, Dallas, TX
Fellowship – Dallas County Medical Examiner's Office, Dallas, TX

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

One day as a sophomore medical student studying in the medical school library and nearly brain dead from trying to memorize the Krebs cycle, I took a break to browse through the stacks. I came across a copy of "Mostly Murder" by Sir Sydney Smith and became fascinated that a medical education could lead to a career in death investigation. This stayed in the back of my mind as I progressed through the clinical years in medical school where I found that, as an introvert, I much preferred solving problems rather than treating patients. Nonetheless, I took a rotating internship and then a first year of pathology residency at The Bassett Hospital in Cooperstown, NY, and began looking at continuing general pathology training in Boston, when I learned that one of the former trainees at the Bassett Hospital, Charles Petty, was the Medical Examiner in Dallas. I visited Dr. Petty in Dallas to see what a forensic pathologist really did. He took me out to a light plane crash in a Dallas suburb and to the autopsy room, where I still remember a woman with a head injury caused by a metal piece that had fallen off a junk truck and bounced off the highway through her windshield. I was impressed with the operation and with the chance to work with him, so I moved to Dallas for my training.

WHAT ADVICE DO YOU HAVE FOR ASPIRING FORENSIC PATHOLOGISTS, INCLUDING RECOMMENDATIONS TO MATCH INTO A PATHOLOGY RESIDENCY PROGRAM AND ACCEPTANCE INTO A FORENSIC PATHOLOGY FELLOWSHIP?

Concentrate on a good science background and strive to be the best physician you can by understanding the scientific basis for disease and injury. Don't be in too big a hurry to get into full time forensics. In residency learn as much basic pathology, in all the other sub-specialties, as possible. You will have plenty of time in your forensic fellowship to learn forensic pathology. Look for a fellowship where can identify one of the faculty as a good mentor.

WHAT IS THE MOST REWARDING ASPECT OF BEING A FORENSIC PATHOLOGIST?

Solving the everyday and occasional complicated cases. Savoring those “ah ha!” moments when you figure out what really happened in a case.

WHAT IS THE GREATEST CHALLENGE OF BEING A FORENSIC PATHOLOGIST?

Keeping my equanimity. Making many decisions of cause and manner of death that are debatable and controversial and finding that criticism can be profound and sometimes personal.
Learning to deal with the grief of the family and friends of the decedents without being judgmental.

WHAT DO YOU THINK ARE THE MOST IMPORTANT ISSUES/CHALLENGES OF FORENSIC PATHOLOGY TODAY?

Necessity to interest more physicians to become forensic pathologists.
Convincing government agencies to fiscally support medical examiner systems.

WHAT HAS BEEN THE MOST UNEXPECTED FINDING YOU HAVE ENCOUNTERED DURING A CASE?

Large diamond in the stomach of a strangled young woman.

WHAT DO YOU ENJOY MOST ABOUT WORKING WITH YOUR TEAM?

Discussing the interesting cases of the day, of course.

WHO IS YOUR ROLE MODEL AND WHY?

Dr. Charles Hirsch, former Chief Medical Examiner, NYC. Best logical forensic thinker; great colleague; good friend.

WHAT ARE YOUR HOBBIES AND HOW DO YOU MAINTAIN A WORK-LIFE BALANCE?

A good round of golf now and then.

WHAT IS YOUR FAVORITE WORK SOUNDTRACK AND WHY?

I usually prefer no background music or sound when I'm doing a case. Vocalists distract me. If I have to have background music, I prefer classical.

WHAT IS YOUR MOST-LIKED MEAL AT YOUR FAVORITE LOCAL RESTAURANT?

Huevos Rancheros with New Mexico Hatch green chili at Duran's.

Emma Lew, MD



4/23/2021

Current position:
Director and Chief Medical Examiner, Miami-Dade County Medical Examiner Department

Education history:
Undergraduate & Medical Education: University of Saskatchewan
Residency Program: University of British Columbia (one year), and University of Saskatchewan
Fellowship: Miami-Dade County Medical Examiner Department
Other: University of Leeds as a Junior Lecturer for one year after my first year in residency

WHAT ADVICE DO YOU HAVE FOR ASPIRING FORENSIC PATHOLOGISTS, INCLUDING RECOMMENDATIONS TO MATCH INTO A PATHOLOGY RESIDENCY PROGRAM AND ACCEPTANCE INTO A FORENSIC PATHOLOGY FELLOWSHIP?

Medical school and a pathology residency are prerequisites to acceptance into an accredited forensic pathology Fellowship. Every program has its strengths and offers different advantages, but the year is what you make it. Take the opportunity to do complex cases in the nurturing environment of a Fellowship where you have supervision, guidance and constructive feedback. Visit scenes of death – it is a learning experience regardless of the type of case. Be attentive to detail; a little OCD is a positive trait in forensic pathology. Every office has great material regardless of its size – interesting circumstances and anatomical/pathological findings are not limited to metropolitan centers. The Fellowship you choose should synchronize with your personal life so that those twelve months feel like "just yesterday" rather than an eternity. Ultimately, certification in Forensic Pathology by the American Board of Pathology is the ticket to your career.

WHAT IS THE MOST REWARDING ASPECT OF BEING A FORENSIC PATHOLOGIST?

I am living my dream job as a forensic pathologist practicing as a medical examiner. The most important element has been, and continues to be, the Miami-Dade County Medical Examiner employees who love their jobs and create the positive working atmosphere of the office. Responding to scenes, working with Detectives and Crime Scene Investigators, conducting

autopsies, explaining cause of death to families whose first language is not English, teaching forensic pathology to attorneys, judges and jurors, lecturing to law enforcement, consulting on living victims, doing reenactments, occasionally giving free advice to private attorneys, and constantly learning in the process are fringe benefits. I am proud and humbled that so many former Fellows have achieved Chief and Deputy Chief positions, distinguished academic appointments and successful private enterprises throughout the U.S. and abroad, the most recent of which was a Deputy Chief position two days ago. Congratulations to you all!

WHAT HAS BEEN YOUR MOST MEMORABLE CASE AND WHY?

Valujet Flight 592 crashed into the Everglades on Saturday, May 11, 1996. Dr. Mittleman and I went to the scene the next morning, on Mother's Day, riding out on a small airboat to the crash site, surrounded by unnatural silence because the animals and birds in the vicinity had been killed by the crash. It was sobering to see personal effects from luggage strewn over the water, including pages from children's books. The Miami-Dade Police sectioned off quadrants of the twenty-acre crash site and organized police search teams dressed in chest waders and with gaffs and nets in hand to recover body parts. No intact heads were found but there was a nose, a partial maxilla/upper alveolar ridge, a uterine cervix, numerous hands and feet (and portions thereof), and the largest body part, a hindquarter still in a pant leg. As the weeks passed, hands and feet were replaced by pieces of skin and bone. Those seven weeks during the recovery operation were the most foul-smelling in memory around the morgue. Superimposed on the essence of decomposition (Eau de Comp) was the strong odor of jet fuel and the added stench of bodies having been in the swamp water. We discovered that adipocere (especially pungent) can form within a couple of weeks, earlier than what textbooks say. Towards the end of the recovery operation, a memorial service was held, and wreaths and a teddy bear were taken by airboat out to the crash site, giving closure to families who held vigil from the road. The floral memorial floating in the water was a reminder to those of us who continued to work the scene that 110 passengers and crew died.

WHAT HAS BEEN THE MOST UNEXPECTED FINDING YOU HAVE ENCOUNTERED DURING A CASE?

Years ago, a young man asked rhetorically if we had ever found anything implanted by aliens. I confess that I do like finding foreign objects inside bodies. Subcutaneous beads on the penis are not rare in Miami; the largest number I have seen on one penis is eight. Penile skin heals amazingly well, and scars are rarely visible. Within the past seven months, my unexpected findings included: fine needles broken off in the scarred subcutaneous tissue in both upper arms of a chronic IM drug abuser; several pen tops in the vagina of an elderly woman; a cylindrical device reminiscent of a little satellite that was a leadless pacemaker tethered by endocardial fibrosis to the medial wall of the right ventricular apex; a saline-filled blue sphere (diameter of 10.5 centimeters and weight of 660 grams) rolling around in the stomach, that was an intragastric balloon to promote weight loss by occupying space and decreasing gastric emptying time. Unexpected findings at scenes are another story…

WHO IS YOUR ROLE MODEL AND WHY?

The staff medical examiners during my Fellowship are my role models. They were the legendary Dr. Joseph H. Davis, Dr. Charles (Chuck) Wetli, Dr. Roger Mittleman, Dr. Valerie Rao, Dr. Jay Barnhart and the young Dr. Bruce Hyma who would become the second longest-serving Chief Medical Examiner in Miami-Dade County (1991-2016). Their collective enthusiasm for both academic and practical aspects, sense of humor, knowledge, experience, and dedication to forensic pathology made it a joy to come to the office for the four of us Fellows. I remember complaining to Dr. Wetli once about the monthly schedule – he laughed and said one of the staff medical examiners had complained about the same thing, being short-changed in the number of scene call days. The exhilarating scenes, interactions with each other and professional relationships with the Homicide Detectives and Assistant State Attorneys made the work fun, educational and inherently motivating with occasional days extending into nights, and absolutely the perfect way to begin a forensic pathology career.

Keith Pinckard, M.D., Ph.D.



5/28/2021

Current position:
Chief Medical Examiner, Travis County, Texas

Education history:
Undergraduate Education: B.S. Biochemistry, University of Arizona
Medical School: M.D./Ph.D. (Immunology), Washington University School of Medicine
Residency Program: AP/CP, Washington University School of Medicine/Barnes-Jewish Hospital
Fellowship: FP, St. Louis City Medical Examiner/St. Louis University School of Medicine

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

When I was a kid, I enjoyed watching Quincy on television. I suspected of course that television did not likely represent the field accurately, but it did spark my interest when considering a career. I was always interested in the sciences in school, and became interested in scientific research during college, when I decided that I would pursue an M.D./Ph.D. program. The scientific training of the PhD portion lends itself very well to the practice of forensic pathology in terms of reasoning and critical appraisal of literature. It was during medical school that I sought out Dr. Michael Graham at the St. Louis City Medical Examiner's office. He allowed me to spend pretty much all the time I wanted at his office, and he spent a lot of time teaching me both during medical school and into residency. It worked out very well for me in that I was later able to do my fellowship there. He was an amazing teacher and encouraged me over the course of those several years.

WHAT ADVICE DO YOU HAVE FOR ASPIRING FORENSIC PATHOLOGISTS, INCLUDING RECOMMENDATIONS TO MATCH INTO A PATHOLOGY RESIDENCY PROGRAM AND ACCEPTANCE INTO A FORENSIC PATHOLOGY FELLOWSHIP?

Several of my mentors told me a long time ago that in order to be a good forensic pathologist, you first have to be a good pathologist. Pick the residency program where you will get the best

pathology training. Don't worry about forensic pathology at the moment, or even try to pick a residency in the city where you think you'd like your fellowship to be. Just focus on getting the best pathology training you can. There will be a local death investigation system regardless of where your pathology residency is; introduce yourself to the forensic pathologists there and get some exposure to the field. Fellowship program directors are going to expect this, and they will also probably want to see at least one letter of recommendation from a forensic pathologist. Go to the NAME meetings and give a presentation. Introduce yourself to people. We are a small and friendly group—people will come to know you very quickly. The fellowship application process will soon be much easier, in my opinion, since we will have a match program next year (thank you, Dr. Gill!). I also tell applicants to pick a fellowship that they think will be the best fit for them from a purely educational standpoint. Each program has its own characteristics and style, and the place where you train is going to shape the forensic pathologist that you become. Considerations like geography, weather, proximity to family, etc., might be better left for one's choice of job after fellowship. After all, fellowship is only a year long (and it goes by quickly) and there is no guarantee that there will be a job opportunity at the same office as your fellowship. Pick the best fellowship program for you, in order to get the best education/experience you can and then get the job you want!

WHAT IS THE MOST REWARDING ASPECT OF BEING A FORENSIC PATHOLOGIST?

The most rewarding aspect for me is working up a case very well, which brings its own sense of satisfaction, and then being able to provide answers and explanations to families. We really are the decedent's last physician, and it is a great feeling to know that we have brought at least some closure to the family.

WHAT DO YOU THINK ARE THE MOST IMPORTANT ISSUES/CHALLENGES OF FORENSIC PATHOLOGY TODAY?

I think the biggest challenge we are facing as a subspecialty is the workforce issue. We do not have anywhere near the number of forensic pathologists needed in this country, and it does not appear to be getting any better. There are fewer medical students going into pathology residencies in general, and so of course this trickles down to forensic pathology as well. I firmly believe that it is up to us to foster interest in the next generation of students and encourage people to enter the field. Ask any forensic pathologist what steered them toward this career path, and I would bet you that most of us have a story about someone in the field who influenced, encouraged, and mentored them. Mine was Dr. Graham. I think we should all pay it forward.

WHAT HAS BEEN THE MOST UNEXPECTED FINDING YOU HAVE ENCOUNTERED DURING A CASE?

A bullet in the gallbladder, that had arrived there through the liver at the gallbladder bed. There were a few gallstones along with it, so I didn’t notice it on initial palpation. Strangely enough, a colleague had a similar case!

WHAT DO YOU ENJOY MOST ABOUT WORKING WITH YOUR TEAM?

The team itself. I am very lucky to work with an amazing team of individuals who are talented and dedicated to our mission. Whether it's pathology, investigations, morgue, toxicology, histology, or administration, everyone is working together toward our common goals. This is what gets us through adversity such as increases in caseload, the COVID-19 pandemic, and the recent winter storm we experienced in Texas.

I enjoy learning from the people I work with. I like talking about cases with others, hearing different viewpoints, and even debating cause and manner on the really challenging cases. I like hearing other perspectives, understanding others' points of view and reasoning, and benefiting from the perspectives and collective experience of other pathologists. Working with fellows is also particularly rewarding. I've always enjoyed teaching, and through their questions, I discover what I don't know.

WHO IS YOUR ROLE MODEL AND WHY?

I have had several role models throughout my career, but the most notable have been the Chiefs under whom I have worked: Dr. Michael Graham, Dr. Jeffrey Barnard, and Dr. Ross Zumwalt. I have learned a great deal from each of them, and I strive to be like them. While they each approach various aspects of forensic pathology in different ways, I have learned invaluable "life lessons" and bits of wisdom from each of them that only come after many years of experience. I believe it is especially important in this field to identify such role models and benefit from their experience. It is far easier to succeed when you can stand on the shoulders of giants.

WHAT ARE YOUR HOBBIES AND HOW DO YOU MAINTAIN A WORK-LIFE BALANCE?

I used to compete in Ironman triathlon. Well, "compete" is a strong word since I am not particularly fast; the competition is more with yourself to see what you can push yourself to do. Over the last few years, I've just tried to stay in shape by taking time for some exercise—mostly running. In addition to keeping fit, it also helps to clear my mind and take my thoughts off of the office for a while. After all, the office is still going to be there tomorrow...

WHAT IS YOUR MOST-LIKED MEAL AT YOUR FAVORITE LOCAL RESTAURANT?

Austin is known for its barbecue and its tacos. My favorites are the pulled pork, smoked turkey, and the jalapeño cheddar sausage at Black's Barbecue, and anything on the menu at Torchy’s; they have a featured taco each month. Also, although I've been out of New Mexico for a very long time now, I would give anything for a "#9+2" breakfast burrito from Golden Pride.

Francisco J. Diaz, MD



6/25/2021

Current position:
Chief Medical Examiner, Washington, DC

Education history:
Medical School: Instituto Tecnologico de Santo Domingo, Dominican Republic
Residency Program: Conemaugh Memorial Hospital. Johnstown, Pennsylvania
Fellowship: Office of the Medical Examiner, Philadelphia, Pennsylvania

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

Since high school, I was interested in forensic work because of the challenging aspect of investigations.

WHAT ADVICE DO YOU HAVE FOR ASPIRING FORENSIC PATHOLOGISTS, INCLUDING RECOMMENDATIONS TO MATCH INTO A PATHOLOGY RESIDENCY PROGRAM AND ACCEPTANCE INTO A FORENSIC PATHOLOGY FELLOWSHIP?

Get acquainted with the field. Shadow pathologists, investigators and autopsies. As much as possible, try to rotate in at least two different ME offices. Try to go to court and observe. Make sure that you can adjust to doing autopsies for a career and that you are comfortable with testifying.

WHAT IS THE MOST REWARDING ASPECT OF BEING A FORENSIC PATHOLOGIST?

Providing medical information to families that would be useful for survivors.

WHAT IS THE GREATEST CHALLENGE OF BEING A FORENSIC PATHOLOGIST?

The grind of autopsies and the sometimes mentally exhausting aspect of testimony.

WHAT DO YOU THINK ARE THE MOST IMPORTANT ISSUES/CHALLENGES OF FORENSIC PATHOLOGY TODAY?

1. Encouraging physicians to become pathologists and forensic pathologists.
2. Significant increase in the number of cases.
3. Difficulty in recruiting.
4. Not enough funding for training.

WHAT HAS BEEN YOUR MOST MEMORABLE CASE AND WHY?

When I was working in Detroit, the Medical Examiner's office was involved, along with the FBI, in the recovery of 1500 anatomic specimens in a warehouse including more than 1000 heads. We classified the specimens, assigned numbers and stored them.

WHAT HAS BEEN THE MOST UNEXPECTED FINDING YOU HAVE ENCOUNTERED DURING A CASE?

In Detroit as well, we performed the autopsies of four young women that were found in the trunks of vehicles in a 2-week span. There was no trauma and negative toxicology. They had only one thing in common, the individual that contacted them on a dating website. It is my opinion that he asphyxiated them. He was convicted.

WHO IS YOUR ROLE MODEL AND WHY?

Dr. Werner Spitz, who I have developed a friendship with and who has shared his immense knowledge and experience with me.

WHAT ARE YOUR HOBBIES AND HOW DO YOU MAINTAIN A WORK-LIFE BALANCE?

I am a voracious reader of history and literature and love traveling.
The key is to leave work at work (whenever possible).

WHAT IS YOUR MOST-LIKED MEAL AT YOUR FAVORITE LOCAL RESTAURANT?

Cuban Steak at Cuba Libre in DC.

Gregory G. Davis, MD



10/5/2021

Current position:
Professor and Director, Forensic Division, Department of Pathology, UAB
Chief Coroner/Medical Examiner, Jefferson County, Alabama

Education history:
Undergraduate Education: Vanderbilt University, BA chemistry
Medical School: Vanderbilt University
Residency Program: Vanderbilt University, Department of Pathology
Fellowship: San Diego County Medical Examiner's Office
Other: School of Public Health, UAB, MSPH in epidemiology

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

I enjoyed chemistry and working in a lab, leading me into pathology. In pathology I enjoyed autopsy work, both starting at the end and working backward to determine the cause of death and working with my hands. I was moonlighting performing autopsies and thought that if only I could find a job that would allow me to perform autopsies for a living, then I would have the perfect job for me. Nevertheless, I thought that I would dislike forensic pathology, because I thought it would give me nightmares. When I was actually exposed to forensic pathology, I found that I liked it better than anything else I had ever done in medicine, and I had no nightmares. Julia Goodin exemplified being a forensic pathologist to me during that month. I changed my mind about my career and have been glad ever since.

WHAT ADVICE DO YOU HAVE FOR ASPIRING FORENSIC PATHOLOGISTS, INCLUDING RECOMMENDATIONS TO MATCH INTO A PATHOLOGY RESIDENCY PROGRAM AND ACCEPTANCE INTO A FORENSIC PATHOLOGY FELLOWSHIP?

Do not load your electives during medical school or pathology residency toward forensic pathology. You will get to practice forensic pathology for decades. Use these unique

opportunities to experience other aspects of medicine that pertain to forensic pathology (e.g. psychiatry in a prison or homeless setting, addiction medicine, domestic altercations and grief counseling with hospital chaplains, etc). Match into a residency program that will make you learn your anatomic and clinical pathology, as you must learn this material to be a good forensic pathologist, and you must pass the general pathology board exam before you can sit for the forensic exam. Apply yourself to learning pathology as a whole and be patient to learn forensic pathology later when it is time for fellowship.

WHAT IS THE MOST REWARDING ASPECT OF BEING A FORENSIC PATHOLOGIST?

Two things make this field rewarding for me: One is the rare occasion when you either detect a homicide that people did not recognize was a homicide or when you are able to show that a death everyone has told you is a homicide is not a homicide at all. Those rare cases are when you make a real difference, and that is why society needs capable forensic pathologists. The other reward is helping families in a difficult time. Once in a great while a family expresses appreciation for our work, but more often you receive no thanks. Even so, the family benefits from your work and care at one of the most difficult times in their life. Know that, and be confident in the importance of your good work as a forensic pathologist.

WHAT IS THE GREATEST CHALLENGE OF BEING A FORENSIC PATHOLOGIST?

Initially the greatest challenge is testifying, because it is new, different and daunting. Later the greatest challenge is to remain a humble, caring forensic pathologist after seeing so much mayhem and inhumanity day after day. Cynicism would be easy, but continued humble care is what the family needs from you, and what you need for yourself, if you are to remain whole.

WHAT DO YOU THINK ARE THE MOST IMPORTANT ISSUES/CHALLENGES OF FORENSIC PATHOLOGY TODAY?

Attracting caring, devoted individuals into the practice of forensic pathology. Even if all of medicine misunderstands the importance of forensic pathology, some people do understand. Academic medicine is rife with individuals loudly repeating that any discipline of medicine other than their chosen discipline is a waste of time and effort. Do not let someone that narrow-minded dismiss forensic pathology, or any other specialty that appeals to you, as unworthy. As long as you seek to help others with your training and skill, then you are doing a noble thing.

WHAT HAS BEEN YOUR MOST MEMORABLE CASE AND WHY?

My most memorable case was a white male killed by a black male in a jail cell. I knew that the case would be difficult to handle as soon as I saw the body. This death did not make national news, but it led the local news for weeks. People threatened to kill me, and an armed guard accompanied me when I went to testify before a special council on this matter. Medical school taught me nothing about how to deal with all this publicity and these threats. In time I spoke to a representative of the group that threatened to kill me. That person casually mentioned that everyone knew that I was only saying what people in charge paid me to say. I can endure many things, but I will never allow a false statement impugning my integrity to go without response. I

was watching a clock, so I am correct when I say that I spoke for 10 minutes straight, telling the person reasons why he could believe my statements and reasons why his own statements appeared self-serving. Long before I finished my response the person was saying, "Yes, sir, I understand, sir." After that I received no threats. I learned anew that bullies are afraid of courage. I do not wish such a case on anyone, but nothing since has compared to that case. My outlook now is that as long as no one is threatening to kill me, then things must be going pretty well. Difficult though it was, that case established me as a capable forensic pathologist both in the community and in my own mind.

WHAT HAS BEEN THE MOST UNEXPECTED FINDING YOU HAVE ENCOUNTERED DURING A CASE?

I examined a body in active decay found in a drug house. I kept finding small bones mixed with the decomposing soft tissue. I was puzzled for long minutes, and then I suddenly realized that the decedent was a female late in a pregnancy when she died. I was so shocked that I exclaimed out loud, even though I was alone in the room at the time. That was by far the most stunning moment of my career.

WHAT DO YOU ENJOY MOST ABOUT WORKING WITH YOUR TEAM?

We support each other. If someone notices that one of us needs help or a break for a moment, then we say so. That mutual care enables us to continue working together year after year.

WHO IS YOUR ROLE MODEL AND WHY?

Randy Hanzlick. Early in my career I had a spectacular opportunity to work on a committee with Randy every few months over the course of a year and a half. During that time Randy embodied what I wanted to be. He was, and is, capable, clever, observant, quick to see connections, witty, and a voice speaking for the importance of good death investigation. Randy has a clear vision of what is important, and he does not let clamor distract him from his goal. He also represents the importance of good death investigation, simply by being so capable. I strive to be like Randy.

WHAT ARE YOUR HOBBIES AND HOW DO YOU MAINTAIN A WORK-LIFE BALANCE?

I enjoy cooking, especially baking. I have been baking bread since I was in my teens. I also enjoy hiking and running. I run because I enjoy it, but I also run so that I can run with Dan Dye, Kelly Lear, and Marcus Nashelsky whenever we are together in any combination. I have to keep running all year so that I can run with my friends those few times a year that we are together. I enjoy hiking with Sue, my wife, and with our daughters Claire and Camille. As we hike, we may talk of books we have read lately. Camille and I enjoy playing cribbage, a game that has been passed from parent to child in my family for generations.

Over the years, all forensic pathologists that I have observed clearly understand that life consists of more than work alone. Family and friends are vital to well-being, and those relationships deepen with time spent together. I make maintaining a balance between life and work a priority.

WHAT IS YOUR FAVORITE WORK SOUNDTRACK AND WHY?

We listen to many songs, but I have special consideration for a good song that pertains to forensic practice. Many such songs exist, some obvious ("I Shot the Sheriff" by Bob Marley), some less obvious ("Use Me" by Bill Withers), some perhaps obscure ("Streets of Paradise" by Richard and Linda Thompson). Other songs in this vein include "One Way Out" by the Allman Brothers, "Chain of Fools" by Aretha Franklin, "Sheep Go to Heaven" by Cake, "The Goodbye Look" by Donald Fagen, "Let Him Dangle" by Elvis Costello, "Sweet Old World" by Emmylou Harris, "Little Miss S" by the New Bohemians, "Digging in the Dirt" by Peter Gabriel, "That Joke Isn't Funny Anymore" by the Smiths, "Living for the City" by Stevie Wonder, "Don't Take Me Alive" by Steely Dan, "Walking in the Woods" by The Pursuit of Happiness, and "Frank's Wild Years" by Tom Waits. "Skeletons" by Rickie Lee Jones is special, too heartbreaking for the morgue. In my office I listen to jazz, particularly Steve Kuhn and Marcin Wasilewski.

WHAT IS YOUR MOST-LIKED MEAL AT YOUR FAVORITE LOCAL RESTAURANT?

Steak frites with the caramel chocolate nut tart at Chez Fonfon. There are many good meals, but that particular meal assumed a place of pride after my family endured a long day of hiking and each ordered steak frites at the restaurant when we finally got to eat. Sharing that particular meal on that day was magical.

Gregory J. Davis, MD



10/5/2021

Current position:
Professor of Pathology & Lab Medicine, University of Kentucky, Director of the Forensic Consultation Service

Education history:
Undergraduate Education: University of Kentucky
Medical School: University of Tennessee
Residency Program: University of Louisville Affiliated Hospitals
Fellowship: Office of the Chief Medical Examiner, Commonwealth of Kentucky

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

Primarily due to the influence of Dr. George Nichols, Chief ME of Kentucky, while I was an anatomic and clinical pathology resident, as well as Dr. L.C. McCloud, another Kentucky ME. They were both outstanding teachers in wildly different ways.

WHAT ADVICE DO YOU HAVE FOR ASPIRING FORENSIC PATHOLOGISTS, INCLUDING RECOMMENDATIONS TO MATCH INTO A PATHOLOGY RESIDENCY PROGRAM AND ACCEPTANCE INTO A FORENSIC PATHOLOGY FELLOWSHIP?

Major in anything you want for undergrad, as long as you get your pre-requisites for med school. Take as many humanities classes as possible: the last thing we need in medicine is a one-note specialist who can only relate to their job. Your major doesn't matter (mine was English), just try to remember to enjoy yourself along the way. Volunteer where needed, not just to put something on a CV, but to add to your life. As much as possible, given that so many of us are a tad introverted, be a people person, meeting and talking with as many MEs, death investigators, and others who can give you insight. In med school, take pathology electives as soon as possible in 4th year and chat folks up.

WHAT IS THE MOST REWARDING ASPECT OF BEING A FORENSIC PATHOLOGIST?

Far and away: the people I get to meet grace of our profession. Other pathologists and other physicians, family members, prosecutors and defense attorneys, civil attorneys, news media, students, residents, and fellows. If one thing has kept the burnout monster at bay, it's the amazing people I get to work with, directly and indirectly. One of the more profound rewards is thinking of my former residents who are now practicing forensic pathologists.

WHAT IS THE GREATEST CHALLENGE OF BEING A FORENSIC PATHOLOGIST?

Finding work-life balance, depending on your case load, and admitting to one's self, when appropriate, when counseling/debriefing/stress reduction is called for. The work is hard and traumatic, and we often see some of the worst things humans can do to themselves and others. It takes an emotional and physical toll, and it's important to 1) admit it to one's self and 2) do something about it.

WHAT DO YOU THINK ARE THE MOST IMPORTANT ISSUES/CHALLENGES OF FORENSIC PATHOLOGY TODAY?

Recruiting the next generation and beyond of forensic pathologists is critical. Compounding the issue is relatively low pay compared to our general pathology colleagues who are hospital-based and the ever-present possibility of negative press and potential harassment, sometimes not just in spite of but because of doing the "right thing" as we see it with our opinions. Adequate funding of ME Offices by governmental agencies, and those same agencies recognizing the necessary independence of the office is an important challenge.

WHAT HAS BEEN YOUR MOST MEMORABLE CASE AND WHY?

There are so many memorable cases, but two stand out. One is the Carrollton bus collision of May 1988, the worst DUI collision in US history with 27 dead. In the midst of that horror, the way multiple agencies and individuals came together to help was an inspiration, as was Dr. George Nichols' ingenious decision to move the crime scene, the bus itself on Interstate 71, to the National Guard Armory for examination. The other was the accidental shooting by an African-American man of his white friend in SE Kentucky in the late 90s, and I performed the autopsy. In response, the Klan decided to march in that town, and a local minister and the county's coroner put together an interfaith anti-Klan rally on the opposite side of town. I was invited by the minister and coroner to speak as a forensic pathologist and as a Jew on the fallout of senseless hatred, and Reverend Derek Penwell and former Coroner Bill Bisceglia remain dear friends to this day.

WHAT HAS BEEN THE MOST UNEXPECTED FINDING YOU HAVE ENCOUNTERED DURING A CASE?

Situs inversus totalis certainly stands out, perhaps along with a 60 lb / 27 kg toxic megacolon.

WHAT DO YOU ENJOY MOST ABOUT WORKING WITH YOUR TEAM?

Their wonderful mix of professionalism, collegiality, and appropriate humor.

WHO IS YOUR ROLE MODEL AND WHY?

Like many of us, I've had several. Dr. J. Hill Hamon, my undergrad professor who with erudition and humor got this English major interested in science. Dr. Larry Giltman, med school pathology professor who let me know about this entity called pathology and lab medicine. Dr. L.C. McCloud, a Kentucky forensic pathologist who was among the smartest, kindest, and funniest individuals I've ever known. If I ever say something good to my trainees or in court, it's most likely his wisdom speaking via me, his former resident.

WHAT ARE YOUR HOBBIES AND HOW DO YOU MAINTAIN A WORK-LIFE BALANCE?

Walking/sauntering/hiking, be it urban, rural, or wilderness; reading fiction or non-fiction that has nothing to do with medicine; and a meal with family and/or friends. Maintaining a work-life balance is always a challenge, but that helps. A lot.

WHAT IS YOUR FAVORITE WORK SOUNDTRACK AND WHY?

Instrumental guitar or any of a large number of singer-songwriters. Acoustic is best. It gives me energy and helps me focus.

WHAT IS YOUR MOST-LIKED MEAL AT YOUR FAVORITE LOCAL RESTAURANT?

Vegetarian pho and salad rolls at Pho Saigon, Lexington, KY - by far!

Marcella F. Fierro, MD



11/5/2021

Current position:
Retired CME, Commonwealth of Virginia

Education history:
Undergraduate Education: D'Youville College
Medical School: State University of New York School of Biomedical Sciences
Residency Program: Ottawa Civic Hospital, Cleveland Clinic and Virginia Commonwealth U of Ottawa, Cleveland Clinic, U Buffalo Biomedical Sciences
Fellowship: Virginia Commonwealth U Dept of Legal Medicine

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

Exposure to the Cuyahoga County Coroner's Office during residency.

WHAT ADVICE DO YOU HAVE FOR ASPIRING FORENSIC PATHOLOGISTS, INCLUDING RECOMMENDATIONS TO MATCH INTO A PATHOLOGY RESIDENCY PROGRAM AND ACCEPTANCE INTO A FORENSIC PATHOLOGY FELLOWSHIP?

Pick the best one you can. Look for real time exposure, scenes, autopsies, court exposure and teaching.

WHAT IS THE GREATEST CHALLENGE OF BEING A FORENSIC PATHOLOGIST?

Answering the pertinent questions regarding a death, putting the pieces of the puzzle together to figure out cause and manner of death, investigation correlation with autopsy findings.

WHAT DO YOU THINK ARE THE MOST IMPORTANT ISSUES/CHALLENGES OF FORENSIC PATHOLOGY TODAY?

Making sure any place you go has independence and a good code section governing your independence.

WHAT HAS BEEN YOUR MOST MEMORABLE CASE AND WHY?

Too many. When I had a really terrific case put together, the perpetrator would plead guilty and I never got to testify to how we put it together.

WHAT DO YOU ENJOY MOST ABOUT WORKING WITH YOUR TEAM?

Everyone has something to contribute.

WHO IS YOUR ROLE MODEL AND WHY?

David Wiecking, MD LLB because of his analytical approach to cases.

WHAT ARE YOUR HOBBIES AND HOW DO YOU MAINTAIN A WORK-LIFE BALANCE?

Stamps, retired now. Travel until recently. Never did have great work-live balance. Work was always consumed too much of my time.

WHAT IS YOUR MOST-LIKED MEAL AT YOUR FAVORITE LOCAL RESTAURANT?

Unagi don.

Barbara A. Sampson, M.D., Ph.D.



11/8/2021

Current position:
Chief Medical Examiner of the City of New York

Education history:
Medical School: Weill Cornell Medical College, 1994
Residency Program: Anatomic and Clinical Pathology, 1994-1998, Brigham and Women's Hospital, Boston, MA
Fellowships:
Cardiovascular Pathology, 1997-1998, Brigham and Women's Hospital, Boston, MA
Forensic Pathology, 1998-1999
Other: Ph.D., Rockefeller University, 1993

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

As the daughter of two physicians, I was always going to be a physician. Dinner conversation was often about what kind of physician I would be. My father, an internist, when I was about 10 years old, suggested pathology. He told me a pathologist is the physician's physician. I loved the sound of that! My mother then told me about forensic pathology, where I could practice medicine at the crossroads of both public health and criminal justice. Everything I learned about the field only increased my interest over the years.

WHAT IS THE MOST REWARDING ASPECT OF BEING A FORENSIC PATHOLOGIST?

The most rewarding part of our field is honestly and compassionately answering questions for families and loved ones at the worst time of their lives using the finest science and medicine.

WHAT HAS BEEN YOUR MOST MEMORABLE CASE AND WHY?

My early research interest was in microbiology. The investigation of West Nile encephalitis in 1999 in NYC is the most memorable investigation in which I have participated. It required not

only in-depth neuropathology examination, but also collaboration with public health officials in many agencies. Who would have ever thought I would be able to study an emerging infectious disease in NYC? Our experience with Covid-19 and in planning for management of Ebola cases were also challenging experiences in the microbiology realm.

WHAT DO YOU ENJOY MOST ABOUT WORKING WITH YOUR TEAM?

My favorite aspect of working with my team is the camaraderie. We have a very difficult job, both physically and emotionally. It is of the utmost importance that you trust your team and enjoy working with them. When the going gets tough, which it will, you will be spending a lot of time together. Knowing that they have your back is critical.

WHO IS YOUR ROLE MODEL AND WHY?

I am fortunate to have several outstanding role models for various aspects of my career. As a forensic pathologist, my role model is Dr. Charles Hirsch. His steadfast leadership of the NYC office and of our fellowship program for 24 years is remarkable. His compassion, professionalism, strength, and firm belief in science and medicine are inspirational. He led this office through 9/11, the largest US homicide investigation. His commitment to those families, to make as many identifications as possible, continues today. We quote his famous "Hirschisms" regularly. One of my favorites (and one every forensic pathologist should take to heart) is "For a difference to be a difference, it has to make a difference!"

Joseph A. Felo, D.O.



12/9/2021

Current position:
Chief Deputy Medical Examiner & Forensic Pathology Fellowship Program Director, Cuyahoga County Medical Examiner's Office

Education history:
Undergraduate Education: St. Lawrence University, Bachelor of Science
Medical School: Kansas City College of Osteopathic Medicine, Doctor of Osteopathy
Residency Program: Cleveland Clinic Foundation, Anatomic & Clinical Pathology
Fellowship: Cuyahoga County Coroner's Office, Forensic Pathology

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

I went to an osteopathic medical school, planning on a primary care career in either pediatrics or family practice. I loved the histology and pathology courses in medical school that piqued my interest in pathology. I would often list pathology as a possible career choice during clinical rotations and was often discouraged by attendings, and told not to seek pathology, because I was so good with living patients that I should not waste those talents on the dead ones. I completed an osteopathic internship and unfortunately one of my patients died, but fortunately, I was able to attend his autopsy, which was the first autopsy for me. That autopsy experience cinched my decision to pursue pathology. With my early interests in osteopathy and primary care, forensic pathology was the ideal path for me, as it lets me examine the whole body and share my talents on both the dead patients and their surviving loved ones.

WHAT ADVICE DO YOU HAVE FOR ASPIRING FORENSIC PATHOLOGISTS, INCLUDING RECOMMENDATIONS TO MATCH INTO A PATHOLOGY RESIDENCY PROGRAM AND ACCEPTANCE INTO A FORENSIC PATHOLOGY FELLOWSHIP?

Most importantly is to find programs that you like and in which you feel comfortable. Three or four years of residency and one year of fellowship are long times to be unhappy. One mentor of

mine told me to strive for the best reputable programs, because you will be asked about your educational background many times, especially during court proceedings. Keep in mind, that to be a competent forensic pathologist, you first have to be a competent general pathologist, so do your best to secure a residency that will expose you to all aspects of pathology. The more variety you see in residency and fellowship, the less you'll have to study (hopefully) for the board examinations.

WHAT IS THE MOST REWARDING ASPECT OF BEING A FORENSIC PATHOLOGIST?

I have been fortunate to be the forensic pathology fellowship program director at the Cuyahoga County Coroner and Medical Examiner's Office for the last 15 years. I am very proud that our program was the second accredited forensic pathology fellowship program and is currently the oldest program in America. During the past 15 years, I have had the honor and privilege of training 18 forensic pathologists. It delights me to no end to see the fellows develop confidence and competency as they mature into the next generation of forensic pathologists.

WHAT IS THE GREATEST CHALLENGE OF BEING A FORENSIC PATHOLOGIST?

Maintaining a positive and optimistic attitude about self and society, especially when dealing with death and tragedy on a daily basis. My Irish immigrant grandfather used to say, "work hard and play harder." It is hard work to be happy, but happiness has been very rewarding for me in my professional and personal lives.

WHAT DO YOU THINK ARE THE MOST IMPORTANT ISSUES/CHALLENGES OF FORENSIC PATHOLOGY TODAY?

No secret here, but I feel recruitment for future forensic pathologists is a critical issue. I am encouraged by those who have been visible in promoting one of the most gratifying medical careers available. Personally, I have never turned down an opportunity to talk about forensic pathology, be it at the high school and college levels as well as during lectures given to medical students, residents, first responders, and community events. I encourage everyone to talk to anyone interested in forensic pathology, because many years later, when you talk to someone on their career path to forensic pathology and they tell you how influential you were in helping them make their decision, it is way cool and gratifying!

WHAT HAS BEEN YOUR MOST MEMORABLE CASE AND WHY?

I certainly have had many memorable cases, but my MOST memorable case was during my third year of residency. I was in the hospital morgue consulting with a junior resident, and the autopsy assistant was a young lady from Tennessee getting autopsy experience so that she could sit for her Pathology Assistant board exam. I had talked with the young lady a few times briefly before, but never had the courage to ask her out on a date until I saw her over the body eviscerating the abdominal organs. It was then that I asked her out on our first date, she said yes, we were married two years later, and we have been happily married ever since. That case was not only the day I first asked my future wife out for a date but was also the day I realized how comfortable and confident I am in the morgue.

WHAT HAS BEEN THE MOST UNEXPECTED FINDING YOU HAVE ENCOUNTERED DURING A CASE?

The most unexpected finding was during the only autopsy I performed on a parachutist. The recreational parachutist was witnessed to be unresponsive upon landing and sustained open fractures of both lower extremities. High on the differential was a cardiac event during his descent. However, at autopsy, he had a high cervical spinal fracture with near total lacerated transection of the cervical spinal cord. Inspection of his helmet revealed a scuff mark over the frontal region that was thought to have come from him striking his head at the top of the airplane door frame resulting in a hyperextension injury of his cervical spine and spinal cord. Wicked cool! Don't underestimate the value of examining helmets, usually during motorcycle deaths, but also other helmet-related deaths.

WHAT DO YOU ENJOY MOST ABOUT WORKING WITH YOUR TEAM?

I have been extremely fortunate to have trained and have spent my entire forensic pathology career at the Cuyahoga County Office. The best reason for my staying in the one office is because of the high talent the entire staff of the office has to offer. We are fortunate to have all disciplines of the forensic sciences housed in the same building, which helps make it easy for personal and professional interactions between the scientific disciplines. It also makes our forensic pathology fellowship a great training program that I am proud to direct. I know there are many other great fellowship training programs, but the botanist in me feels that the grass is always greener on my side of the fence!

WHO IS YOUR ROLE MODEL AND WHY?

Dr. Robert Challener was my forensic pathology fellowship program director and the most influential forensic pathologist on my career. He was nearing retirement during my fellowship and had raised 6 children, so he had that father/grandfather air about him. He was also a surgical pathologist that left private practice to pursue forensic pathology. Dr. Challener instilled in me the value of being a quality anatomic pathologist as a basis for being a quality forensic pathologist. Dr. Challener's mentor was Dr. Lester Adelson, and several Friday afternoons during my fellowship, Dr. Challener would bring Dr. Adelson into our office where the two of them would invite me to join them, as they offered me learning points on some of my autopsies. Now as the current forensic pathology fellowship program director in Cleveland, I am proud to continue the great teaching legacy that preceded me, that I now pass on to the next generation of Cleveland-trained forensic pathologists.

WHAT ARE YOUR HOBBIES AND HOW DO YOU MAINTAIN A WORK-LIFE BALANCE?

One of the foundations of osteopathic medicine is that a balance of mind, body, and spirit are key to maintaining a healthy life. I am efficient at work and rarely bring work home. That way, I can spend time with my family and pursue the many hobbies I have to help maintain my healthy and happy life. Some of the hobbies I enjoy include: 1. Gardening: I have over 100 plants in my office so that I can always be surrounded by life even after spending a day surrounded by death. 2. Crossword and logic puzzles: Exercise for the brain. 3. Cross-stitching:

Very relaxing and I enjoy creating artwork. 4. Home beer brewing: I grow my own hops and need to use them somehow. 5. Rollerblading: I have yet to see a case come into our office when someone died while rollerblading, so I figure it must be safer than any other mode of transportation. 6. Watching sports: My favorite teams are historically not successful but supporting them helps keep me humble. 5. Outdoor Christmas lights: My time of the year!

WHAT IS YOUR FAVORITE WORK SOUNDTRACK AND WHY?

I work in Cleveland, so it's gotta be Rock 'n Roll! Rock music is usually playing on the radio in the autopsy suite. My son started playing drums when he was 7 and over the last 15 years, he has played and performed many rock songs at a variety of different venues. I especially like hearing a song that he has performed at one of his concerts come on the radio while I am doing an autopsy, then my toe tapping begins!

WHAT IS YOUR MOST-LIKED MEAL AT YOUR FAVORITE LOCAL RESTAURANT?

My wife is an awesome cook, so we don't go out to restaurants all that much. So, any meal at Chez Felo prepared by Chef Mrs. Doctor Felo is my favorite. I give my wife a break from cooking over most holiday long weekends and slow smoke pork ribs. Enjoying smoked pork ribs with my own brewed IPA beer on my backyard deck, that is surrounded by my planter container vegetable garden, with my wife, son, and dog with rock 'n roll music playing in the background is truly what life is all about for me!

Steven Clark, PhD



3/2/2022

Current position:
Director: Occupational Research and Assessment, Inc

Education history:
B.A.A. Industrial Supervision and Management, Central Michigan University, December 1975
M.A. Industrial Technology, Eastern Michigan University, May 1982.
Ph.D. Education, Curriculum and Instruction, Michigan State University, June 1987.
Doctoral research, Department of Counseling and Educational Psychology, reliability and validity testing of computer-generated occupational assessments for certification, licensure and program completion.

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

In November 1993, I was a university professor at a small school in Michigan, teaching and doing consulting work with several companies in the Midwest. At that time, I was several months into a large occupational analysis project involving job redesign with integrated assessment testing for the Saint Joseph Mercy Hospital System. This background story is important because the St. Joe project involved the majority of the system's employees and the three unions who represented them--everyone from the custodians, skilled trades mechanical/technical, to medical technicians, and nursing staff. The only unaffected employees were exempt hospital administrative staff and the doctors. Even in hindsight, that was hard job. Now to answer the question: "How did you initially become interested in forensic pathology?" Well, it was Thanksgiving weekend and my childhood friend Jeffrey Jentzen and I were back in our hometown for the holiday weekend, catching up and telling stories at his brother's house, as was the tradition. During the "What are you doing now?" conversation, Jeff (who was the Chief Medical Examiner in Milwaukee) was interested in the St. Joe story, and asked if I'd be interested in coming to Milwaukee and working with his medicolegal investigators to possibly help "standardize" some level of professional training and promotion strategy for the staff? I

asked him if "medicolegal" was a real word… and here we are nearly thirty years later. I cannot overemphasize the significance of that day; it was life changing for me.

WHAT ADVICE DO YOU HAVE FOR INDIVIDUALS ASPIRING TO JOIN THE FORENSIC PATHOLOGY WORKFORCE?

Three things: Skill, knowledge, and ability. There are few occupations that require such high levels of competence in each domain of learning: psychomotor (skill), cognitive (knowledge), and affective (ability) to perform successfully and consistently over time.
1. Skill. Autopsy performance requires the ability to dissect the human body (without destroying it). This requires a high-level hand-eye coordination (perception), the ability to manipulate tools skillfully (skilled movement), and in some cases sheer strength (fitness), all while looking, feeling, and smelling for things that do or don't make sense – given the circumstances.
2. Knowledge. Forensic pathologists must walk the bridge between science and medicine, possessing a working knowledge of medical specialties that cross traditional "practice" boundaries--from emergency medicine to obstetrics, from radiology to anesthesiology and specialties I cannot pronounce and do not reside in my spellcheck. In addition, forensic pathologists must have a pretty good grasp on the laws of physics.
Regarding the performance of the forensic autopsy, I've been told by multiple forensic pathologists over the years "Homicides are easy, it's the subtle naturals that test you."
3. Ability. Understanding how people behave, respond to situations, provide feedback, and interact with those around them. Forensic pathologists must be able to describe and explain their findings to others, while adapting, behaving and simply "playing-well" in whatever sandbox they find themselves in – from kitchen to courtroom.

WHAT IS THE MOST REWARDING ASPECT OF BEING A PART OF THE FORENSIC PATHOLOGY COMMUNITY?

This is going to be a two-part answer, and the first may sound a little corny. First, the people who do this work. The forensic pathologists (and staff) have given me experiences and stories you couldn't make up. I get the rare opportunity to work closely with people who are passionate about their work and want to make a difference. However, it's the friendships that are most rewarding.
Second, to see the work we've done stand the test of time is hugely rewarding. Consensus-driven standards development, by design reflect the expertise within the group. But, more importantly, the personalities in the room drive the group – and, with forensic pathologists, that's a lot of personality. The "boil room" atmosphere of workgroup meetings was challenging and sometimes just plain hard to control. Ask anyone who participated, everyone brought their "A-game" and I think the results speak for themselves.
Most rewarding projects involving forensic pathologists:
- Medicolegal Death Investigation Training Text.
- Medicolegal Death Investigator Pre/Post Training Assessments (now the ABMDI).
- Death Investigation: A Guide for the Scene Investigator.

• National Missing and Unidentified Persons System (NamUs) and Associated National Training Academies.
• Forensic Autopsy Performance Standards.
• Sudden Unexplained Infant Death Investigation (SUIDI) and Associated National Training Academies.
• NAME's Inspection and Accreditation inspector training.

WHAT DO YOU THINK ARE THE MOST IMPORTANT ISSUES/CHALLENGES OF FORENSIC PATHOLOGY TODAY?

I worry about what appears to be the loss of art and science in forensic pathology. Some might call it deprofessionalization? It is not uncommon that advances in technology and economics significantly alter or eliminate occupations. No doubt, many repetitious and physically demanding jobs have been successfully replaced. However, some occupations require a deeper understanding of science and circumstances to evaluate and then perform at the highest level. Basic computer logic of "if this, then this" while performing some tasks may not produce be the "best" results? Ask Captain Sully.

WHO IS YOUR ROLE MODEL AND WHY?

Studs Terkel. He wrote the book "Working" in 1974. The book was one of the reading options in an undergraduate sociology class. It was inspiring and interesting. Inspiring, to think of the author entering unknown and uncomfortable worlds, while engaging strangers in conversation about what they did for a living – good – bad – and sometimes illegal. Interesting, in realizing the role work plays in the shaping of people's perception of themselves and others.
The research to write the book was brilliant: just in talking to people about their work and writing it down. I thought, "That's a cool job."

WHAT ARE YOUR HOBBIES AND HOW DO YOU MAINTAIN A WORK-LIFE BALANCE?

I guess I'm lucky. I don't have to balance the two, for me, they're the same.

Kathryn Pinneri, MD



3/30/2022

Current position:
Director, Montgomery County Forensic Services

Education history:
Undergraduate Education: Louisiana Tech University
Medical School: University of Texas Southwestern Medical School at Dallas
Residency Program: University of Tennessee Medical Center at Knoxville
Fellowship: Southwestern Institute of Forensic Sciences, Dallas, TX

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

After college I became a certified nuclear medicine technologist. While I enjoyed the work, I knew it wasn't what I wanted to do for the rest of my life. I stumbled upon the book “Coroner” by Dr. Tom Noguchi. I thought it was fascinating and I knew it was what I wanted to do. Thankfully, I had all the credits I needed for medical school, so I took the MCAT and off I went. Best decision EVER!

WHAT ADVICE DO YOU HAVE FOR ASPIRING FORENSIC PATHOLOGISTS, INCLUDING RECOMMENDATIONS TO MATCH INTO A PATHOLOGY RESIDENCY PROGRAM AND ACCEPTANCE INTO A FORENSIC PATHOLOGY FELLOWSHIP?

My advice for aspiring forensic pathologists is to become a good pathologist first. My hardest cases have had some unusual microscopic finding and I'm glad I have a solid pathology foundation to work from. It's a long journey, but worth it in the end. For pathology residency, I wanted to pick a location where I wanted to live for 5 years (it was a five-year program when I went through it) and I love anthropology, so the Knoxville program was perfect for me. Your fellowship year will be tough... there is so much to learn! I'm still learning, and I've been doing

this for 20 years now. My #1 professional advice I give to people in this field is “if you think about it, you should do it”. It's much easier to explain why you did something than why you didn't.

WHAT IS THE MOST REWARDING ASPECT OF BEING A FORENSIC PATHOLOGIST?

Providing answers to grieving family members. Even if they aren't the answers they want or expect, having an answer can help with the healing process after the loss of their loved one.

WHAT DO YOU THINK ARE THE MOST IMPORTANT ISSUES/CHALLENGES OF FORENSIC PATHOLOGY TODAY?

A declining workforce in the setting of increasing caseloads is the biggest challenge we are facing right now. NAME is putting a lot of effort into the workforce issue with grass-roots outreach in medical schools, colleges and even high schools. No one else is going to recruit for us, so we have to do it ourselves. We won't see the fruits of our labors for several years, but we are making progress.

WHAT HAS BEEN YOUR MOST MEMORABLE CASE AND WHY?

My most memorable case happened during my training. A man with schizophrenia ended up with a 6-inch metal blade spatula sticking out of his mouth. The end of the 8-inch handle was by his scapula. He perforated blood vessels in the posterior pharynx and aspirated a lot of blood. I still have no idea how that spatula got shoved that far down. The x-ray was quite remarkable!

WHAT HAS BEEN THE MOST UNEXPECTED FINDING YOU HAVE ENCOUNTERED DURING A CASE?

The most recent unexpected finding that comes to mind would have to be a plastic dipping sauce container in the upper larynx. The container completely obstructed the airway. And yes, they were intoxicated at the time. We see unexpected stuff all the time, though, which is why I love this job so much!

WHAT DO YOU ENJOY MOST ABOUT WORKING WITH YOUR TEAM?

I am very fortunate to have a wonderful group of people to work with. We have a very small office (both in number of people and space in the current building), so it has a kind of a “family” atmosphere. We are very competitive with the county contests for pumpkin carving, Halloween costumes, Christmas tree and stocking decorating and work together as a group to come up with ideas and execute them for each contest. We try to promote a light atmosphere and support each other through the emotionally and physically difficult cases. Laughter is important. We play pranks on each other from time to time (my office was recently 'infested' with fake cockroaches....). Having a good work environment is important for this job.

WHO IS YOUR ROLE MODEL AND WHY?

I have different role models for different aspects of my life. My husband is the biggest role model in my personal life. He is one of the most selfless, giving and understanding people I've

ever known. My successes and achievements were made possible with him by my side. He's my sounding board and gives me great advice. Something he said to me many, many years ago that I think about regularly is: Don't compare your insides to other people's outsides. I think this is especially important advice in today's society.

My pathology role model is Dr. John Neff, the pathology director at my residency program. He was full of life, always excited about pathology, loved forensics and was a true Renaissance man. He was so encouraging and approached everything with a child-like wonder. Somehow, he even made me like renal pathology and blood bank! He never said anything negative about forensic pathology and valued our role as pathologists. I have so many forensic pathology role models - I really couldn't pick one. I am grateful for the trailblazers in our field... I know it was an uphill battle in the beginning, and in some ways, it still is, but I wouldn't be doing this job if it weren't for those who came before me. I am equally grateful for those coming along after me, for you will carry forensic pathology into the future. I look forward to seeing this transition as I lounge on a deck overlooking something scenic with my husband and dog next to me. :)

WHAT ARE YOUR HOBBIES AND HOW DO YOU MAINTAIN A WORK-LIFE BALANCE?

I love being outside - especially walking my dog or inline skating. We have really awesome walk/bike trails around my neighborhood and a long skate helps clear my head. For the past 10+ years I was a soccer mom, and for the past 3 years I've been a band mom, so my kid's activities also keep me busy. I'm an avid reader (fiction mostly) and I love getting book ideas from people. My most recent reads were: The Rose Code (by Kate Quinn), Golden Girl (by Elin Hilderbrand) and Chain of Iron (by Cassandra Clare, part of the Shadowhunter series). If I'm being honest, my work-life balance isn't as balanced as I'd like it, weighing more heavily on the work side right now. The past few years have been pretty brutal for most of us. I think it's important to find something that gives you peace and comfort each day - even if it's just a short walk or a cuddle with the dog. I recently started gardening, but last year I only had success with cherry tomatoes and jalapenos. Hoping to do better this year!

WHAT IS YOUR FAVORITE WORK SOUNDTRACK AND WHY?

I have an 80's alternative, indie/folk music soul, but I really love almost all music. We listen to a variety of things in our morgue. Streaming music is so much better than having to bring in a stack of CD's each day! We can pick a genre and hear different artists/songs all day long and it exposes me to new music which is wonderful.

WHAT IS YOUR MOST-LIKED MEAL AT YOUR FAVORITE LOCAL RESTAURANT?

Tex/Mex is a staple for our family. We have amazing restaurants in the Houston area, so we try lots of new things when we eat out. I also love to cook, so we eat at home a lot.

Jan M. Gorniak, DO, MHSA



5/4/2022

Current position:
Forensic Pathologist/Medical Examiner

Education history:
Undergraduate Education: Edinboro University of Pennsylvania
Medical School: Lake Erie College of Osteopathic Medicine
Residency Program: University Hospitals of Cleveland
Fellowship: Cuyahoga County Coroner's Office
Other: Master's in Health Service Administration, 2018 Master's in Medical Education, Current (Graduation 2023)

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

Unknowingly, my first introduction to forensic pathology was as a tween in the 80s watching "Autopsy" on HBO with Dr. Michael Baden. The only case I remember was a young lady found decomposed in a bathtub. The only thing left was her long brown hair. Maggots were scooped out of the tub and sent for toxicology. It was determined she died by an overdose of barbiturates, and it was a suicide. I thought that was the coolest thing ever!! I am embarrassed to admit that I did not know forensic pathology was a specialty until I was in medical school. A classmate lent me DiMaio's Forensic Pathology textbook and I read it cover to cover. I thought it was interesting, but I was interested in emergency medicine #traumajunkie. Halfway through medical school, my personality changed. I do not function well in "chaos". The thought of being in a fast-paced emergency scared me. I thought I was too old to complete a 5-year pathology residency and then a forensic pathology fellowship, so I decided to go into family medicine. The month before I graduated, I had a conversation with a resident about why I was going into family medicine, and he said to me "after all the money you spent, the time you invested, and the sacrifices you made, you don't want to wake up in 10 years and hate going to work." He was

right. It was then that I made the decision to go into forensics. I am grateful every day for that conversation.

WHAT HAS BEEN YOUR MOST MEMORABLE CASE AND WHY?

My most memorable case was when I was the elected Coroner in Columbus, OH. It was the case of Ariel Castro. He was the man who held 3 girls captive in his basement for 10 years. He died by suicidal hanging in prison. There was nothing exceptional about the autopsy, but the media frenzy that followed was overwhelming. I fielded hundreds of calls from newspapers, television stations, and radio stations around the world. I even did an interview on a Spanish radio station. Before finalizing the case, I met with his son for 2 hours going over everything and explaining how I determined the cause and manner of death.

Months later, the prison put out a report stating that Castro's death was not a suicide, but autoerotic asphyxiation. The media floodgates flew open. I was so glad I had had that conversation with his son. I called him and asked if he had any concerns about his father's death. His reply was "No Dr. Gorniak. I know the truth."

WHAT HAS BEEN THE MOST UNEXPECTED FINDING YOU HAVE ENCOUNTERED DURING A CASE?

During fellowship, I had a case of a young man that was hit by a Rapid Transit Authority train. Many people were on the platform when it happened. The problem was that many different accounts were given: he jumped; he was pushed; his pant leg got caught in the door; he was walking between the cars and fell; he dropped something on the tracks, jumped down to get it and yelled "don't move the train!" His cause of death was obvious, blunt force injuries, but what was the manner? At autopsy, we found a 5 centimeter pituitary adenoma. His mother confirmed that his eyesight was "terrible," and that he should have been using a cane. After the scene reconstruction, it was determined that the man mistook the opening between the cars for the door. His death was ruled an Accident.

WHAT ARE YOUR HOBBIES AND HOW DO YOU MAINTAIN A WORK-LIFE BALANCE?

Work-life balance has to be intentional. After carrying 2 phones for 10 years and getting frustrated while on vacation because I couldn't access VPN, I knew I had to change. I do not bring any work home. I do not check any emails after I leave work.

I have both a Peloton bike and treadmill, so I enjoy working out. My favorite hobbies are doing jigsaw puzzles (1000 pieces) and diamond dotz art. But usually, you can catch me watching reality tv shows (90 Day Fiance, Love After Lockup, Top Chef, Married at First Sight, etc.).

WHAT IS YOUR FAVORITE WORK SOUNDTRACK AND WHY?

My favorite Pandora station at my desk is Vitamin String Quartet. For those that are not familiar, it is classical string covers of popular songs of varying genres. If you have seen Netflix's "Bridgerton," you have heard it. It is great background music and pairs well with my essential oil diffuser. In the autopsy room, anything goes... from hip hop to country to pop.

WHAT IS YOUR MOST-LIKED MEAL AT YOUR FAVORITE LOCAL RESTAURANT?

Double cheeseburgers from White Castle!

Elizabeth A. Bundock, MD PhD



6/21/2022

Current Position:
Chief Medical Examiner, Vermont

Education History:
Undergraduate Education: Purchase College, State University of New York
Medical School: Chicago Medical School/Rosalind Franklin University
Residency Program: Brigham and Women's Hospital
Fellowship: New York City Office of Chief Medical Examiner
Other: Neuropathology Fellowship, Brigham and Women's Hospital and Boston Children's Hospital

HOW DID YOU INITIALLY BECOME INTERESTED IN FORENSIC PATHOLOGY?

After completing my PhD in Neuroscience and medical school, pathology was the clear choice for me. My pathology residency rotation in forensic pathology was entertaining, but I didn't really give the career choice a second thought. I continued through residency to neuropathology fellowship - my singular mission at the time. Neuropathology fellowship requires forensic NP experience. So my NP mentor, Dr. Umberto DeGirolami, sent me to NYC OCME to spend two weeks shadowing his colleague Dr. Vernon Armbrustmacher. That was the first fateful step. I returned home to finish my NP fellowship knowing I wanted to include forensic consulting in my career as a surgical neuropathologist. The next fateful step, several months later, was a phone call from Dr. Mark Flomenbaum, First Deputy Chief Medical Examiner of the NYC OCME at the time, asking if I would like to return for a fellowship position. It honestly hadn't occurred to me before that moment. After thinking it over for a couple of weeks, I accepted. The rest is history. I was hooked. I now practice forensic pathology full time and continue neuropathology consulting privately.

WHAT ADVICE DO YOU HAVE FOR ASPIRING FORENSIC PATHOLOGISTS, INCLUDING RECOMMENDATIONS TO MATCH INTO A PATHOLOGY RESIDENCY PROGRAM AND ACCEPTANCE INTO A FORENSIC PATHOLOGY FELLOWSHIP?

Be honest with yourself about what you love to do and what your strengths and weaknesses are. If you are self-motivated, thrive when immersed in an analytical or technical challenge, are confident and resilient, have good communication skills and are empathetic, you will fit here. If you are also excited and just can't get enough of forensic pathology, then you will do well and survive. You need to be all in.

WHAT IS THE MOST REWARDING ASPECT OF BEING A FORENSIC PATHOLOGIST?

Knowing there are people depending on or benefiting from the answers is a definite perk.

WHAT IS THE GREATEST CHALLENGE OF BEING A FORENSIC PATHOLOGIST?

Consistency in attentiveness, perseverance, and decision making. Some days are too busy and others easy. Some cases are fascinating and others routine. Some years you have extra energy and others you have none. The challenge is to approach every case with the same attention, determination, and consideration irrespective of those variations.

WHAT HAS BEEN YOUR MOST MEMORABLE CASE AND WHY?

My first dismemberment homicide. That's when I realized this stuff doesn't just happen in the movies.

WHO IS YOUR ROLE MODEL AND WHY?

I am continually inspired by Dr. Rebecca Folkerth, my neuropathology fellowship mentor who switched gears by moving to the NYC OCME after an already notable career in surgical neuropathology and research. With excitement and smiles, she brings her amazing diagnostic skills and humility to every case, equally ready to tell it like it is or learn something new. If I can be half the teacher, scholar, investigator, and diagnostician she is, I will call it a good career!

WHAT ARE YOUR HOBBIES AND HOW DO YOU MAINTAIN A WORK-LIFE BALANCE?

Horseback riding is my primary hobby. When I arrive at the barn, everything else just fades away. It's my respite even though it's actually quite a bit of work. I also enjoy making art, being in the peace of a deep forest (often with my horse), and sailing. I certainly work too much, so having all-absorbing hobbies that force me to turn off the work brain or completely introspective, peaceful hobbies are essential.

WHAT IS YOUR FAVORITE WORK SOUNDTRACK AND WHY?

I like wordless, slightly upbeat but relaxing background music while doing histology and paperwork. After reading Dr. Gorniak's faculty profile, streaming the Vitamin String Quartet "radio" playlist is just right. Thank you Jan.

George Gantner Lectures

George E. Gantner, Jr., M.D. Annual Lecturer Award



THE NATIONAL ASSOCIATION OF MEDICAL EXAMINERS®

This lectureship acknowledges and pays tribute to the contributions made by George E. Gantner, Jr., M.D. to the National Association of Medical Examiners. In 1977, when 11-year old NAME needed to relocate from its second home in Wilmington, Delaware, Dr. George E. Gantner, Jr. was Director of the Division of Forensic and Environmental Pathology at St. Louis University School of Medicine and had just been elected as Secretary/Treasurer of the organization. Dr. Gantner generously offered to oversee NAME activities in St. Louis, Missouri and NAME moved there in 1977 and remained there until 2003.

Dr. Gantner served as NAME's Secretary/Treasurer until his death November 15, 1988, having served as the daily overseer of NAME for more than a decade. He availed himself to NAME and its needs and contributed greatly to this organization. It is in his memory and honor that the George E. Gantner, Jr., M.D. Annual Lecturer Award was established in 1994. Those selected by the Awards Committee to give the lecture and receive the award have made outstanding contributions to the advancement of forensic science and have attained professional recognition and respect as an orator in a professional field.

George Gantner, Jr., MD Lecturers

1984	George Lundberg, M.D.	"Brain Injury and Boxing"
1985	William McCormick, M.D.	"Sickle-cell Trait – A Cause of Death?"
1988	Lester Adelson, M.D.	"Forensic Pathology Then and Now: Retrospective and Reflections"
1989	Sidney Kaye	"Blooming of Modern Forensic Medicine"
1990	George Lundberg, M.D.	"Medical Journalism and Forensic Pathology"
1992	John Coe, M.D.	"The Beginnings of Forensic Pathology in the North Midwest"
1993	Leslie Lukash, M.D.	"The Future Direction of NAME"
1996	Vincent DiMaio, M.D.	"The Death of Innocents"
1999	Jack Titus, M.D.	"Registry of Cardiovascular Diseases"
2000	Thomas Generalli	"Mechanisms of Cerebral Injury"
2001	Lawrence Harris, M.D.	"Are We Doing Any Good"
2003	Boyd Stephens, M.D.	"Medical Examiner in the 21st Century"
2004	John Butt, M.D.	"My Career as a Medical Examiner"
2007	Sandra Conradi, M.D.	"My Life in forensic pathology"
2008	Garry Peterson, M.D., J.D.	"Everything I Ever Needed to Know I Learned After My Forensic Fellowship"
2010	John E. Pless, M.D.	"One Man's Forensic Pathology Career"
2011	Mary Fran Ernst	"NAME Meeting History"
2013	Steven Clark, PhD	"Timing"
2017	Ross E. Zumwalt, MD	"Forensic Pathology: Current Trends and Future Predictions"

Gantner Lecture 2010 – John E. Pless, MD



8/26/1938-3/17/2014

NAME President 1997-1998
Clyde G. Culbertson Professor Emeritus
Indiana University School Medicine

One Man's Forensic Pathology Career

Cleveland, OH, October 2010

"…teaching them to smile openly…
…into the camera of possibility…"

Thank you for the honor of this opportunity to tell you about the uniqueness of my travels in the field of forensic pathology. I now feel much like George Goble who said…"I feel like the world is a tuxedo and I am a pair of brown shoes."

The paraphrase "teaching them to smile openly…into the camera of possibility" is a quote from a poem by Jim Luke, my friend and mentor. I believe that it has a special application to my career.

I would like to dedicate this lecture to my parent's 60 years of life together and my wife, Lois, lover, mother, companion, global supporter and sometime critic.

When I was 15 years old we had a family conference around the kitchen table where my parents told me that they wanted me to be a doctor. I was an only child – so I did what I was told. I actually thought that every family had such meetings during the second year of high school. My mother had trained as an LPN and had taken a job with a local GP who like to think that he was a cardiologist. She took the EKGs in his office and at the hospital. Her work provided the extra funds for my education.

The main campus of Indiana University was just 23 miles down the road and I was lucky enough to get into Indiana University School of Medicine after three years of undergraduate school. My goal was to return to my hometown of Bedford, Indiana to be a general practitioner. My exposure to toxicology, pathology and the autopsy was unusual. Indiana University Pharmacologist, Dr. Rolla Harger had invented the Drunkometer. Indiana State Police Laboratory Director, Dr. Bob Borkenstine invented the Breathalyzer and Dr. Robert Forney along with Irvine Sunshine and Kurt Dubowski did a great deal of work establishing blood alcohol testing of intoxicated drivers. We were the first state in the nation to set alcohol breath testing in place for drivers of automobiles. I knew all of these people as a medical student and later we became personal friends.

During our sophomore year Bob Forney gave us lectures on homicidal poisoning. I wondered then what someone could do investigating such death if he was an MD. Little did I know the rarity of homicidal poisoning. I wasn't aware of the field of a forensic pathology. My first autopsy as a student was on a 14 year-old girl with hepatitis. My studies on that case led me to an article written by Alan Moritz who had been in charge of a hospital in Northern Africa. He wrote about his experiences with an epidemic of serum hepatitis apparently induced in service men from contaminated needles used to inoculate them for Yellow Fever. His work was seminal in defining hepatitis B. I had no idea that he was one of the greats in forensic pathology. My case was probably sexually transmitted.

I was lucky enough to perform autopsies on my off quarters at the VA Hospital. Pathology was important at Indiana University. Our Chairman, Dr. Edward B. Smith was secretary of the American Board of Pathology. The board examinations were often held in Indianapolis. Dr. Parker Beamer was the editor of the American Journal of Clinical Pathology with offices in the medical school building.

My rotating internship was in a large private hospital in South Bend where I discovered the very unique nature of a freestanding non-profit clinical pathology laboratory that served several communities around Northern Indiana and Southern Michigan. The South Bend Medical Foundation served 2,000 beds. Stat labs were located in all the hospitals and the main laboratory supplied all the standard tests that could wait overnight. A pneumatic tube system supplied results to the two 500 bed hospitals in South Bend. One of these tube systems had to go under the St. Joseph's River – no mean task. This sparked my interest in clinical laboratory medicine enough for me to sign up for a residency there before I was drafted into the U.S. Army.

Again as luck would have it I was assigned to a research position at the Edgewood Arsenal (Army Chemical Center) near Baltimore, Maryland. I can admit to you now that I was asked to perform clinical pharmacology testing on human volunteers. Many of my military colleagues were giving anticholinesterase drugs (chemical warfare agents such as GB and VX) and monitoring the effects of potential treatments. The US knew what the Russians had and our task was to establish some defense against those agents. My work was with synthetic marijuana (tetrahydrocannabinol THC) produced by Roger Adams in the 1950's. The government automatically confiscated potent chemical agents that were possible chemical warfare agents. We ran full batteries of clinical laboratory tests and did complete physicals and psychological examinations on each candidate. Who were the test candidates? U.S. Army soldiers. What did the soldiers get in return? A three-day pass every weekend. It was a different day.

During my stay in Maryland I discovered that forensic pathology was being practiced in Baltimore. There were physicians who dedicated their lives to medical legal work. It was very clear to me at that time that if I was going to do that work I needed to be trained by people who knew what they were doing in a place with some stature.

My residency was exciting and I found the performance of 250 autopsies to be great fun. I knew that all my experience had been leading me to a career in forensic pathology. We were able to perform coroner's autopsies, and that added to my experience. I testified before a grand jury in one homicide case – making every mistake in the book. I actually thought that I could remember all of the details – so I did not take the autopsy report with me. The first question was, "what was the weight of the deceased?"

Although I had a "good eye" I did not want to be a tissue mole. I wanted to go back to my hometown and be a local pathologist doing anatomic, clinical and forensic pathology for a t least 5 years – then eventually going into forensic pathology full time.

My search for a place to train in forensic path was complicated by lack of funding of fellowship training at the time. I initially applied to Miami. Joe Davis was interested in me because his toxicologist came from Edgewood Arsenal, but he had no funds. Chuck Petty was the only full time forensic pathologist in Indiana then, and he was about to leave for Dallas. He thought that it would not be wise to sign me up for a program when he could not guarantee what would be available. His advice to me was…"Don't go to a large office. It can be a factory."

Bill Sturner was in Chicago at the time and we met for lunch at the University of Chicago Hospital. He was considering going to Dallas with Petty. He recommended that look into Jim Luke who had just written an article in the Journal of Forensic Sciences entitled The Oklahoma Medical Examiner System: Semi urban – Semi rural. It described his practice of forensic pathology in a statewide system. The idea of a small program with a one to one association with a program director was very appealing.

Jim Luke enabled me to attend the AAFS meeting in Chicago in February of 1970. He introduced me to Dr. Milton Helpern and F. Lee Bailey. That was special meeting since Tom Noguchi presented the findings of the Robert Kennedy autopsy. F. Lee Bailey followed this with a discussion of the difficulty of the defense of Sirhan-Sirhan. His opening remarks were interesting. He said that this was the first time that he had experienced a case in which there was literally no question about the quality of the post mortem examination because Tom Noguchi had done such an excellent job. I had a feeling that everyone knew why he was capable of such perfection. He was an excellent pathologist and he had prepared for just such an event. That doesn't mean that he was a psychic. It was a demonstration of his extraordinary vision.

Jim Luke and I met before and after almost every case. Occasionally we would return to the morgue to review an interesting case finding first hand. He also gave me good examples of his writing. Jim wrote many letters in behalf of the specialty and he asked me to review them. It was great training.

I had this desire following my fellowship to return to Indiana, my hometown and a small group of pathologists based in Bloomington. I still had the urge to run a hospital laboratory. This was what I had trained to do and I knew that my career would not be complete without that experience. I was going to do forensic pathology part-time.

I also had this idea in the back of my head that we could change the coroner system in Indiana and replace it with a medical examiner system. The first thing that I was asked to do when I returned home was to run for coroner. I was elected in a landslide after running against the local chiropractor. It was lonely being the first and only forensic pathologist coroner in Indiana. The Indiana coroner law was unusual in that it had a very liberal definition of what could be a coroner's case. All someone had to do was to voice suspicion concerning the manner death. There was requirement that all coroners' autopsies had to be performed by a board certified pathologist. Ed Smith had accomplished that change in 1963. That was very helpful in insuring the quality of the examination. However, these were not always complete autopsies.
I remained in Bloomington for the next twelve years. During that time I built a reputation as a forensic pathologist. I made sure that my three other partners did complete autopsies on all coroner cases. Much to their dismay. Soon I was doing about 200 cases in the Southern half of the state.

In January of 1983 Jim Benz left Indianapolis for Florida. Residents were doing most coroner autopsies in Indianapolis. By May of that year the Chairman, left with the responsibility for the forensic service was at his wits end. He had organized seven young faculty members to supervise residents in the performance of forensic autopsies. The faculty member took responsibility for testimony in all homicide cases. It only took a couple of months before they all began to wear thin. In June I received a call from the Chairman of Pathology to go to lunch. He made me an offer to become a part-time or full –time faculty member at the main campus.

I was already a part-time faculty member in Bloomington. He said that I could literally name my own terms. So I left my group in Bloomington for full time position as tenured Professor in Indianapolis. This turned out to be the opportunity of a lifetime. But it was a great challenge for Lois and the children. Did I say that I would be making less money?

In six months from my hiring the Chairman asked if I would be willing to direct the two courses in sophomore pathology. I was more than willing to help. The first thing that I did was to restore the requirement that all medical students have to observe an autopsy. This turned out to be a popular addition. I also returned several exercises in the laboratory that had been removed over time adding one session on forensic pathology. The pathology scores began to climb. Pathology brought up the School of Medicine average to above the national average. At the end of the first year I was asked if I could take on the responsibility for the residency program. This was something that I wanted to do but I knew that I would be frustrated by the disinterest of a few faculty members I actually taking time to teach. I was rewarded by being given the title of Associate Chairman for Education.

In 1988, the pathologist who developed the clinical laboratories at Indiana University in 1931, Dr. Clyde G. Culbertson, decided to give the department a gift of One Million Dollars for an endowed professorship. He was so pleased with the changes that I had made that he request that the endowment go to pathology education and that I be named the recipient of the title. This came as a complete surprise tome after only being in the Department for less than 5 years creating some jealousy. The greatest compliment that we could have at Indiana University is the fact that more board certified pathologists were produced from the Indiana University School of Medicine than any other school in the United States during the 20 years from 1980-2000.

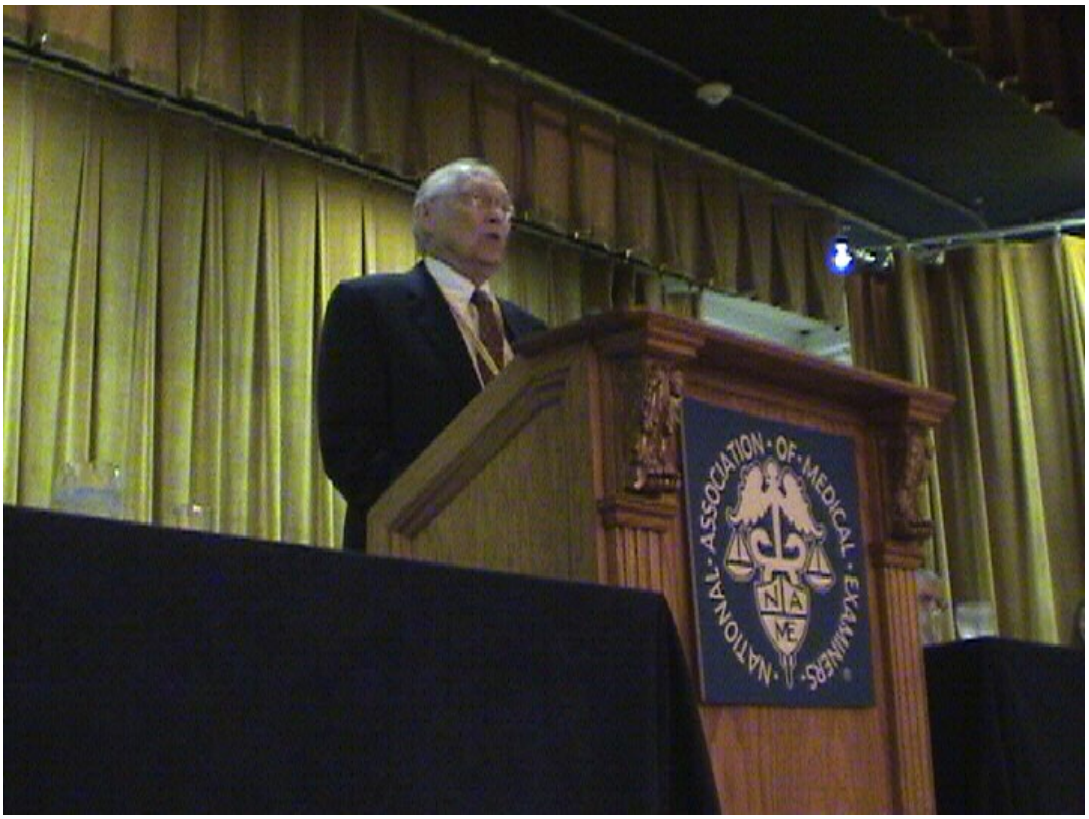
There are several things that I believe represent challenges for you all. In 1971, Dr. Leslie Lukash gave a presentation on Standards of Death Investigation. From his presentation NAME developed an inspection program in 1976. During the administration of Charlie Stahl a CAP like checklist was developed by Victor Weedn for inspection and accreditation. My office was the first to submit to that survey and the first to be accredited under the new system. When I was president of NAME it was my personal charge to increase the number of offices that were inspected by NAME following my term we went from 33 to over 50 labs inspected largely due to our work on the State of Florida. The Miami Larry Tate announced from the podium of a NAME meeting in 1979 that it was no longer adequate to do “body only” forensic autopsies. Since that time we have seen gradual inclusion of autopsy procedures in the inspection and accreditation process. In my opinion there is no place for inclusion of the term “partial autopsies” in our inspection process. Partial examinations are not autopsies. Something will always be missing in a partial examination. You can’t use inadequate funding to support doing incomplete autopsies because we all know that we can spend as much time and effort doing a partial exam as a full autopsy. The autopsy is clearly an academic exercise. You must keep that in mind every time you go through the process. We have been charged with a duty that is as sacred as the profession of medicine itself.

The act of cutting another person open to expose the insides to the outside world is as old as recorded time. It must be done for more than curiosity. We must understand that analysis of the findings is more than coming to a conclusion about the cause of death. We are also charged with determining the mechanism of death and there rests the reason for an academic exercise. Anyone can speculate about a cause of death without doing an autopsy. But if your opinion is to be couched in terms of reasonable medical certainty you must open the body and your opinion must be based upon findings not circumstances.

I remember talks by Joe Davis on the importance of including information from the circumstances of death when determining the cause. This is all well and good when the autopsy is negative. But an opinion based upon circumstances is still speculation and you can't take that to a court of law. As Jim Luke taught me if you don't know the answer admit your ignorance. I was told as a resident that I shouldn't leave the morgue unless I knew what the cause of death was since it is so often evident in the gross exam. I will challenge you with fact that you should not leave the morgue without at least a clue as to the mechanism of death. Confirmation may depend upon microscopic examination.

Confirmation of the details of an autopsy is best done with microscopic examination. It is time that we require microscopic examinations in every case. A negative microscopic examination can be as important as positive findings. You should not be in the death investigation business if your primary consideration is saving your state, county or city money. Your government will never appreciate cost cutting that you might do. If you are going to cut costs don't do it by cutting out the science. Remember that the autopsy is an academic exercise where you have an obligation to do it right the first time.

"Teaching them to smile openly… into the camera of possibility."


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Gantner Lecture 2017 - Ross E. Zumwalt, MD



Forensic Pathology: Current Trends and Future Predictions

Scottsdale, AZ, October 2017

Fellow NAME members and guests. It is an honor to be selected to give the George Gantner Memorial Lecture. Thinking about a suitable subject matter for this presentation caused me to recollect on my forensic career of more than 40 years since I started my forensic pathology training as a forensic pathology fellow in Dallas. Those recollections led me to remember that I first met Dr. Gantner at the NAME interim meeting in conjunction with the AAFS annual meeting in February 1976 in Washington DC. Dr. Gantner gave the Annual Slide Seminar on the obscure topic of microscopic examination of stomach contents to identify specific food materials. For a new forensic pathologist, it was a fascinating subject and after talking to Dr. Gantner following his presentation, I purchased the manual that was the basis for his presentation. The manual was entitled The Identification of Food Materials in the Human Stomach, and I actually used it to identify food particles which helped determine an estimated time of death in one of my early cases where an 8-year-old boy was stabbed and left in an open field. Unfortunately, that manual has disappeared from my library possibly into the library collection of one of my former residents or fellows. That manual is now out of print, but I would recommend it to you as a valuable contribution to the forensic literature if you can find a copy.

Now that recollection caused me to reminisce over the many diverse cases that I have encountered over the years, the many colleagues in forensic pathology that have influenced me in my career and of course the many changes (mostly good) that have altered the practice of our profession. With all of that recollection and being at a stage in my career that hopefully allows me some latitude to speculate, to perhaps pontificate, and maybe verbalize some things

I would hope for, I would like to talk about some current trends in forensic pathology and some ideas for the future development of our discipline.

In 1988, one of my first mentors, the legendary Dr. Lester Adelson gave this lecture at the annual NAME meeting in Boston. I remember the Boston meeting well because I gave a platform presentation on DNA fingerprinting, then the exciting new technology of using DNA in forensic cases. Now, less than 30 years later most of us routinely save a sample from our autopsies for possible DNA testing. At that invited lecture in Boston, Dr. Adelson boldly stated that forensic pathology had emerged from its previous role as an invisible profession and had become a respected and productive branch of laboratory medicine. He reminded us that more than a decade previously he had written an article in JAMA entitled "The Forensic Pathologist: Family Physician to the Bereaved" where he introduced the concept that the forensic pathologist is the last true generalist in medicine. I would like to expand on some of the changes in forensic pathology since 1988 that strengthens our claim as the last true generalist in medicine.

I would propose that we take very seriously and actively promote the concept that the forensic pathologist is the true generalist in medicine. The forensic pathologist deals with all comers with every known disease or injury. Although the forensic pathologist may consult other specialists and other scientists, he does not turn the cases over to them for a final diagnosis. This he invariably does himself through use of his broad medical knowledge and incorporation of all other information accumulated from his investigations and his consultants. There is no type of death that we do not and cannot deal with.

Now, there was a time when forensic pathologists shied away from deaths that occurred in hospitals under medical care, but that era is fast closing. We have all seen this trend. Fewer and fewer autopsies are being conducted in hospitals by fewer and fewer non-forensic autopsy pathologists who still have the interest and the expertise to do autopsies.

Resident training in autopsy pathology is continuing to decrease in numbers and in dedicated time devoted to that training. Just this year the American Board of Pathology again decreased the requirements for training in autopsy pathology for qualification to sit for the board exam by permitting unlimited shared autopsies and allowing autopsies on single organs to count among the meager total of 50 required examinations. This is despite the persistent and ongoing evidence of the value of the autopsy in correctly identifying the mechanisms and the causes of death.

The forensic pathologist is being asked to take responsibility for even the most intensely surgically and chemically treated patients. It is not the forensic pathologist who consults the hospital autopsy pathologist; it is often the hospital pathologist who when required to do an autopsy, calls the forensic pathologist when he is stumped by a finding on his autopsy table, when he is not sure of a microscopic finding on postmortem tissue, when he does not know

how to correctly word a cause of death on a death certificate or when he does not know whether the manner of death might be best certified as something other than natural.

What is important here for our profession is that we should encourage and support this trend. By taking ownership of all autopsies, we champion our status of the masters of interpretation of pathophysiologic correlation of clinical presentations with disease and injury. We move further away from being perceived as outsiders to mainstream medicine who confine ourselves to mechanical injury and violent death. The title of forensic pathologist has too long been associated with a quasi-medical specialty. We should present ourselves as physicians who best understand the practice of medicine as it relates to death.

As the last true generalists, we forensic pathologists truly monitor the medical practice of other specialists. To take this one step further, forensic pathology should really be recognized not as a subspecialty of anatomic pathology but as a division of pathology at least on the same level as the anatomic pathology and clinical pathology.

Perhaps the title "Forensic pathologist" is too confining and no longer serves our profession since we more and more do more than just medicolegal type cases. Could we be better served as being referred to as the postmortem physician or perhaps there is some other better title. I throw that naming challenge out to all of you.

Should not the American Board of Pathology recognize and support training requirements for certification in this new titled discipline that recognizes the need for expertise in all postmortem examinations and competent determination of cause and manner of death, a skill that is increasingly not addressed adequately in many pathology training programs in anatomic and clinical pathology.

Training in this new discipline would require a component of AP/CP training or AP only training followed by probably 2 years of postmortem medicine training that would include forensic and hospital autopsy pathology, training in interpretation of the new postmortem imaging techniques, training in ancillary postmortem testing evaluation (toxicology, bacteriology, genetics etc), and training in proper death certification for all deaths. The 2 years of training would probably be necessary since there is increasingly little or no autopsy exposure in medical schools and inadequate autopsy numbers and training in many anatomic pathology training programs. This would also be necessary because of the complexity of deaths in the modern age of increased medical and surgical intervention and for factoring in environmental, genetic and social components of the deaths.

The difference between the old forensic pathology emphasis on mechanical injury and violent death and the current practical day to day workload for the forensic pathologist is in my opinion most evident in the epidemic of illicit and prescription drug associated deaths. The homicides are still there but they have always been a minority of the cases reported to the medical examiner or coroner and approximately 10% of autopsies in many Medical Examiner's

offices depending on the jurisdiction. Also, we have seen a gradual decrease in the number of traffic victim deaths. Additionally, postmortem imaging capabilities will continue to improve in Medical Examiner and Coroner offices and provide non-invasive means to decrease the numbers of autopsies in deaths from mechanical trauma.

But we all know that drug associated deaths have soared. Determining cause and manner of death in drug associated deaths is not always easy. Your reference lab will give you a report but the numbers on the report are just numbers. Those numbers must be considered in the context of circumstances of death including environmental conditions, the postmortem interval (postmortem redistribution), lifestyle of the decedent (tolerance), medical history, age, pharmacokinetics (the different effects of drugs on individuals) and pharmacodynamics (the individual genetic differences and how they affect the individual's response to that drug). Also to be considered are laboratory capabilities, the possibility of undetected or undetectable substances (designer drugs), the potential for laboratory error, and finally, of course, the autopsy findings.

These variables surrounding drug associated deaths compound the complexity of the day to day practice of forensic pathology. We all know that working up a complicated case with significant natural disease and multiple prescription drugs of varying concentration can take a lot longer to resolve than a simple gunshot wound case. This increasing complexity of our cases further strains our national shortage of trained forensic pathologists.

To further compound our changing practice, I only have to look in the mirror and see that I'm getting a little older. With the aging of our population and an increasing national concern over quality and availability of medical care for our elderly, there is an ever-increasing clamor to monitor the quality of health care given to the elderly at home, in hospitals, in rehabilitation units, in extended care facilities and in nursing homes. Assessing the quality of that care in individual cases will necessarily be directed to the competent forensic pathologist or should I say the postmortem physician.

A long-term result of the public interest in deaths in the elderly will probably include expanding death certification responsibility to forensic pathologists with the not far-fetched possibility that all death certification will be required to be performed by forensic pathologists. We are all aware of the high percentage of poorly completed and confusing death certificates issued by non-forensic pathologists. Again, as an organization, we should support the trend to be responsible for certification of more deaths although initially it may seem foolish to want more responsibility and more work for our understaffed field. However, in the long run, that expansion of our mandate will necessarily have to be accompanied by increased resources and emphasis on expanding our numbers. As an organization we have a lot of work ahead of us to convince the public, our governing boards, our elected representatives, our medical schools and residency programs of the emerging roles for our discipline and the need for more resources and manpower.

In summary the practice of forensic pathology continues to evolve. Even in the near future forensic pathology will not look the same as it does now. The forensic pathologist, whatever his title, may spend less time in the autopsy suite doing autopsies and spend more time reviewing the data from each death (both anatomic and non-anatomic data) in order to determine the immediate, intervening and underlying causes of death and the relative components of injury, disease, environmental factors, heredity, and lifestyle factors. This will lead to a more comprehensive understanding of each death for the improvement of public health.

I look forward to being part of these changes and challenges at least for a few more years. I am encouraged with the quality and the motivation of the new generation of forensic pathologists that I have had the privilege to work with and with those who I have been able to meet here at this meeting.



Milton Helpern Lectures

Milton Helpern Laureate Award

THE NATIONAL ASSOCIATION OF MEDICAL EXAMINERS®

The National Association of Medical Examiners began, as many great organizations do, from the dreams, ideas and wisdom of a few farsighted, socially conscious individuals. Back in 1965, Milton Helpern recognized the need for the nation's Medical Examiners to share their knowledge, expertise and experience in order to improve the medicolegal investigation of death in this country.

He discussed this concept with Richard Childs, the Executive Director of the National Municipal League, and a group of his close colleagues, Ali Hameli, Chief Medical Examiner, State of Delaware, Leslie Lukash, Chief Medical Examiner, Nassau County, New York, and Joseph Spelman, Chief Medical Examiner, City of Philadelphia. In the spring of 1966, these individuals formed a planning committee in order to bring Doctor Helpern's concept to reality. This group became the foundation and heard of what was later to become the National Association of Medical Examiners.

Through the dedication and efforts of these five men, N.A.M.E. was incorporated in August, 1966. Subsequently they invited Chief Medical Examiners throughout the country to meet in Doctor Helpern's Office. As a result of that meeting, an interim steering board was formed which later paved the way for the first annual membership meeting held at the Knickerbocker Hotel in Chicago in February, 1968.

Milton Helpern Laureates

1991	Joseph Davis, M.D.	25th Anniversary Meeting
1994	John Coe, M.D.	"Public Relations for the Medical Examiner's Office"
1996	Leslie Lukash, M.D.	"Importance of inspection and accreditation"
1998	Charles J. Stahl, M.D.	"Importance of inspection and accreditation"
2002	James Luke, M.D.	"Perspectives gained as a Medical Examiner"
2005	Thomas Noguchi, M.D.	"History of NAME"
2006	Vincent DiMaio, M.D.	
2009	Marcella Fierro, M.D.	"The Future of Forensic Medicine"
2012	Edmund Donoghue, MD	"Leadership in Forensic Pathology"
2014	Randy Hanzlick, MD	"Risks and Persistence"
2015	Donald Reay, MD	"50 Years of NAME"
2018	Jeffrey Jentzen, MD	"Profiles in Courage"

Helpern Lecture 1989 – Lester Adelson, M.D.



Forensic Pathology Then and Now – Retrospect and Reflections

Sanibel Island, FL, 1989

American Journal of Forensic Medicine and Pathology 10(3): 251-260, 1989

The American Journal of Forensic Medicine and Pathology 10(3): 251–260, 1989.

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Forensic Pathology Then and Now

Retrospect and Reflections*

Lester Adelson, M.D.

The past half-century has witnessed significant progress and multiple, meaningful changes in the day-to-day practice of forensic pathology as it has in all other branches of laboratory and clinical medicine. Associated with the welcome advancing "scientific" aspects of our work have been gratifying changes in the professional status of our much misunderstood area of medical activity, the latter most vividly and convincingly represented by American Board of Pathology certification in Forensic Pathology and the appearance of such growing, vital, national professional organizations as the American Academy of Forensic Sciences and our National Association of Medical Examiners and the creation of such highly respected periodicals as the *Journal of Forensic Sciences* and our *American Journal of Forensic Medicine and Pathology*. Objective assessment of the foregoing accomplishments leads to the inescapable conclusion that forensic pathology has emerged from its previous role as the "invisible profession" and become a respected and productive branch of laboratory medicine.

Key Words: History, forensic pathology—History, forensic toxicology.

From the Pathology Departments of the Cuyahoga County Coroner's Office and Case Western Reserve University School of Medicine, Cleveland, Ohio. Pathologist and Chief Deputy Coroner (Retired), and Professor Emeritus of Forensic Pathology.

Address correspondence and reprint requests to Lester Adelson, M.D., 23005 Beachwood Boulevard, Beachwood, OH 44122, U.S.A.

*The Milton Helpern Lecture, presented at the annual meeting of the National Association of Medical Examiners, in Boston, Massachusetts on November 7, 1988.

I gave considerable thought to the matter of a subject suitable for my presentation. After considerable soul-searching and insomniac cogitation, I concluded that a review of *some*—an important word—of the changes that had occurred in our much misunderstood area of medical practice during the past half-century, my professional lifetime, would be illuminating and thought-provoking. (I willingly acknowledge that 1938 will seem to many of our younger colleagues not medieval or ancient, but prehistoric.)

Such a review presents an opportunity to survey whence we came and *perhaps* tell us where we *may* be going. I emphasize the words "perhaps" and "may" because it has long been axiomatic in our profession that the least certain aspect of our capacity to deal with our professional responsibilities is prognosis. Accordingly, that frequently quoted adage, "What is past is prologue," is more realistically cited as "What is past *may be* prologue."

I chose the past half-century because several key events, critically important to forensic pathology, or legal medicine as it was then called, occurred in the late 1930s. As in all branches of medicine, so many significant changes have taken place in our area of practice during the past five decades that I cannot, in my allotted time, "hit all the high spots," as the cliché has it, nor can I provide a broadly encompassing "bird's eye view," to resort to yet another ancient saw. The best thing I can do is to provide a "satellite scan," something that did not exist in our early or "primitive" days.

KEY EVENTS IN THE EMERGENCE OF FORENSIC PATHOLOGY FROM ITS ROLE AS THE "INVISIBLE PROFESSION"

The first event that I cite was the creation in 1937–1938 of the Department of Legal Medicine at

Harvard Medical School (1–3). Thanks to the generosity of Mrs. Frances Glessner Lee, who endowed it, the George Burgess Magrath Chair of Legal Medicine was founded in an American medical school, the first modern, intramural, independent, full-scale *department*, not a "division" or "section," devoted to this area of laboratory medicine. The chair was first occupied by that pioneering physician, Dr. Alan Richards Moritz, to whom we here are all deeply indebted (1,3).

This institutional "first" bestowed on forensic pathology the mantle of academic respectability and scholarly acceptance, critically important characteristics sadly lacking up to that time (1). Once the department was organized and functioning, it provided two enriching, much needed, educational programs:

1. *Seminars in Homicide Investigation*, which brought law enforcement officers from all over the country to Harvard Medical School where they were instructed in the pathologic, toxicologic, and other "scientific" features of their heavy professional responsibilities, and
2. *Rockefeller Fellowships in Legal Medicine* to train pathology-oriented physicians how to perform effectively at the scenes of decedent discovery and death and in the autopsy room and the courtroom.

That the Department was phased out in 1967 (4,5) is a somber, thought-provoking matter. Happily, other training sites have come into being around our nation to take its place (vide infra).

The second event, which also occurred in 1937, was the appearance of the first edition of *Legal Medicine and Toxicology*, the then "bible" of American forensic pathology, co-authored by Drs. Thomas A. Gonzales, Morgan Vance, and the man we honor today, Milton Helpern, all functioning in the office of the Chief Medical Examiner of the City of New York.

Such were the two major factors in American forensic pathology's emergence from obscurity and misconception. In those "early" days, physicians who practiced what we today call "forensic pathology" could correctly be characterized as practicing the "invisible profession" (6). In my four student years (1935–1939) in a Boston medical school, never once was my class formally instructed or informally informed about the authority, duties, and responsibilities of a medical examiner or a coroner, this despite the fact that the Commonwealth of Massachusetts had in 1877 been the first state to replace lay coroners with physician medical examiners (7).

Thanks to the foregoing ground-breaking events, the 1988–1989 AMA Directory of Graduate Medical Education Programs lists some 67 traineeships in forensic pathology, located in 38 institutions across our country (8). And a goodly number of texts and monographs have appeared to cure the then-existing dearth of professional publications in this segment of laboratory medicine.

"Legal Medicine" and "Forensic Pathology"

To be noted in the foregoing two major events are the words "Legal Medicine" in the name of the Harvard Medical School Department and in the title of the volume from the New York City Medical Examiner's Office, for such was the designation of our specialty at that time. Consistent with this terminology, my colleagues and I at the Cuyahoga County Coroner's Office, who were members of the Pathology Department at Case Western Reserve University's (CWRU) School of Medicine, held faculty positions at various academic ranks in "legal medicine."

Certification in Forensic Pathology

A significant event in the welcome change to our current appellation occurred in 1959 when Certification in Forensic Pathology was instituted by the American Board of Pathology, thus providing the "official" accurate and informative designation for our specialty (4,9). Accordingly, my faculty title and that of my colleagues at CWRU's Medical School were changed to various rankings in "forensic pathology."

In addition to creating an enlightening and accurate designation for our field, certification by the American Board "legitimized" our branch of laboratory medicine. Thirty pathologists were certified in 1959 without examination on the basis of a so-called "grandfather clause" (4). As of December 1987, the original 30 "grandfathered" physicians have been joined by 639 additional laboratorians, certified following periods of approved training and written examination (M. Wilson, Secretary to the Executive Director of the American Board of Pathology, personal communication, February 2, 1988). More certifications have been awarded in forensic pathology than in any other "super" or "sub" specialty in pathologic anatomy, for example, neuropathology and dermatopathology (9) (M. Wilson, personal communication, February 2, 1988). This is not to gainsay the fact that there are still troublesome shortages of forensic pathologic expertise in several areas of our country, but we are certainly much better off from a personnel stand-

point today than we were in the so-called "good old days," more correctly termed "the bad old days."

The term "legal medicine" for our area of medical practice is now archaic in the United States. However, the adjective "medicolegal" is still valid to identify matters associated with or relating to medical examiners' and coroners' offices, and I will so use it today in referring to either governmental agency.

FORENSIC PATHOLOGY DEFINED

The term "forensic pathology" as I use it here is restricted to the morbid anatomic (and toxicologic) features of the sudden, unexpected, suspicious, and violent deaths that constitute our daily challenges and responsibilities.

We live in an age where there is said to be a "rage to litigate." Accordingly, there is scarcely a disease, a disorder, or a known or alleged traumatic agency that has not left its native habitat in the physician's office, hospital emergency room, hospital bed, operating room, and hospital autopsy room and made its appearance before some tribunal. When a physician, regardless of area of practice, testifies concerning some feature(s) of the matter before a trial court, arbitration board, or the like, he/she can be said to be practicing forensic medicine, best defined as the application of medical knowledge, medical "know-how," and medical "know-why" to aid in the administration of justice, the single most important function of a true democracy. Inasmuch as gross pathology and microscopic pathology undergird the signs and symptoms of disease and injury in the courtroom as they do in a clinicopathologic conference, what a pathologist attests before such a judicial body can correctly be termed "forensic pathology."

A discussion of *clinical* forensic pathology would take us far afield from the matter with which we are here concerned, namely, the role of autopsy table and microscope (and forensic toxicology), functioning in the public interest. Indeed, forensic pathology and forensic toxicology have been glowing termed "the twin pillars of forensic medicine" (10).

A "nit" I would like to "pick" at this point is the matter of calling the forensic pathologist a "medical detective" à la "Quincy," the first "universal man" since Leonardo da Vinci. As we all know, "Quincy" appeared and happily disappeared during the latter portion of our half-century of interest. Inasmuch as the word "detect" means "uncover," "reveal," or "expose," the laboratory physician who uncovers an unsuspected homicide in a fatally battered child or who brings to light a previously undiagnosed, lethal infectious disease that offers a threat to the community or who helps to remove suspicion of guilt from a blameless person is more correctly characterized as a "detecting medic" rather than as a "medical detective."

ORGANIZATIONS AND PUBLICATIONS

Over and above, the criteria that I mentioned as indicative of a responsible and respected professional group, that is, academic acceptance and American Board certification, are such additional concrete indications of our "coming of age" as the creation and growth of our two nationwide medicolegal organizations: the American Academy of Forensic Sciences (AAFS), which held its 40th annual meeting in Philadelphia this past February (1988), and our National Association of Medical Examiners (NAME), which was organized in 1966.

The creation of the AAFS and NAME have importance in a related area in that each organization gave rise (or birth) to a scholarly periodical. The *Journal of Forensic Sciences* made its debut in 1956 under the capable editorship of the late Dr. Samuel Levine (11) and our *American Journal of Forensic Medicine and Pathology*, which first appeared in 1980, has become a bastion of academic enrichment under the inspiring editorship of Dr. William Eckert.

Prior to the appearance of these periodicals, the relatively few "legal medicine" papers published appeared in the *American Journal of Clinical Pathology*, the *Journal of the American Medical Association*, the *American Journal of Pathology*, and various specialty journals. The appearance of the foregoing two publications provided forensic pathology with its own voices in which research and investigation can be shared with intellectually active colleagues. The ongoing vitality of these periodicals has further strengthened forensic pathology's place in the critical world of scholarly medical productivity and achievement.

THE AUTOPSY: HOSPITAL AND FORENSIC

Earlier I mentioned that my thrust today is based on the forensic autopsy as the quintessential feature or point of departure for our professional activities. It can be said with more than "reasonable medical certainty," to utilize that courtroom phrase, that in many parts of our country the forensic pathologists' "operating room" is becoming or has already become the last stronghold of the autopsy, the single

most informative, most instructive, most revealing, most important, and most costly procedure in the practice of medicine, not merely in the dollars and cents needed for its proper performance, but most costly from the inescapable fact that every autopsy is carried out at the cost of a human life, whether death was the result of natural disease or violence.

In several locales across our nation, the number of medicolegal autopsies approaches or exceeds the total number of "hospital posts" performed in that jurisdiction (12,13). For a variety of reasons, the hospital autopsy output has fallen to so low a level as to give deep concern to thoughtful clinicians and laboratorians (14). Indeed, several authors have practically "done an autopsy" on the autopsy (15–17).

This concern-provoking situation has reached the point where clinicians and pathologists, voicing alarm in professional publications, have been joined by nonmedical people uttering the same concern (18). Typical examples of the latter include *The Cleveland Plain Dealer*, which on May 9, 1983 contained a plea, "Bring Back the Autopsy" and in September 1987 ran an item entitled "Autopsies Decline Though Errors in Diagnosis Stay the Same." An enlightening exposition with the headline "Fewer Autopsies are Performed in the U.S. to the Detriment of Medical Knowledge" appeared in the *Wall Street Journal* on May 23, 1986. The foregoing professional and nonprofessional laments are impressive indications of the rediscovery of the wheel!!

"KNOW YOUR ENEMY"

In World War II, a common, constant reminder to civilian and military personnel alike was "Know your enemy," so that our foes could be more quickly discovered, understood, evaluated, and defeated. Our professional "enemies" today are life-threatening and life-taking diseases, mortal traumata, and deadly drug abuse. While I stand in awe of such diagnostic techniques and instrumentalities as the computerized axial tomography (CAT) scan, positron emission tomography (PET), magnetic resonance angiography (MRA), and other mind-boggling procedures, too numerous to mention and too complex to be described here, we must never, I repeat *never*, forget that these radiologic "breakthroughs," to use a favorite news media term, are based on "chasing shadows." It is only when we visualize the gross lesion in our hands and study its histologic details with our microscopes that we can truly say that we "know our enemy."

We have long been aware that "simple" etiology does not necessarily create or give rise to "simple" pathology. There is certainly nothing rare or complex about an acutely alcohol-intoxicated individual sustaining lethal craniocerebral trauma by falling and striking his or her head on a cement sidewalk, but the resultant gross and microscopic anatomic changes in the scalp, skull, pachy- and leptomeninges, and various parts of the brain are anything but simple.

We also know that disease and injury are *not* mutually exclusive, and that death is often the result of their simultaneous presence. Moreover, trauma can be emotional as well as physical. We can not see fright or panic in our autopsy rooms or with our microscopes, no matter what kind of special stain we may use, but either can be responsible for precipitating a lethal cardiac arrhythmia. History is as important in the forensic arena as it is in the clinical setting.

Finally, the autopsy deserves to be something more than a mere watchdog devoted solely to assessing the degree of reliability and gauging the trustworthiness of clinical diagnoses. It is irreplaceable for our learning to "know our enemies" and thus pointing the way for devising effective means and rational methodologies to deal with them effectively.

THE FORENSIC PATHOLOGIST'S CASE LOAD YESTERDAY AND TODAY

An area of deep concern to us and to the communities that we serve is the size and nature of our case load. Involved as we are with an extremely broad array of deaths, it is educational, informative, and revealing to note some of the changes that have occurred in these areas over the past 50 years and to observe what features have remained relatively unchanged.

Inasmuch as "Death hath ten thousand several doors for men to take their exits" (19), today's metropolitan medicolegal office deals with an extremely broad variety of natural and violent deaths. In a piece of writing published some 11 years ago, I noted that the forensic pathologist was the "last true generalist in medicine" (20). When I mentioned this aspect of our professional activities to a physician-friend, an ophthalmologist (A. Pollen, personal communication), he replied, "Lester, the forensic pathologist is a man for all lesions," a characterization with which I heartily agree.

I will discuss this facet of our daily activities on the basis of my experience in Cleveland, a microcosm of the Midwest. The changes that have or have not occurred in the Atlantic and Pacific coastal

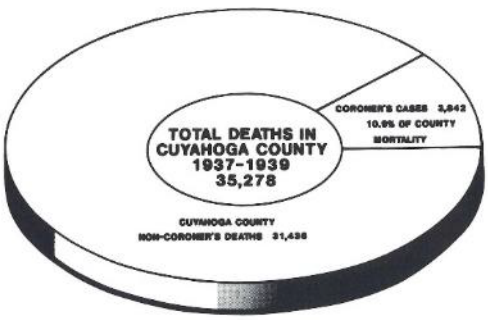


FIG. 1. Deaths in Cuyahoga County, Ohio, 1937–1939 inclusive.

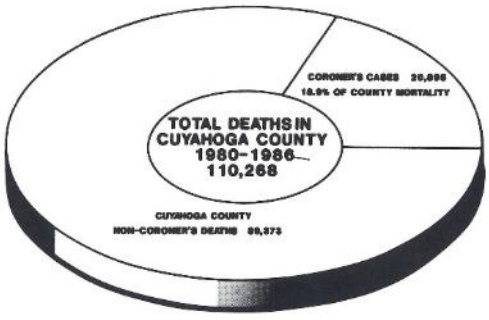


FIG. 3. Deaths in Cuyahoga County, Ohio, 1980–1986 inclusive.

regions, the Sun Belt, and the Deep South may well be different.

In the latter 1930s, the Cuyahoga County Coroner's Office, which serves Cleveland, Ohio, and its suburbs, took jurisdiction in ~11% of all county deaths (Fig. 1). Of these, 37% were caused by natural disease, and 63% were unnatural or violent (Fig. 2). In the 1980s, the office intake comprised almost 19% of all county deaths, roughly twice the earlier fraction (Fig. 3). Of these deaths, 63% were natural disease deaths and 37% were violent, a complete reversal as to *manners* of death (Fig. 4).

All violent deaths—homicidal, suicidal, accidental, and those of undetermined origin—simultaneously represent a tragic waste of human life and a never-ending challenge to society as a whole and to us physicians for meaningful, effective responses. It has been said that fertilization is the beginning of life and death is its end, but a violent death is a death before the foreordained end.

Homicides, which ordinarily receive most of the media attention devoted to violent deaths, ranged in Cuyahoga County from 70 to 80 annually in the 1930s to yearly averages in excess of 360 in the late 1960s and early 1970s, a rise far in excess of the increase in county population. They have since fallen to an annual "body count" in the upper 100s and lower 200s. What our (and your) homicide toll would be with current assault rates and the medical care of the 1930s is a deeply disturbing thought. In those days, before blood banks, before antibiotics, before surgical intensive care units, and before all the other medical advances that made what we have today better than what we had then, many trauma victims, who currently make excellent, uneventful recoveries, would have found their way to your and to my medicolegal establishments.

Case Material

Noteworthy changes have occurred in several natural disease entities that are now encountered far less frequently than they were in the past.

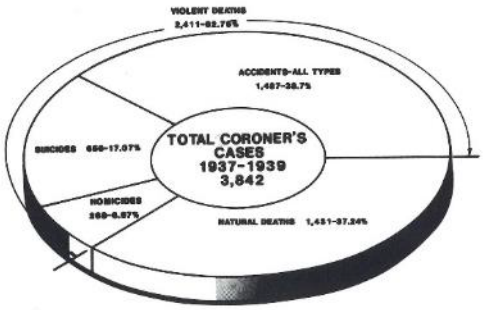


FIG. 2. Breakdown of coroner's cases, Cuyahoga County, Ohio, 1937–1939 inclusive.

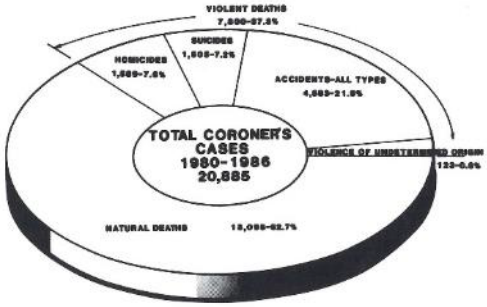


FIG. 4. Breakdown of coroner's cases, Cuyahoga County, Ohio, 1980–1986 inclusive.

Contrariwise, medicolegal challenges, then rare or nonexistent, are seen fairly frequently today. In addition to these two changing case types are segments of our case intake that have remained fairly constant. Included in this latter category are such entities as traffic and vehicular fatalities, unexpected deaths from coronary (ischemic) heart disease and sudden infant death syndrome (SIDS), and firearm homicides. More about these presently.

Frequent Then, Infrequent Today

In the natural disease case material, formerly frequent and rare today are sudden death from rheumatic heart disease with the classic "button hole" and "fish mouth" mitral and aortic valve stenoses, luetic aortic valvular regurgitation with its cor bovinum, ruptured luetic aortic thoracic aneurysms, and active pulmonary tuberculosis. There are subtle indications today of an upsurge in acute rheumatic fever that *may* create these cardiac abnormalities for exploration by future forensic pathologists (21).

A striking example of a shrinking case type is fatal "criminal abortion." Maternal deaths following unlawfully attempted or completed pregnancy interruptions, whether undertaken by the gravid woman, a "friend," or a "back-street surgeon," to quote our British confreres, were encountered all too regularly by us prior to the Roe vs. Wade decision handed down by the Supreme Court in 1973. Thus, in the 15 years prior to Roe vs. Wade, our office certified 40 such deaths, an annual average of three fatalities with their lethal mechanisms of visceral perforation, sepsis, air embolism, exsanguination, and the like. Contrariwise, in the 15 years since "abortion on request" or "abortion on demand" has been available, only two such fatalities, one in 1976 and one in 1977, have been certified by our office up to this moment (October 1988).

The foregoing figures are submitted neither as justification nor as condemnation of licitly interrupting pregnancies. The "moral" and "ethical" aspects of this emotion-laden matter are far too complex to be discussed or debated here. However, the statistics (or arithmetic, if you prefer) are certainly indicative of a significant decrease in the frequency of this entity in our case loads.

Infrequent or Nonexistent Then, Frequent Today

Several new arrivals in our professional field are deserving of comment:

AIDS. Of deep concern since the early 1980s to American society as a whole and especially to our profession are acquired immune deficiency syndrome (AIDS) and AIDS-related complex (ARC). Despite the fact that AIDS and ARC today are chronic, relentless diseases whose termination would ordinarily *not* bring them to the attention of a medicolegal office concerned primarily with *sudden* and *unexpected* natural disease deaths, people with AIDS find their way to our facilities as a result of a large number of varying events (22).

The gay AIDS victim may be fatally shot in a lover's quarrel or be the victim of a fatal traffic mishap. The intravenous drug-addicted AIDS victim can die suddenly from bacterial endocarditis, accidentally from acute intravenous narcotism, or suicidally from a deliberate, self-administered overdose because of the agonizing prognosis. A recent survey points clearly to the increased vulnerability of AIDS patients to intentional, self-destructive acts (23).

Always to be kept in mind is the truism that a person with an inevitably, ultimately fatal disease does not, repeat *not*, necessarily die from the previously, soundly diagnosed lethal process (24). This holds as true for the AIDS patient as it does for the person with generalized carcinomatosis, biologically scheduled to perish tomorrow, who dies today because he inserted a loaded "Saturday night special" into his mouth and pulled the trigger.

Respirator Brain and CPR. During the past 50 years, many newly introduced diagnostic and therapeutic procedures have inevitably come under our scrutiny when the desired end-results have not been attained. Thus, thanks to currently utilized "life-preserving" and "life-extending" technology, we encounter at autopsy the previously nonexistent "flat EEG" lesion called "respirator brain," an indication not that life was prolonged or extended, but rather that the act of dying was lengthened.

Another potential, lifesaving procedure responsible for anatomic abnormalities at our autopsy tables is cardiopulmonary resuscitation (CPR) (25). A "heavy hand on a frail chest" can create a broad spectrum of traumatic iatrogenous lesions including fractured ribs and sternum, mediastinal hemorrhages, and liver lacerations, none of which were seen with any degree of regularity when emergency treatment for the critically ill or severely injured was limited to comparatively ineffectual "artificial respiration." A related therapeutic modality that came into being prior to CPR during our study period and that is now almost completely extinct is (or was) "open cardiac massage," more correctly termed "rhythmic, manual, cardiac compression"

with its frequently encountered sequelae of contused myocardium and lacerated coronary vasculature (26).

Sudden death from pulmonary embolism in women taking oral contraceptives is a striking example of a newly created unanticipated exitus resulting from use of a "prophylactic" agent (27).

Additional examples of recently created anatomic entities that come to our attention today are hearts with surgically altered and prosthetic valves and hearts with one or more coronary bypass grafts, and we are already encountering cardiac transplanted individuals as indicated by Dr. Graham's presentation at this meeting (28). Will our next "strange encounter" be postmortem examination of a decedent with an artificial heart?

The family request autopsy. A noteworthy change has evolved in the past decade at our office as a spinoff of the malpractice situation, malpractice problem, or malpractice crisis as it is becoming more and more frequently encountered.

Like all medicolegal offices, we receive requests from family members to do or not to do an autopsy on a decedent who has come under our jurisdiction. Insofar as is possible, we accede to such requests.

In the past, the most common plea for us to do an autopsy usually involved a sudden, natural death with the request coming from a family member who had no knowledge of a valid, preexisting, potentially lethal disease in the decedent, for example, coronary sclerotic heart disease or hypertension. The requests were usually accompanied by such statements as "The family wants to know what happened to my father. He never had a sick day in his life," or "My brother said that he had not been feeling well for the past week, but he went to work every day. We want to know what was wrong with him. Why did he die?"

During the past decade, we have been receiving more and more calls that run something like the following:

"My father died at the XYZ Hospital last night, and the family would like the Coroner's Office to do an autopsy on him and find out what was really wrong with him."

"Had your father been hurt?"

"No. He was in the hospital because he was sick."

"How long had he been hospitalized?"

"About ten days."

"What did his doctor say was wrong with your father?"

"That's the trouble. He never told us anything. He was always too busy to speak to us. We wonder if he was trying to hide something."

"Well, your father is technically not a coroner's case. His was neither a sudden nor an unexpected death, and from what you told me, he apparently died from natural causes. Why don't you give the XYZ Hospital permission to do an autopsy on your father? I know Dr. Zilch, the pathologist, there. He is an excellent laboratory physician."

"We already turned the hospital down when they asked our permission for an autopsy. We don't trust them. Dr. Zilch would probably be 'in cahoots' with my father's doctor who wouldn't speak to us."

"Suppose we do the autopsy here, and we tell you something that you do not want to hear. Will you feel that we, too, are 'in cahoots' with your late father's doctor?"

"No. We trust you."

The foregoing is fairly typical of the current situation. Functioning as "ombudsmen of death," an appropriate phrase that I learned from our colleague, James Luke, we take jurisdiction in the death, have the decedent brought to our office, and perform the requested examination. When our studies are complete, we discuss the findings with the family, all at no charge. It is a sad, sad story from beginning to end.

New terminology. An interesting change in our daily activities is the appearance of new terms and new meanings for older terms. Examples of the former include such cognomens as "battered child" (29), "maltreatment syndrome" (30), "substance abuse," "drug scene," "SIDS," "angioplasty," "tranquilizers," and "hallucinogens," and such slang verbiage as "uppers," "downers," and "angel dust."

A prototype of *change in connotation* is the word "chemotherapy," first used and popularized in the late 1930s when prontosil and prontylin (the sulfanilamides) and their analogues were introduced for the treatment of *infectious* diseases. Today the word "chemotherapy" without further qualification most often indicates a hoped-to-be efficacious therapeutic agent for *malignant* diseases, for example, adriamycin, methotrexate, cyclophosphamide, or doxorubicin.

In this context, it is interesting to note that "OD" in my youthful years as an Army medical officer in World War II stood for "Officer of the Day," or "olive drab," the type of uniform worn in cold weather. Today, "OD," as we all know, has an entirely different meaning—overdose.

Relatively unchanged entities. Unchanged over

the years are such megatragedies as our 40,000–50,000 annual national traffic and vehicular fatalities, too many of which involve drinking drivers and drunken pedestrians.

Firearms, especially handguns, were and are the most commonly utilized homicidal instruments as they continue to kill and to cripple, the latter so vividly personified by Mr. James Brady, President Reagan's press secretary, and former Alabama Governor George Wallace. Firearms are also responsible for never-ending conflicts with the National Rifle Association and kindred groups on national, state, and municipal levels. The matter of gun control has even become an issue in our current (1988) national election campaigns. In Cuyahoga County and in so many other locales, firearm misuse continues to be responsible for more homicides than all other lethal modalities combined.

Coronary sclerotic heart disease. Coronary disease is responsible for more than 500,000 deaths annually in our country (31), more deaths than are caused by all forms of malignant disease combined. Today, as in the past, coronary disease remains as "Captain of the men of *sudden* death," to paraphrase an ancient dictum. We can hope that such new therapeutic agents as streptokinase, tissue plasminogen activator (TPA), prophylactic aspirin, and surgical procedures will meaningfully reduce this portion of our daily case load.

Homicidal poisoning. Rare in the past and rare today is intentional homicidal poisoning by the stealthy administration of a toxic chemical, a modus operandi beloved by authors of murder mysteries, (32), or the deliberate, toxic overdosage of the victim with (a) therapeutic substance(s). (To be kept in mind in this type of situation is the so-called Tenet of Paracelsus, which tells us that "The dose determines whether a substance acts as a remedy or a poison.") The 12 "tampering" homicides of a few years back with cyanide-tainted, over-the-counter drugs and food products, a unique type of multimurder, have, we are happy to say, come and gone (33). On the other hand, unintentional, poisoning homicides of the type that befell movie comedian John Belushi as a result of misadventure incidental to the unlawful "recreational" [a term that heretofore did not exist] use of drugs is an entity that challenges us more and more today.

Sudden infant death syndrome (SIDS). A never-ending challenge to us in our forensic pathologic establishments and a major tragedy to society is that provided by the victims of SIDS, sudden unexpected infant death (SUID), "crib" death, or "cot" death, to list some of its labels (34). It is not only their suddenness that traumatizes all who are concerned and involved with them. It is the inescapable fact that they are *unexplained* (35). These SIDS "headaches and heartaches" continue to occur at the rate of 2–3 per thousand live births. Granted that the practice of forensic pathology is filled to repletion with a broad array of frustrating anatomic ambiguities, puzzling pathologic perplexities, and disturbing diagnostic dilemmas, I have no hesitation in telling you that, in my opinion, SIDS fatalities are the most demanding, most disturbing, and most humbling deaths that we encounter with any degree of regularity. I have been living and dying with the tiny victims for the past 50 years and they have never ceased to "drive me up the wall."

Progress *has* been made in that we know now what is *not* responsible for these fulminant disasters. We no longer speak (or *should not* speak) glibly of such nonexistent agencies as "smothering in bed clothes," "status thymicolymphaticus," or "overwhelming infection." A great deal of time, money, effort, and thought has been and continues to be spent in an effort to identify the responsible process(es) or agency(ies) that can carry off an *apparently* healthy infant in this totally unexpected fashion (36). Up to now, we have no etiologic hypothesis (or hypotheses) that hold up in the face of probing, disinterested analysis and investigation (37).

Predictably and with regularity, the news media announce a "breakthrough" (38) (there is *that* word again!) in this puzzling, tragic catastrophe that has "finally given us the answer that we have been seeking" about the causation of these challenging and mystifying, unanticipated disasters. What has happened again and again is that today's "breakthrough" replaces the "breakthrough" so enthusiastically greeted a few months earlier and which has since been shown "not to hold water." Predictably, a few months from now, today's "breakthrough" will itself be badly broken (39).

TOXICOLOGY

A review of forensic pathology then and now would be incomplete without a few words about past and present "drug scenes" (40).

Ethanol was and is our number one chemical agent (41,42). The "gay deceiver" plays a critical role in a broad variety of "natural disease"(?) demises ranging from sudden deaths from ruptured esophageal varices in the portal cirrhotic and various types of central nervous system degenerative processes to all varieties of violent deaths. Indeed,

ethanol is an important *factor* in more "forensic" deaths than are all other chemical substances combined. That most uncommon commodity, common sense, is soluble in alcohol.

Once we stipulate the foregoing on the basis of all-too-abundant experience and confront deaths in which other chemicals play a critical role, we encounter important changes in forensic toxicology, the "handmaiden" of forensic pathology, over the past 50 years.

Postmortem Analytic Toxicology Trends

Fatal heavy-metal poisonings, typified by those caused by arsenicals, lead compounds, and mercury bichloride, are rare today, having been replaced by organic central nervous system depressants, for example, methaqualone, glutethimide, and chlordiazepoxide. Deaths from barbiturate overdosage, once the most common solid agent in suicidal and accidental poisoning death, have been replaced by fatalities caused by cocaine and its "crack" derivative, the benzodiazepines, and the tricyclic antidepressants. Said differently, today most fatal "poisonings" are ODs of therapeutic compounds rather than the result of exposure to the "skull and crossbones" variety to toxic substances (43).

An important newcomer in the area of "poisoning" deaths is the "sniffing" fatality, caused by the inhalation abuse of volatile, "nondrug" substances with no known therapeutic or prophylactic capabilities and found in such common household items as glue, hair spray, gasoline, paint thinners, fire extinguisher fluid (CCl_4), and degreasing agents. These ubiquitous threats have become the focus of yet another form of "recreational" drug abuse, a significant cause of death in young people, reaching epidemic proportions in some areas.

"Recreational" use of drugs did not exist as a concept prior to the 1950s. As time has proved again and again, all too often "recreational" becomes "lethal" or "destructive" whether the drug was taken by inhalation, ingestion, or injection.

Not to be forgotten is the basic and inescapable fact that drugs and chemicals are important in two different ways insofar as they affect the nature and volume of our work:

1. They can be the cause of death as such, either as the result of overdosage or hypersensitivity.
2. They can play a critical, adjuvant role in other varieties of unnatural deaths, for instance, victim-precipitated homicides, accidents of all kinds, and suicides because of postabuse depression ("hangover").

Progress in toxicology methodology and toxicology "hardware" has enabled us to keep pace with this harrowing subject. The development of new diagnostic techniques and instrumentalities (44), which are so much more specific, more accurate, and more sensitive than those available in the past, has been critical in permitting us to keep pace with this chemical assault on our community well-being, to say nothing of the fact that it has resulted in the coinage of new terms for which there had never been a use up to this time, for example, microgram, picogram, and nanogram, unimpeachable evidence of "giant steps forward" (45).

The "drug culture," yet another new phrase, is a threat to all of us—our law enforcement agencies, our young people, and our society as a whole—a threat that cannot and should not be ignored or dismissed. It has been discussed and argued repeatedly in the current presidential electioneering campaigns by both candidates. Fatal ODs, whether suicidal or accidental, and the homicides and other violence that stem from "territorial" battles and other vicious aspects of this sickening "business" cry out for valid governmental and societal responses.

CONCLUSION

What of the challenges for future forensic pathologists? Conceding that it is easier to be a historian than a prophet, here is a preliminary list of these challenges:

1. New diseases, such as AIDS and ARC.
2. Mass radiation disasters comparable to what occurred in Chernobyl.
3. New drugs that relieve and cure when properly used, and that cripple and kill when misused or abused.
4. New uses for old drugs comparable to what we are seeing with aspirin in ischemic heart disease.

Time and space do not permit further exploration of many other facets of "forensic pathology then and now." Admittedly, my "satellite scan" has not permitted us to visualize many other matters that have appeared, disappeared, changed, or remained unchanged.

In closing, it is fair to say that the past 50 years (and especially the last 25) have been an exciting and gratifying period in the practice of our spe-

cialty. We need no longer justify our professional involvement in an area that speaks so eloquently and unceasingly about the sanctity of all human life. We are happily further and further removed from what existed in the past when our branch of a noble and learned profession was regarded as the last refuge of medical mediocrity, an unwanted, illegitimate offspring arising from an unholy mésalliance of pathology and politics. □

Acknowledgment: I am deeply indebted to Ms. Elizabeth Tidwell for the numerical data in this exposition and to Ms. Frances Perelman for her meticulous secretarial assistance. Drs. Craig Sutheimer and Bradford Hepler were the source of informative toxicologic data, and Mr. James Wentzel created the graphic material. To all the foregoing, many, many thanks.

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Helpern Lecture 1994 – John Coe, M.D.



Public Relations for the Medical Examiner's Office

Charleston, SC, 1994

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Public Relations for the Medical Examiner's Office

Speech Delivered September 27, 1994, Charleston, South Carolina, U.S.A., on Receiving the Helpern Laureate Award

John I. Coe, M.D.

The inaugural address given by Dr. Davis on receiving the first Helpern laureate award was on The Future of the Medical Examiner's System (1). It is a masterful treatise covering both the development and proper function of the medical examiner's office. From this treatise there are many ideas that one can expand on. One of these is what Joe referred to as networking, which "demands a close working relationship with police, medical record librarians, and professional colleagues." "Networking requires that the medical examiner not be insular but should interact in community affairs and with individuals in government and the private sector."

What Dr. Davis alludes to as networking is part of what I call public relations, which can be defined as the actions of a private or governmental entity in promoting good will between itself and its employees or the public. It is this broad subject that I shall address in these brief remarks.

Good PR is engendered within the confines of the medical examiner's office when there is integrity of all of the workers, respect of every worker for the professionalism and conduct of other employees, and participatory management in which everyone feels free to contribute to how objectives of the office should best be accomplished. This type of internal PR will not be further elaborated on in this lecture; rather attention will be devoted to the interaction between the medical examiner's office and the public.

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There are two distinct public groups to be discussed: First are the people who are forced to interact with us because the death of a relative or close friend is being handled by the medical examiner's office. Second is the public at large.

FORCED PUBLIC INTERACTION

Considering the first group, public relations demand great sensitivity. What is needed is the ability to respond to another person's feelings in a supportive manner that expresses sympathy or compassion while still carrying out the functions of the office, i.e., collecting data, discussing cause and manner of death, releasing possessions, etc. All members of the staff from the physicians to the investigators, secretaries, and technicians must learn how to communicate appropriately with bereaved individuals, both at the scene of death and in the office. This is not something that is universally instinctive! Training sessions to instruct newer personnel may be needed.

Although it is impossible to adequately discuss all aspects of this subject in this lecture, certain precepts will be stressed:

When no relatives are present at the scene of a sudden and unexpected death, then the closest available relative should be informed by a *personal* messenger. A manual detailing how this is best done was published by the Department of Justice in Iowa in June of this year (2). It is the first manual of its kind in this country and it gives a very complete, detailed way in which such notifications should be handled. Following are some quotes from the introduction to the manual.

> Death notification is acknowledged to be one of the most difficult tasks faced by law enforcement officers and other professionals, because learning of the death of a loved one often is the most traumatic event in a person's life.
> The moment of notification is one that most people remember very vividly for the rest of their life—sometimes with pain and anger.
> Some survivors hear the news first through the media or a reporter calling, and then have flash-backs to that moment for years. Others tell how they were stunned to hear the person who was killed referred to as "the body" only minutes after the death.
> This booklet suggests ways to notify survivors effectively and sensitively—including tips on what *not* to do or say.
> The principles described here are simple: *Notification should be done in person, in time, in pairs whenever possible, in plain language, and with compassion.*

Further details from this manual are included in the Appendix.

In Minneapolis, the Medical Examiner's Office has commonly used police chaplains. For relatives who are out of town, police or sheriff personnel in their location are requested to assist us. Only under extreme circumstances is notification made by telephone and this should never be done until you have verification that someone is physically present to assist when a relative is given the bad news.

Be prepared for relatives who wish to view the deceased in the morgue no matter how severely the body may be damaged. Some relatives may wish to be alone with the body for a period to accept the death and express a private grief. Their wishes should be honored where possible. Telling them to wait until the funeral director has prepared the body is not a kindness.

Telephone conversations are frequently carried out with people who are depressed, sometimes irrational, and occasionally very angry or hostile. Office personnel must remain calm and respond in a gentle manner. Calls from recalcitrant individuals can be transferred to the medical examiner or a forensic physician.

The Office personnel should later encourage a conference with the professional staff when relatives express concern about the cause or manner of death or any other problem. In such conferences the family can be informed of appropriate grief support groups (SIDS parents, MADD, suicide or homicide victims, etc.).

Appropriate attention to such sensitivity training commonly results in grateful letters from relatives. These not only buoy up the office but can be a counterweight to totally negative publicity when something does go wrong.

PUBLIC IN GENERAL

Proceeding now to the general public, there are a number of separate groups to be considered. These consist of professional personnel, the public at large, and the news media.

Professional Personnel

It is from this group that the networking about which Dr. Davis spoke will be developed. Request invitations to speak to all of the following:

1. The local medical society and staff meetings of all hospitals within your jurisdiction. It is here that you can define what comprises a medical examiner's case, explain policy concerning forensic autopsies, and discuss problems and procedures concerning organ donation from bodies under your jurisdiction.

2. All ambulance and emergency room personnel. This provides an opportunity to stress the necessity of saving clothing no matter how blood stained, torn, or otherwise damaged it may be. A slide show illustrating how physical evidence from essentially dirty, torn rags has helped in solving some cases can be very persuasive. (Some examples: paint fragments from a car in a hit and run accident, range and direction of fire in a gunshot homicide, etc.) The lecturer can also stress the necessity of describing the initial appearance of a traumatic wound that has subsequently been altered by emergency personnel. A good example was the difficulty in the JFK assassination of interpreting a gunshot wound of the neck through which emergency room physicians had performed a tracheotomy.

3. All attendees at training seminars or workshops for emergency, police, and crime lab personnel should receive instruction from the ME staff. The desirability of this is self-evident. The advantage to each group from cooperation with the others can be easily demonstrated.

4. The staffs of both the county attorney and public defender's office. Here the neutrality of the medical examiner's office plus its accessibility to both prosecutor and defense attorneys can be explained. Procedural details such as pretrial conferences, the question of whether a subpoena for trial testimony need be issued, etc. can be worked out.

General Public

Lay people usually know very little about the medical examiner's office, and invitations to speak will develop because of the detective aspect of forensic pathology. Fascinating, theatrical slide presentations are possible concerning murders, acci-

dents, and suicides without ever showing a dead body. Photographs will be of clothing, x-ray films, blood spatter patterns, etc.

The talks indirectly provide an opening to discuss the many lesser-known ways in which the medical examiner interacts with the populace—identification of new diseases (SIDS), product safety (crib and toy construction, automobile design, dangerous medical devices, etc.), epidemiology, and other aspects of public health with which the medical examiner is concerned.

Talk to whomever will invite you—boy scouts, women's auxiliaries, rotary clubs, church groups, fraternities, etc. Never decline an opportunity to tell people about your work and what it means to the community.

News Media

The medical examiner's office is a political office by definition (''exercising power in the governmental or public affairs of a state, municipality, etc.''—Webster's Dictionary). As a consequence, it is subject to constant scrutiny by other governmental agencies and the press. The press is always looking for ''newsworthy'' material, frequently to our disadvantage. However, there are certain things you can do to maximize good relations with the news media.

1. Lay out exactly what your office will routinely provide them. Then make sure that this information is really available in a timely fashion. What you will routinely provide depends on whether your records are ''open'' or covered under a ''data privacy'' act of legislature.

2. Invite reporters to visit the office and learn how it carries out its job. We have twice had investigative reporters work in our office for several weeks before publishing generally laudatory full-feature articles on the operation of the office.

3. Provide statistical data for subjects a reporter wishes to write about such as suicides, drunk drivers, young victims of heart attacks, etc.

4. Suggest topics for possible articles; for example: SIDS, autoerotic asphyxia, carbon monoxide poisoning in standing automobiles, electrocutions from faulty swimming pool lights, hypothermia, etc.

5. Become friends with the science writers of your local newspapers and help them as an unpaid consultant.

6. Be available for general information or news-type programs done by local radio or television stations.

SUMMARY

Use of the suggestions outlined in these brief remarks are meant to enhance the quality of your service to the community. This is the primary reason for their implementation.

However, they also enhance the perception of your office by the people of the community who interact with you. This can frequently provide a base of support when trouble arises. And many, if not most of you, have experienced or will experience unfavorable media coverage sometime during your professional career. How you will fare in such a situation will depend not only on the validity of the criticism directed against you but on the perception of the public, as influenced by the news media. It is at this unexpected and critical time that your past public relations' efforts will bear fruit.

APPENDIX

The following pages are from *In Person, In Time*, slightly modified to make them more universally useable. Permission has been given by the Iowa Department of Justice to alter the forms or portions of this material in any way that will best serve the local needs of each individual reader.

BASIC DEATH NOTIFICATION PROCEDURES

These are some of the cardinal principles of death notification. Some of the points overlap, and all will be refined by the notifier's experience and judgment.

In Person

Always make death notification in person—not by telephone.

It is very important to provide the survivor with a human presence or ''presence of compassion'' during an extremely stressful time. Notifiers who are present can help if the survivor has a dangerous shock reaction—which is not at all uncommon—and they can help the survivor move through this most difficult moment.

Arrange notification in person even if the survivor lives far away.

Contact a medical examiner or law enforcement department in the survivor's home area to deliver the notification in person.

Never take death information over the police radio.

Get the information over the telephone, or it

might leak out to family through the media or private parties listening to police radio. If radio dispatchers start to give information over the radio, stop them and call in.

In Time—and with Certainty

Provide notification as soon as possible—but be absolutely sure, first, that there is positive identification of the victim. Notify next of kin and others who live in the same household, including roommates and unmarried partners.

Too many survivors are devastated by learning of the death of a loved one from the media. Mistaken death notifications also have caused enormous trauma.

Before the notification, move quickly to gather information.

Be sure of the victim's identity. Determine the deceased person's next of kin and gather critical information—obtain as much detail as possible about the circumstances of the death, about health considerations concerning the survivors to be notified, and whether other people are likely to be present at the notification.

In Pairs

Always try to have two people present to make the notification.

Ideally, the persons would be a law enforcement officer, in uniform, and the medical examiner or other civilian such as a chaplain, victim service counselor, family doctor, clergy person, or close friend. A female/male team often is advantageous.

It is important to have two notifiers. Survivors may experience severe emotional or physical reactions. (Some even strike out at notifiers.) There may be several survivors present. Notifiers can also support one another before and after the notification.

Take separate vehicles if possible.

The team never knows what they will encounter at the location. One might need to take a survivor in shock to a hospital while the other remains with others. *(Shock is a medical emergency.)* One notifier may be able to stay longer to help contact other family or friends for support. Having two vehicles gives notifiers maximum flexibility.

Plan the notification procedure.

Before they arrive, the notifier team should decide who will speak, what will be said, how much can be said.

In Plain Language

Notifiers should clearly identify themselves, present their credentials and ask to come in.

Do not make the notification at the doorstep. Ask to move inside, and get the survivor seated in the privacy of the home. Be sure you are speaking to the right person. You may offer to tell children separately if that is desired by adult survivors.

Relate the message directly and in plain language.

Survivors usually are served best by telling them directly what happened. The presence of the team already has alerted them of a problem.

Inform the survivor of the death, speaking slowly and carefully giving any details that are available. Then, calmly answer any questions the survivor may have.

Begin by saying, "I have some very bad news to tell you," or a similar statement. This gives the survivor an important moment to prepare for the shock.

Then, avoid vague expressions such as "Sally was lost" or "passed away." Examples of plain language include: "Your daughter was in a car crash and she was killed." "Your husband was shot today and he died." "Your father had a heart attack at his work place and he died."

Call the victim by name, rather than "the body."

Patiently answer any questions about the cause of death, the location of the deceased's body, how the deceased's body will be released and transported to a funeral home, and whether an autopsy will be performed. If you don't know the answer to a question, don't be afraid to say so. Offer to get back to the survivor when more information is available, and be sure to follow through.

There are few consoling words that survivors find helpful—but it is always appropriate to say, "I am sorry this happened."

With Compassion

Remember: Your presence and compassion are the most important resources you bring to death notification.

Accept the survivor's emotions and your own. It is better to let a tear fall than to appear cold and unfeeling. Never try to "talk survivors out of their grief" or offer false hope. Be careful not to impose your own religious beliefs.

Many survivors have reported later that statements like these were *not* helpful to them: "It was God's will," "She led a full life," and "I understand what you are going through" (unless the notifier indeed had a similar experience.)

Plan to take time to provide information, support, and direction. Never simply notify and leave.

Do not take a victim's personal items with you at the time of notification.

Survivors often need time, even days, before accepting the victim's belongings. Eventually, however, survivors will want all items. (A victim's belongings should *never* be delivered in a trash bag.) Tell survivors how to recover items if they are in the custody of law enforcement officials.

Give survivors helpful guidance and direction.

Survivors bear the burden of inevitable responsibilities. You can help them begin to move through the mourning and grieving process by providing immediate direction in dealing with the death.

Offer to call a friend or family member who will come to support the survivor—and stay until the support person arrives.

Offer to help contact others who must be notified (until a support person arrives to help with this duty.)

Survivors may have a hard time remembering what is done and said, so write down for them the names of all who are contacted.

Inform the survivor of any chance to view the deceased's body.

Be available to transport the survivor or representative for identification of the victim, if necessary. Explain the condition of the deceased's body and any restrictions on contact that may apply if there are forensic concerns. If appropriate, explain that an autopsy will be done.

Viewing the deceased's body should be the survivor's choice. Providing accurate information in advance will help a survivor make that decision. Some survivors will choose to see the body immediately, and this should be allowed if possible. *(Denying access to see the body is not an act of kindness.)*

Provide other specific information. Take a copy of the *Community Resource Information* form, fill it out, and leave it with the survivor. [See copy of form at end of this Appendix.]

Fill out and keep the "*Survivor Intake Form.*" [See copy of form at end of this Appendix.]

This form records basic information about survivors and their wishes. Complete the form, sign it, and keep it with the report or investigation file.

Follow-up

Always leave a name and phone number with survivors.

Plan to make a follow-up contact with the survivor the next day.

If the death occurred in another county or state, leave the name and phone number of a contact person at that location.

Most survivors are confused and some might feel abandoned after the initial notification. Many will want clarifications or may need more direction on arrangements that are necessary.

Following up can be the last step in completing a "person-centered" and sensitive death notification that is truly helpful to survivors.

The notification team should be sure they are clear on any follow-up assignments they need to carry out.

DEATH NOTIFICATION IN THE WORKPLACE

Survivors often must be notified at their workplace. Here are several tips to help apply the basic principles described above to a workplace notification.

Ask to speak to the manager or supervisor, and ask if the person to be notified is available. It is not necessary to divulge any details regarding the purpose of your visit.

Ask the manager or supervisor to arrange for a private room in which to make the notification.

Follow the basic notification procedures described above: in person, in time, in pairs, in plain language, with compassion.

Allow the survivor time to react and offer your support.

Transport the survivor to his or her home, or to identify the body, if necessary.

Let the survivor determine what he or she wishes to tell the manager or supervisor regarding the death. Offer to notify the supervisor, if that is what the survivor prefers.

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APPENDIX

Community Resource Information

"What do I do now?" -- Basic Information for survivors.

[This form should be completed by notifiers at the time of notification and left with the survivor.]

1. You may obtain copies of the *death certificate* from the funeral home.

2. You may obtain a copy of the *autopsy report* from the county medical examiner (name and phone):_____

3. You may obtain a copy of a *police report* from the agency investigating an accident or crime:_____
   Police case number, if any:_____

4. You may obtain *medical records* from the hospital or clinic where the deceased was taken:_____

   Note that it takes varying amounts of time to obtain death certificates, medical records and autopsy and police reports. Ask officials when you can expect them.

5. You may file for *social security benefits* by contacting the Social Security Administration

6. If the person who died was a veteran, contact the *Veterans Administration* Regional Office

7. Notify the *insurance agent* and the *bank* of the person who has died.

8. If there is a *criminal case* pending, contact the county attorney in the county where the crime occurred for more information:_____

9. Name of the person who notified you:

   _____Phone_____

Survivor Intake Form

Information about survivors and their wishes – to be completed by notifier.

[This form is to be filled out at the time of notification and retained by the notifier.]

Name of survivor:_____

Person providing information (if different):_____

Address of survivor:_____

Community:_____ZIP_____

Telephone: Home_____ Work_____

Relation to the deceased:_____

Name of funeral home to which the body of the deceased should be sent:

_____

If the survivor has no preference in funeral homes, would he or she like the medical examiner to choose one? ____Yes ____No

Do any survivors wish to see the body of the person who has died?

___Yes ___No ___Will decide later.

Are there any special items that might have been in the possession of the person who died (such as jewelry or a donor card)?

List:_____

Others to be contacted by notifier (other kin, unmarried partners, roommates, etc.):

_____Phone_____

_____Phone_____

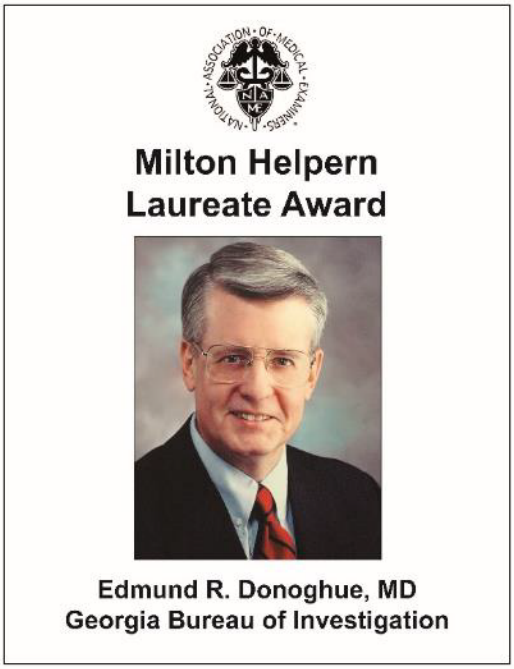
Persons contacted by notifier to provide support to the survivor:

_____Phone_____

_____Phone_____

Signature of the notifier_____Date_____

Helpern Lecture 2012 – Edmund R. Donoghue, M.D.



Leadership in Forensic Pathology

Baltimore, MD, October 9, 2012

The first time I came to Baltimore was in the summer of 1968, between my 2nd and 3rd years of medical school, for a ten-week fellowship in forensic pathology. At that time, the Office of the Chief Medical Examiner of Maryland was located just across the inner harbor from our hotel, at the corner of President and Fleet Street. The autopsy area on the 1st floor was not air conditioned but depended on the prevailing breezes across the harbor for cooling. On the Monday morning that I arrived, there were 24 bodies awaiting autopsy and I was wondering if I had made a terrible mistake. It turned out to be a wonderful experience.

At the time, Russell Fisher was the chief medical examiner.

Werner Spitz was the deputy chief medical examiner.

Ron Kornblum, Ed Wilson, and Charlie Springate were assistant medical examiners.

Josh Perper and Dimitri Contostavolos were residents in forensic pathology.

Richard Lindenberg, the renowned forensic neuropathologist had his laboratory in a city pumping station directly adjacent to the medical examiner's office and did weekly brain cutting conferences at the office.

During that summer, I drove up to the Armed Force Institute of Pathology and finally found the Department of Forensic Pathology on the Mall at 7th and Independence Avenue. There I met then CDR Charles Stahl who graciously sat down and talked with me about forensic pathology. In May 1969, I attended the AFIP Forensic Pathology course where I met Dick Froede, Jim Weston, and Tom Canfield.

Since I was from Chicago, I was able to attend the 1969 and 1970 annual meetings of the American Academy of Forensic Sciences and met Drs. Milton Helpern, Charles Petty and many other notable forensic pathologists.

I did a straight medical internship and two years of anatomic pathology training at the Mayo Clinic in Rochester, MN. I may have been the 1st or 2nd forensic pathologist to come out of the Mayo Clinic.

Next, I went to the Office of the Medical Examiner of Wayne County, MI, in Detroit, for a year of training in forensic pathology with the new installed chief medical examiner Werner Spitz. Since I had a military obligation to the Navy under the Berry Plan, I was very fortunate to be able to arrange a 2nd year of training in forensic pathology at the AFIP. At that time Charlie Stahl and Dick Froede were my supervisors. Robert Hertzog, Michael Dunne, Bob Thompson, and toxicologist Able Dominguez were also there at the time were important in my formation. During my training period, I was assigned to the Office of the Chief Medical of the District of Columbia for autopsy experience and was very privileged to work with Jim Luke, Brian Blackbourne, Roy Riddick, and Doug Dixon in the old DC morgue that overlooked the Congressional Cemetery. After my training year at AFIP, I remained on the staff at AFIP for two years and at the time of my departure I was chief of the wound ballistics or missile trauma branch.

Cook County was planning a transition from a coroner system to a medical examiner system on December 6, 1976, and the appointment of Robert J. Stein as chief medical examiner was announced about a year in advance to facilitate the transition. I met with Dr. Stein early in 1976 and was offered the appointment as deputy chief medical examiner and co-director of residency training contingent on becoming board certified. Of course, I still had a military obligation and could not report until July 1, 1977.

During 1976, I did become board certified in anatomic and forensic pathology.

On Sunday, March 27, 1977, just weeks before my departure from AFIP, the largest aviation accident in the world occurred in Tenerife in the Canary Islands when Pan American and KLM 747's collided on the runway killing 583 people. Because only the military had the manpower

to handle a disaster of the magnitude, the following afternoon, I found myself on a flight to Tenerife with other AFIP pathologists.

Unfortunately, because this accident occurred just before Easter, the height of the tourist season in the Canary Islands, the Spanish authorities would not allow us to process the victims in the Canary Islands. The bodies were brought back to the Port Mortuary at the Dover Air Force Base in Delaware and processed there.

I reported to Chicago on July 1, 1977, on the same day, Shaku Teas become the first resident in our provisional residency training program in forensic pathology. Mitra Kalelkar joined her in January 1978 and stayed with us for more than 30 years.

When a new medical examiner office starts or a new chief is appointed everyone wonders whether they will survive. It wasn't long before the new Cook County Medical Examiner's Office was challenged. On August 12, 1978, a delta wing British Vulcan bomber with a crew of four, visiting for the Chicago Air and Water show, crashed in a landfill just outside Glenview Naval Air Station. In December 1978, DesPlaines Police served a search warrant on the home of John Wayne Gacy and discovered 27 bodies buried in the basement.

On May 25, 1979, American Airlines Flight 191 dropped an engine on its take-off, rolled, and crashed next to a mobile home park just north of O'Hare airport. We worked at O'Hare for nearly a month identifying the 273 victims.

Two visiting hospital residents, Dan DelBoccio and Joanne Richmond, were given medical examiner badges by Dr. Stein and sent to the airport. We ended recruiting both of them as residents in forensic pathology. Dr. Clyde Snow, the anthropologist, worked for the FAA at the time and later became our forensic anthropology consultant and worked with Dr. Stein on the Gacy Cases.

In September 1982, Barry Lifschultz and I became involved in the Tylenol-Cyanide poisoning cases and suggested to the police and emergency room personnel that because of the rapidity of the deaths that we were probably dealing with cyanide poisonings. This was something that I had learned by Dr. Joseph Davis in a continuing education course.

The paramedics and the public health nurse involved in the death suggested that the vehicle might be Tylenol and brought the containers to our investigator at the hospital. I asked that investigator to smell the contents of the container and he said that he could smell cyanide. We then had him bring the containers to the medical examiner office. We called in our toxicologist, Dr. Michael Schaeffer, in the middle of the night, and had him analyze the capsules. By the early the next morning, he had found cyanide in lethal quantities. Since, Dr. Stein was out of town, it fell to me to schedule a press conference and inform the world that Tylenol had been contaminated with cyanide.

In 1993, Dr. Stein retired and I was appointed chief medical examiner of Cook County. In less than two years, my challenge occurred in the form of heat wave that killed more than 800 persons.

We were astounded when Mayor Richard M. Daley began to suggest that perhaps the number of heat deaths was being exaggerated. We were in a bit of dilemma because we were confident that we were right but we understood that we could not confront the mayor directly. My mother even called to advise avoiding a fight with mayor. So we acknowledged that the Mayor of Chicago was entitled to ask questions about the determination of heat related deaths. We also asserted that we were confident of the figures, welcomed a review, and were sure that we would be upheld. The incident has been written about in a very interesting book entitled "Heat Wave: A Social Autopsy of Disaster in Chicago," by sociologist Eric Klinenberg.
I learned many things as a chief medical examiner.

During the heat wave, I found that my employees already knew what needed to be done. My job was to see that they had the resources to do their job. I think that our host (at this meeting), Dr. Dave Fowler, has done a wonderful job in providing needed resources to his employees.

Your probably can't tell your employees enough how much you appreciate what they do for you. Praise them publicly; and remember always to correct them privately.

The transition to chief medical examiner will be difficult if you can't allow your staff to do things for you. In the past you may have done everything yourself, as a chief your responsibilities will broaden so that it will become impossible to attend to every detail. I was fortunate to have very competent people around me including Scott Denton, Roy Dames, and Chris Morris.
I would like to talk a little about what it takes to be successful in professional organizations. The first to attend the meeting of the organization—85% of success in life comes from simply showing up. Attend the business meeting of your organization. Learn the basics of parliamentary procedure.

I can't count the number of times that I have seen a physician get up in a meeting with a very thoughtful idea and fail to have any action taken because he did not say the words "I move that…" In our Chicago Medical Society we would annually offer an 8-hour class for up to 15 physicians in parliamentary procedure. I would send my forensic pathology residents to these classes and both Scott Denton and Ponni Arunkumar, the new deputy chief in Cook County, attended. These skills are transferable to every organization in which you participate.
Present scientific papers, this is good for you and your office. Volunteer for committees. When given an assignment, deliver an excellent product in a timely fashion.

Here is probably the most important thing that I am going to tell you today. Treat your colleagues well. Socialize with your colleagues. Avoid negativity and negative people. You will not advance in any professional organization without the help of your colleagues.

In 1990, Marcella Fierro called me because NAME's AMA delegate and alternate could not attend the AMA annual meeting in Chicago. She asked me if I would attend. The ink was barely dry on my AMA membership card, I had joined three months earlier and now I occupied the seat held for many years by Dr. Milton Helpern. That turned into more than a 22 year assignment with both NAME and the American Society for Clinical Pathology. Marcella also suggested me to the nominating committee for a seat on the NAME Board.

My colleagues in St. Louis have been helpful on so many occasions and in so many ways, I would like to thank them all: Mary Fran Ernst, Mary Case, Julie Howe, Kathleen Diebold Hargrove, Mike Graham, and of course I want to include Denise McNally in that.

Jeff Jentzen deserves special thanks for his assistance during the 1995 heat wave when he supplied me with the heat death mortality figures for Kenosha, Racine, and Milwaukee just before a very important press conference. I know there are many other colleagues to thank, just know that I appreciate everything you did.

Here is another suggestion. If you have done so already, get an automated external defibrillator and train your employees in basic life support. A little more than a year ago, I had an episode of ventricular fibrillation. Thanks to Jamie Downs and our Georgia Bureau of Investigation staff, I was resuscitated, defibrillated, and transported two blocks to our heart hospital in Savannah. I also need to thank Kris Sperry for purchasing the defibrillator. After a quadruple coronary bypass, I am back to normal.

I want to thank my lovely wife of 39 years, Judy, who has always supported me in my chosen career.

Lastly, I would like to thank the NAME Awards Committee, the Executive Committee, the Board of Directors, and the members of NAME for my selection as the Milton Helpern Laureate. I deeply gratified and humbled by my selection. I thank you profoundly for this honor. I want to tell you that I have never regretted my choice to become a forensic pathologist. I feel very lucky to have been in the field of forensic pathology and to have met the pioneers in the field. I am grateful to know all of you who continue to carry on this important work.

Helpern Lecture 2018 – Jeffrey Jentzen, M.D.

The Executive Committee and Board of Directors of the National Association of Medical Examiners is extremely pleased to present the Milton Helpern Laureate Award to Jeffrey M. Jentzen, M.D. who has made outstanding contributions to the development and improvement of medicolegal investigations in the United States; who is highly respected by his colleagues for the highest excellence in forensic pathology, education, research, consultation and administration; and who has attained and is a living example of the principles, standards, and goals of the National Association of Medical Examiners.

Dr. Jentzen grew up in Ypsilanti, Michigan Southeast Michigan, home of the Willow Run Bomber Plant, "The Arsenal of Democracy." I was active in sports at Ypsilanti High School and a late-bloomer academically. I attended Michigan Technological University on a football and wrestling scholarship majoring in pre-med. In Houghton I met and married Dorianne Otto, the daughter of a pathologist! We have two children, Nicole and Kaitlin and four grandchildren.

I have been active in NAME for over thirty years in a number of positions including president in 2007. Dorianne was also very active over the years in supporting Mary Fran Ernst and Denise McNally during the annual NAME meetings. Unsuccessful at my first attempt to medical school, I attended the Autonomous University in Guadalajara Mexico for two years before transferring to Wayne State University in Detroit. This international exposure would stimulate my international interests in the coming years. After medical school, I completed a flexible internship in Ann Arbor before traveling to Minneapolis for a pathology residency at Hennepin County Medical Center.

I entered the anatomic and clinical pathology residency at Hennepin County Medical Center in Minneapolis with the intention of being a general pathologist in the mold of my father-in-law. Dr. John Coe was the chairman of pathology at Hennepin County Medical Center and medical examiner for Hennepin County. I was reluctant, at first, to enter the forensic fellowship; however, I changed my mind after medical reimbursements changed in the early 1980s there were few jobs available in general pathology. Coe accepted me into the forensic fellowship with the simple words, "You're tall enough!" Coe retired as medical examiner the year preceding my fellowship and I was Garry Peterson's first fellow.

During the 1980s, Minneapolis contained one of the most dynamic groups of forensic pathologists in the country and I was fortunate to train there. There was a strong emphasis on forensic toxicology and teaching in forensic pathology. John Coe was active nationally including his involvement in the Kennedy and King Assassination investigations. His annual forensic conference brought the top people in the field to Minneapolis to lecture. Coe was of course known for his work in vitreous fluid analysis helped to a large degree by his access to the hospital lab and Calvin Bandt. Dr. Calvin "Cal" Bandt was the unsung force behind the scenes. He was a board-certified forensic pathologist and supervised and ran the clinical labs at

Hennepin County Medical Center. He was the one of the first to recognize the phenomenon of postmortem drug re-distribution.

Garry Peterson MD, JD took over as medical examiner in 1984 following Coe. I became the assistant medical examiner for six months until I left for Milwaukee in 1987 to take the medical examiner job. I became the Medical Examiner for Milwaukee County in 1987, at age thirty-three, one of the youngest medical examiners of a major American city at the time. I intended to stay in Milwaukee for a short time, but quickly fell in love with the city. My later success in Milwaukee was to a large degree because of the almost weekly telephone conversations, "sessions" I had with Garry during the early years of my career, right out of training.

I spent the major part of my career in Milwaukee where I was the medical examiner for twenty-one years before retiring in 2008. The office was staffed with hard-working professionals. My first accomplishment was to recruit Dr. John Teggatz as the Deputy Chief medical examiner. John, who also completed his pathology residency and fellowship training with me at Hennepin County, was a dedicated colleague and friend until his untimely death from cancer.

The toxicology laboratory in Milwaukee was especially prominent. Susan Gock was the toxicologist most responsible for the excellent service and reputation of the lab. Steve Wong, Ph.D., came to Milwaukee in the mid-1990s and provided academic foundation for many of the publications and developed a forensic toxicology fellowship program. Steve developed one of the first forensic pharmacogenomics laboratory (the study of genetic influence on drug deaths) and did extensive work in the field. I have been fortunate to work with dedicated managers, staff and fellows.

In Milwaukee, I was extremely fortunate to have a supportive district attorney and a number of local physicians in the local Milwaukee community who understood the importance of the role of the medical examiner. Over the years we developed child death review teams, a regional medical examiner system with coroners, co-operative relationships with organ and tissue agencies, and public health authorities, and continued the annual two-day forensic seminar similar to those in Hennepin County. The highest profile case I handled was the Jeffrey Dahmer serial killing (1991). Although it received a lot of publicity, it was really more like dismantling a museum. During my time in Milwaukee, I handled a number of other major incidents including, the 1995 Heat Wave Disaster, 2008 Lake Michigan airplane crash, and any number of industrial accidents, serial killers and public health epidemics.

I believe my most lasting accomplishments to the field have been in the area of death investigator education. Certainly, the best thing I ever did professionally was to interest Dr. Steve Clark, a PhD., an educator, curriculum and testing expert in the field of death investigation. Steve is my boyhood friend. The result was a training manual, The *Medicolegal Death Investigator: A Systematic Training Program for the Professional Death Investigator* and development national forensic autopsy standards, which eventually developed into the American Board of Medico-Legal Death Investigation (ABMDI). Since that early project, Steve

has made a number of contributions to NAME and forensic medicine including: National Guidelines for Death Investigation and Crime Scene Investigation, certification examinations, NAMUS program for missing and unidentified persons, forensic specialty certification and computerizing the NAME Inspection and Accreditation process and a number of other research programs in death investigation.

I relocated to the University of Michigan in Ann Arbor in 2008 as the Director of Autopsy and Forensic Pathology and Washtenaw County medical examiner. The leadership of the department sought to develop a forensic center of excellence. We eventually embedded the local ME office into the department of pathology. Seeking to develop a forensic fellowship, in 2011 the department took over the responsibility of administering the Wayne County (Detroit) medical examiner office under Dr. Carl Schmidt. Another local county was added in 2017. The result has been the creation of a regional, academically based medical examiner system in southeast Michigan.

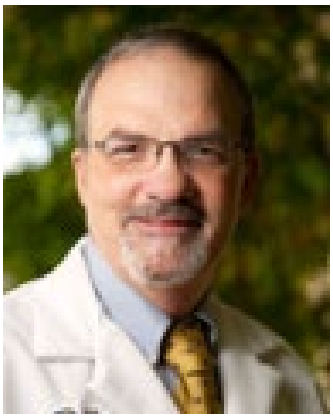
One of my major areas of interest includes medical history. In 2007, after ten years of study, I earned a PhD in the history science from the University of Wisconsin-Madison. The result was the publication*, Death Investigation in America: Coroners, Medical Examiners, and the Search for Reasonable Medical Certainty,* a history of forensic pathology in America during the twentieth century. I have published a number of papers and chapters on the history of death investigation including a forthcoming book, *Instruments of Empire: A Global History of Death Investigation in the Colonial Perspective*.

Medical examiners need special skills and gifts of patience, suspicion, paranoia, and common sense. They need to be public servants that know how to avoid perceptions of conflicts of interest. I learned how to be a public servant form my father Harold, a county engineer, and how to practice medicine from my father-in-law Howard Otto, a pathologist. Over my career, I have developed a number of practices, which I believe would be beneficial advice for forensic pathologists entering the field for forensic medicine.

- The autopsy begins at the scene.
- No guts; no glory. (Make a decision)
- No good deed goes unpunished. (Treat everyone the same.)
- Get your butt out of bed! (Go to crime scenes)
- The chief has to spend time in the autopsy room.
- You don’t know how much authority you have until you try and use it.
- The statutes won’t save you, use common sense.
- Speak to politicians like you visit with your neighbor over the back fence.
- Always do a complete autopsy.
- Specialize in something.
- If you think about it; Do it!

I am truly humbled and grateful for this Award and the support of my colleagues. I will continue to encourage and extoll the benefits of quality death investigative practices across the country.

(The following is the text from his lecture)



Profiles in Courage

West Palm Beach, FL, October 16, 2018

I would like to thank the NAME awards committee, board of directors and my colleagues for this special Award. I am humbled and privileged to be a part of this tradition and to join those who have previously received this prestigious award. I am well aware that many of my colleagues in this hall are equally deserving of this honor.

I first want to than my family whose unwavering support and untold sacrifices have sustained me over my professional career. My wife Dorianne, has spent 35 of our 45 years of our marriage with a phone next to her bed. My family has lost numerous weekends by being delegated to second place to my patients and duties in the morgue. I could not have survived without my family and faith. My twin brother Steve and his wife Mary are also here. Steve has the other half of my brain, a small price to pay for having immediate access to a lawyer.

In addition, I want to recognize a few of the people I believe were special mentors and guides throughout my journey. I was Garry Peterson's first forensic fellow and he taught me much more than forensic medicine. Ray Zastrow, a Milwaukee pathologist, had the confidence and courage to hire me at age 33 in Milwaukee as chief medical examiner. My father-in-law, Howard Otto M.D., taught me the art of medicine. Steve Clark, my collaborator and friend of 55 years, is the one I consider to have done more than any individual or institution to improve death investigation in the United States over the past twenty-five years. I also want to recognize and thank the many outstanding men and women I have had the privilege to work beside in offices in Minneapolis, Milwaukee and the University of Michigan.

I have supplied a brief biographical sketch of my career, which I believe paints a realistic picture of the course of events that have brought me to this place. However, I have reserved the privilege to not to divulge the amount of beer I drank in college.

Through my historical research of death investigation and personal contacts, I have discovered certain acts of professional courage exhibited by medical examiners in the course of providing public service under difficult circumstances. I would like to share a few illustrative examples where the actions of one person changed the course of history.

In the horrible year of 1968 following the assassination of Martin Luther King and not long after the tragic death of President John Kennedy, Bobby Kennedy was shot and killed in Los Angles. Dr. Tom Noguchi, the relatively new coroner for LA took immediate control of the case. Under incredible scrutiny with local and national political pressure lingering from criticism of the President Kennedy investigation, and armed only with his words, "Trust Me," Noguchi, cut-through bureaucratic red-tape, re-created the scene, protected evidence and provided transparency to the process. In an impeccable sixty-eight-page report, Noguchi not only set a new standard for high-profile death investigation but single handily restored the prestige and stature of forensic pathology.

Competent Courage

Dr. John Edland was a 36-year old medical examiner in Rochester, New York. In September 1971 the worst prison uprising in American history occurred at Attica prison in his county. Eventually, corrections officials retook the prison with shotguns and rifles leaving twenty-nine inmates and 10 police hostages dead. Over the course of a single evening, Edland and his associate pathologist autopsied eight of the guard hostages and nineteen inmates. In each case, Edland determined that the all guards and inmates had been killed by shotgun blasts from the state police retaking the prison and not stabbing or mutilations from the inmates as was rumored by the state police. In disbelief, the state patrol criticized Edland and rejected his findings. Edland never wavered. Governor Rockefeller and State Police Commissioner remained skeptical and requested second examinations by NY pathologist Michael Baden, who confirmed Edland's original findings. Despite the conclusion, Edland was continually harassed by the state police, his car was pulled over forty times in the next year for fictitious violations. Edland eventually left New York and died relatively young. His actions, however, resulted in a review of prison procedures and renewed surveillance of New York prison practices. In her 2016 book, Blood in the Water, author Heather Anne Thompson called Edland the "Hero of Attica."

Courage Unbiased.

Biko

On September 7, 1977, the South African police stopped Steven Biko, the South African reformer and leader of the Black Consciousness Movement, on a road to Cape Town, South Africa. The police arrested him under the 1967 Terrorism Act, which allowed for indefinite detention and solitary confinement for the purposes of interrogation without trial or charges. He was eventually charged with distributing "subversive" pamphlets. Biko was detained for 110 days. While in jail, he was beaten by his police interrogators and sustained brain injuries due to being punched, beaten with a hosepipe, and thrown into a wall where he collapsed. He was then shackled spread-eagle to a security gate where he languished for hours while the police did not seek medical attention for almost twenty-four hours.19 Biko died after police authorities elected to transport him seven hundred miles in the back of an open truck to a police hospital in the Pretoria's Central Prison.

News of Biko's death was followed by international outrage. The Minister of Police initially offered that Biko had died of suicidal injuries, similar to their explanation for many other prisoners' deaths in the custody of the South African police—or possibly of a hunger strike. Up until this time, South African courts had not substantiated police culpability in any case of torture or death of a detainee while in custody. During a two-week inquest trial the autopsy results of the autopsy performed by State Forensic Pathologist Dr. Loubsen and supported by a private independent pathologist employed by the family, Dr. Jonathan Gleckman were presented in court. Their postmortem reports provided clear and convincing evidence that Biko had suffered brain injury from police beating that contradicted the events alleged by police.24

Although the inquest failed to identify the security personnel directly responsible, the opposition to apartheid grew as a result and the government came to realize that it could no longer afford the consequences of activists dying in police custody. Biko's death death investigation brought widespread scrutiny upon the system of apartheid and the collaboration of medical authorities with the South African police in covering up deaths in custody. His death was the spark that lead to independence. The end of apartheid in 1994 resulted in an overhaul of forensic science services.

Courage Defiant

(Denzel Washington portrayed Stephen Biko in the 1987 film, Cry Freedom, produced and directed by Richard Attenborough)

Kevorkian

In 1990 Dr. Jack Kevorkian assisted in the first of 137 "suicides" in Oakland County Michigan. Over the next eight years, Kevorkian along with his flamboyant lawyer brazenly taunted and attempted to humiliate Dr. Lubi Dragovic, the Oakland medical examiner, by delivering Kevorkian's victims at the morgue in broad daylight.. In the early days of end-of-life care without clearly defined laws against assisted suicide, Dragovic endured the constant criticism from right-to –die advocates, physicians and even local medical examiners. Dragovic's careful

investigations revealed that all of Kevorkians patients did not suffered from imminently fatal diseases, many were simply depressed. Eventually, Kevorkain's own hubris cost him his freedom when he showed a video of him assisting in a suicide on national television. By the late 1990s, Oregon passed the Death with Dignity laws which helped define physician assisted suicide and end-of-life care. Dragovic's demonstrated courage and resolve as he struggled against right-to-die advocates and health care authorities to fulfill his professional mandate in a changing world of medical ethics.

Resilient Courage
(I often wonder who could play Lubi in the movie. Answer: only Lubi.)

Heat Wave

During a sweltering July weekend in 1995, Chicago and other upper Midwestern cities experienced a head wave of unprecedented severity. The Cook County medical examiner Edmund Donoghue, reported that hundreds of citizens, many of them elderly, had died as the result of the excessive temperatures. Reacting to criticism that public officials had not responded adequately, Mayor Daly and the Public Health director openly criticized Donoghue in the media for inflating the number of dead. Donoghue stood his ground. In response, Daly invited the CDC to make an independent investigation. In the end, the CDC attributed 770 deaths to the three-day heat wave, not the 540 Donoghue had initially reported. To the embarrassment of the mayor, the CDC applauded the actions of Donoghue.

Courage challenged.

Honor Killings

In 1999, an unprecedented grassroots group of young Jordanians challenged the political regime by establishing the "Campaign to Eliminate So-Called Crimes of Honor." Forensic pathologists from the Jordanian Medical Examiner office, actively participated with the group to expose the grim realities of Islamic law. Honor crimes usually resulted in lenient sentences for the male relative who murdered their female relatives "in defense of their honor." mainly for committing or being suspected of alleged sexual misconduct.

Jordanian medical examiner, Hani Jashan, actively participated in the cause by providing statistics of his investigations indicating that sixty percent of murders of women in Jordan were honor crimes. The majority of the offenders' sentences varied from no punishment to less than one years' imprisonment.54 Jordanian forensic pathologists routinely examined girls and women accused of breaking sex laws. Despite their male relatives' allegations of sexual misconduct, autopsies performed by the forensic pathologists demonstrated that the overwhelming majority of the victims were virgins at the time of their death reporting the results to police and prosecutors. On one occasion, Hani Jashan lamented that, "girls he

examined alive have been returned to him dead. 'Working here is difficult'…he said, 'We have to solve this problem."

As a result, the honor killings came to the attention of members of the royal family themselves including the late King Hussein and his American-born Queen Noor initiated discussions of honor killings have proclaimed their disgust with honor killings. The law remains but is being challenged like never before.

Compassionate Courage

I would be remiss if I did not mention the late John Plunkett. John was a pathologist of a rural Minnesota hospital and forensic pathologist who late in his career challenged the diagnosis of Shaken Baby Syndrome. I trained under John at Hennepin County. He was often criticized and rebuked for his controversial ideas and opinions. In 2016, John received the Life Achievement Award from the Innocence Network. Although I and many others strongly disagree with John's beliefs and conclusions, his arguments and debate challenged the field of forensic pathology and helped to sharpened the scientific diagnosis and our understanding of fatal child head injury. We as physician-scientists must maintain an open mind to contrary views, for it is by this we uncover new paradigms of knowledge, advancing the scientific basis of our field, which has been so successful in issues such as SIDS, Chronic Traumatic Encephalopathy (CTE) and others.

Courage of Convictions

Present in the everyday work of medical examiners are untold examples of profiles of courage. Courage that is competent, unbiased, defiant, resilient, challenged, compassionate and born of conviction.

Again, I would like to thank the NAME membership for this precious award…..and Be Courageous.

Special Topics

History of the Department of Defense DNA Registry



Victor W. Weedn, MD, JD

May 2016

The AFIP and Pathology

The Armed Forces Institute of Pathology (AFIP) for at least the latter half of the 20th Century was an ivory tower for pathology. The AFIP grew out of the Army Medical Museum and Library (AMML) which was established in 1862 by President Abraham Lincoln and U.S. Army Surgeon General William Hammond. The AMML was created to collect morbid anatomy specimens from the Civil War and the Army Surgeon General's library; but it became a storehouse of pathology knowledge. The AMML was housed in Washington D.C., moving to the Washington Mall in 1887. In 1949, the AMML was renamed as the AFIP and in 1955 it moved to its final resting place on the Walter Reed Army Medical Center in Bethesda, MD. Building 54, by a 1951 presidential directive, was to be an atomic bomb proof building. Thus, the building was a windowless rectangular concrete box with a vaulted main entrance door and a helipad was located nearby for arrival of the President if need be. Nuclear bombs became more powerful and the building was obsolete before it was finished; another building of its design was never built again.

Forensic Pathology at the AFIP

Forensic pathology at the AFIP began in the 1950s. The American Board of Medical Subspecialties first recognized forensic pathology in 1958 and forensic pathology certifications were conferred beginning in 1959. A registry for forensic pathology cases was established in 1958. In 1959, the Military Environmental Pathology Division was established consisting of forensic pathology, aviation medicine and toxicology. In 1962, the College of American Pathologists sponsored the first board approved fellowship in forensic pathology at the Armed Forces Institute of Pathology (AFIP) in Washington, DC.

AFIP forensic pathologists participated in high profile cases such as the 1967 Apollo 1 mission mishap, the 1978 Jonestown mass suicide, the 1985 Gander, Newfoundland crash, and the 1986 space shuttle Challenger explosion.

Office of the Armed Forces Medical Examiner (OAFME)

In 1988, Dr. Richard Froede, with assistance from Dr. James Luke and the approval by the ASD(HA) Enrique Mendez and the three Surgeons General, founded the Armed Forces Medical Examiner System (AFMES) with an Office of the Armed Forces Medical Examiner (OAFME) at the AFIP. Dr. Froede created the new OAFME from the pre-existing AFIP forensic science and aerospace mishap departments, which had only consultative roles, and gave it jurisdiction over deaths of military members abroad and on exclusive federal jurisdiction. The creation of the OAFME was authorized by the National Defense Authorization Act of 1988 and directed by the DoD Directive 6010.16. Implementing regulations at the AFIP (AR 40-57, BUMEDINST 5360.26, and AFR 160-99) became effective February 1991. As of 1999, the jurisdiction has been defined by 10 US Code 1471. This new office is still the only federal medical examiner office in the United States.

The original group consisted of Richard C. Froede as the civilian Chief, Col Bill Gormley, CDR Arthur Burns, COL Charles Springate, Capt Steven Sohn, Capt Glenn Wagner, Col Donald Wright, and civilian consultant James Luke. Mick Smith ran the toxicology progam. Others that would rotate through the OAFME at the AFIP in those early days, as I recall, included Joni McClain, Kari Reiber, Dave Hause, Carl “Chris” Stacy, Frederic Hellman, Deborah Kay, Ed Kilbane, Steve Cogswell, Paul Mellon, Natalie Shemonsky, Joy Carter, Tim Monaghan, and Joyce Ann Lapa; William “Billo” Oliver was in the Department of Cellular Pathology.

Early efforts of the OAFME included the investigations of the abduction, torture, and death of Colonel William Higgins, the 1989 turret explosion on the USS Iowa killing 47, the 2000 USS Cole bombing, and the 9/11 Pentagon and Somerset attack deaths from Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF).

My Recruitment to the OAFME

Forensic DNA identity testing is dated to 1985 when Alec Jeffreys in an article in the journal *Nature* described the “DNA fingerprint” and noted that it could be useful for forensic purposes. DNA testing was first made available through private laboratories (SERI/Forensic Science Associates, Cellmark, and Lifecodes) in 1986 and 1987. The FBI began casework in December 1988 and Virginia became the first State to begin DNA testing in March of 1989.

In 1987, Dr. Marcella Fierro, then in the Virginia medical examiner office, when I approached her after a lecture, suggested that I look into the new DNA technology. My first wife's (Bridget Jones) best friend (Suzanne Miller) was a paralegal for Don Brown, a defense attorney in Conroe, Texas, with a client, Clarence Brandley, who was a black custodian convicted of raping and killing a 16 year old white female at the local high school in Conroe, Texas. I suggested that DNA testing be performed in the case and it became one of the first cases conducted by Lifecodes, however an insufficient amount of DNA precluded testing; he was eventually exonerated on other grounds (recounted in the book *White Lies* by Nick Davies). I had joined

the Department of Pathology faculty of the University of Texas Medical Branch (UTMB) in Galveston, Texas. I decided to learn molecular biology and Dan Schultze allowed me to learn them in his laboratory. I studied the dominant textbook at the time, *Molecular Cloning: A Laboratory Manual* by Maniatis, Fritsch, and Sambrook.

Dr. Froede recruited me (and my colleague Buzz Keiper) from UTMB to the AFIP to help establish the OAFME; he recognized that my newly acquired expertise in forensic DNA typing would be useful. I was commissioned into the active duty Army as a Major in September 1988, endured boot camp at Fort Sam Houston (graduating as the Honor Graduate), and reported to duty at the AFIP in December of 1988.

At that time, the American Board of Pathology accepted experience in lieu of a forensic pathology fellowship and specifically accepted my experience performing autopsies for the local medical examiner's office (under Dr. William Korndorffer), which constituted one third of our cases, and thus the three years spent there was counted as one half of the time needed for certification. I completed the rest of my forensic pathology training in the supervised fellowship of the AFIP and was sent to spend time both in the Virginia office in Richmond (under Drs. David Wiecking and Marcella Fierro) and the Maryland office in Baltimore (under Dr. John Smialek).

Upon the completion of my forensic pathology fellowship training, I was ready to work towards establishing a forensic DNA identity testing laboratory.

Establishment of the Armed Forces Identification Laboratory (AFDIL)

The U.S. Army was the first modern military to bury its war dead in individual graves. During the American Civil War soldiers paid for metal tags so that they might be identified after death. In 1906, the War Department made "dog tags" mandatory. In these early days, personnel identification was a logistics matter. During the Vietnam war, there was a shift in the responsibility for personnel identification to personnel (graves registration) and an attempt to shift to positive means identification; images of the two index fingerprints were required on military identification cards. However, limitations of fingerprints for human remains identification became evident. The FBI was not entering a significant number (>15%) of 10-print cards into their database, due to poor print quality. Moreover, fingerprints were often unavailable from severely decomposed, partially incinerated, or fragmented human remains. Thus, the military shifted to dental identification However, on December 12, 1985, the crash of a C-130 charter plane carrying U.S. troops of the 101st Airborne Division crashed in Gander, New Foundland resulted in the deaths of all 248 passengers and 8 crew. The identifications were made as follows: 112 (43%) dental only, 67 (26%) dental and fingerprint, 51 (20%) fingerprint only, and 26 (11%) other means. The dental records, which were in the medical records carried with the soldiers on the plane, had to be recovered from the crash site. This resulted in the creation of a dental panograph repository in Monterey, CA. However, an estimated 5% of all servicemembers have no dental restorations, particular those youngest

troops, whom are most likely to be out front in battle. Furthermore, fragmented remains may not contain fingers or teeth. There was an obvious need for DNA identification.

As I began efforts to create a DNA laboratory, I decided to name the Armed Forces DNA Identification laboratory (AFDIL). Launching the program required funding. At one point, General Gordon Sullivan visited the AFIP and asked me what it would take to establish the DOD DNA Registry and I responded $10M, but the AFIP leadership did not want to accept the money and the strings that might be attached. The AFIP Director, Captain Robert Karnei, and the American Registry of Pathology Director, Dr. Florabel Mullick, on the advice of Colonel Kenton Hartman, a dentist and veteran of the Jonestown and Gander identification operations, decided to place a bet on me; they closed some other programs and invested in my DNA program.

The first person I hired was Mr. Jim Canik, a former Dustoff medevac helicopter pilot –among the most dangerous jobs during the Vietnam war. He became my administrator and right hand man. Still today, he remains the foundation rock of the program, 25 years later. The second hire was Deborah Fisher, now Hobson. She was a student of Professor George Sensabaugh at the University of California at Berkeley. Sensabaugh's lab had connections to Cetus Corporation, where Kary Mullis developed the polymerase chain reaction (PCR) technique in 1985, and the Serological Research Institute (SERI) and Forensic Science Associates, where Brian Wraxall and Ed Blake put PCR to use in forensic applications as early as 1986. I correctly deduced that the predominant forensic DNA testing method at the time, (single locus probe) restriction fragment length polymorphism (RFLP) testing using the Southern Blot technique, would not work well on human bodies due to degradation and that PCR would be a better method of analysis. This turned out to be one of the most important decisions that I made. After Jim Canik and Debbie Fisher (now Hobson), Demris Lee, Rhonda Roby, and Mitchell Holland were my next hires—all became prominent members of the forensic DNA community. This small crew worked out of a two room, 400 square foot space for the first few years. AFDIL became operational in 1991.

As the laboratory was established, we felt pressure to become operational, but without immediate casework we had the ability to establish procedures and to do the research we felt was needed. From the outset the laboratory was a pioneer laboratory. Most laboratories at the time were performing cumbersome RFLP testing and the few doing PCR were generally only using dot/blots for casework, which had a very limited discrimination. AFDIL was among the earliest adopters of STR and mitochondrial DNA technologies. To meet the needs of the OAFME, AFDIL developed a policy of issuing preliminary STR DNA identification results within 24 hours since the late 1990's.

The fact that we were a remains identification laboratory, instead of a criminalistics laboratory, and that we resided within a research institution was very important in giving AFDIL the largesse to rapidly advance technology. As I recall, we purchased the fourth gel scanner manufactured by Applied Biosystems Inc. (ABI), which was the first attempt at automation. I was aware of the resolving power of capillary electrophoresis and that heat dissipation would

be greater than slab gel electrophoresis and pushed for the adoption of this technology before any other forensic laboratory, but we did not publish our efforts before others. Today, STR DNA testing is almost exclusively performed by capillary electrophoresis. Later, we purchased a MALDI-TOF mass spectrometer, built by Marvin Vestal out of his garage, to try to adopt this technology for DNA testing. John Butler, who had worked with GeneTrace to adopt mass spectrometry to DNA testing, spent time at AFDIL on this instrument. Ken Gabriel at DARPA had me review DNA microchip proposals. I chose a project with Dan Erlich at the MIT Lincoln Laboratory to perform capillary electrophoresis on a chip, which eventuated in today's GE NetBio's DNAscan Rapid DNA Analysis System. The other project that I chose was with Allen Northrup at the Lawrence Livermore National Laboratory in partnership with then PerkinElmer-ABI to perform PCR thermal cycling on a microchip, which eventuated in Cepheid SmartCycler. This technology is now used for anthrax detection at postal centers. At the initial planning meeting with Allen Northrup, Tim White, and myself, I suggested that an optical window be created to allow laser interrogation of the amplified product using fluorescence from ethidium bromide intercalation of the double-stranded product as was being investigated by ABI's Russ Higuchi; this effort eventuated in real-time PCR. During further development, the first truly fieldable DNA testing instrument was developed for AFDIL and not for the CIA or any other government component.

Although not a traditional crime laboratory, I succeeded in making AFDIL an accepted part of the forensic science community. AFDIL staff regularly presented at forensic science meetings and the laboratory became ASCLD-LAB accredited early on (with thanks to Richard Lewis). The laboratory did assist in a few murder investigations, such as the Green River murders, Ted Bundy case, and the 1983 armed robbery of a Kentucky Fried Chicken restaurant in Kilgore, Texas.

AFDIL was sufficiently prominent by 1993, that Nobel Laureate James Watson spent a full day visiting the laboratory and gave the Ash Lecture for the AFIP. As of January 2016, AFDIL became the first forensic identity testing laboratory in the world to routinely use massively-parallel sequencing (using next generation sequencing instruments) to make identifications.

OperationS Desert Storm

Operation Desert Shield was the U.S. operational name for the U.S. buildup of 500,000 troops in the Persian Gulf region from August 1990 to January 1991, in anticipation of a war with Iraq, after Saddam Hussein invaded Kuwait. Military planners estimated that the Army would suffer 30,000 to 40,000 casualties, including 15,000 deaths in the ensuing war. During this time, Army Surgeon General Frank Ledford began working with Dr. Froede began preparations for mass fatality operations. The Dover Port Mortuary was expanded and equipped; the OAFME and AFDIL made preparations.

The first Persian Gulf War, *Operation Desert Storm*, January 17 to February 28, 1991 (with only 100 hours of ground combat), was a quick, decisive, and overwhelming victory with far fewer dead than anticipated. The remains of 298 servicemembers were processed at the Dover Port

Mortuary--26% of the human remains were fragmented (half fragments only), 14% of the remains had no fingers to be fingerprinted, 30% did not have fingerprints on file, 8% of the remains had no dentition recovered, and 12% of the antemortem panographs were found to be uninterpretable. Nonetheless, identifications were made by fingerprint and dental comparisons in 188 cases (63%), fingerprint comparisons only in 39 cases (13%), dental comparisons only in 53 cases (18%), and by other means in 18 cases (6%). A victim of a truck accident in the theater staging area, involved a soldier with no fingerprints on record and a useless overexposed panograph; he was identified by his family despite the fact that half of his face was crushed. A friendly fire incident involved a personal carrier with three soldiers hit by a hellfire missile. None of the bodies had heads or hands and were identified through an anthropologic examination. These early cases underscored the need for DNA identification capability.

A western blot antibody profiling method capability was established at the Dover Port Mortuary, a PCR-based dot/blot (Polymarker) capability at AFDIL, and a capability to conduct AmpFLP nDNA testing (a forerunner of STR testing) was established through contracts with commercial laboratories (Roche, Cellmark, and Genmark). AFDIL funded Robin Cotton of Cellmark to work with Holly Hammond in Tom Caskey's lab in Houston, TX to learn the new STR technique; which would be used in casework for AFDIL for the first time in the world; Peter Gill and the Forensic Science Service usually get the credit for the first to use STRs and they were the first to routinely and successfully use the technique.

I began collecting DNA samples from the remains at Dover and at one point I was ordered to stop collections by a senior officer at Dover, who did not believe in DNA identification methods, but this order was reversed by Dr. Froede. Our efforts were used primarily for re-association of remains. For example, we associated a head, which had identifiable dentition, a right hand with identifiable fingers, a shoulder and a foot; this was considered an identification by dental and fingerprint means.

The first DNA identification of Desert Storm (#DS1-257) was of a U.S. Air Force A-10 pilot that went missing in action (MIA) on January 15th 1991. His two pounds of tissue were recovered on March 19th, 1991. Essentially, we were being challenged--"So you think you can do something, try this!" AmpFLP DNA technology matched his family references.

CAPT Michael Speicher

The first American combat casualty of the war, a U.S. Navy F-18 pilot, LCDR Michael Scott Speicher, was witnessed to be shot down over Iraq on January 17th, 1991, the first night of the war. One pound of remains (#DS1-256), thought to be his, were recovered on March 20th, 1991. AmpFLP testing of the remains and reference specimens from his wife, son, and daughter revealed a non-matching trio, but this could have been a case of non-paternity. Mitochondrial DNA was performed, with the help of Lloyd Mitchell in the NIH laboratory of Carl Merrill on an electrical shaver, a direct reference source, confirmed a non-match. This was the first instance of mitochondrial DNA testing used in casework by AFDIL. After this testing and

despite the absence of identification, his status was changed from MIA to Killed-in-Action/Body Not Recovered (KIA/BNR). In December 1993, the wreckage of the plane was discovered in the desert by the Qatari military, but the U.S. military considered it too risky at that time to investigate the site. In December 1995, the site was excavated by the International Committee of the Red Cross, but concluded that Speicher had ejected from the aircraft. Families were concerned that he might still be alive and captured. His remains were eventually found by a Marine squad in 2009. His body had been buried by local Bedouins. A jaw bone was recovered and identified through DNA testing. I was interviewed about this case three times for the TV show *60 Minutes*.

Post Operation Desert Storm

During disposal of explosive ordinance, an explosion occurred that killed three military EOD technicians at the Blackhorse Base in Doha, Qatar on 23 July 1991. One body was intact and quickly identified, but the other two bodies consisted of 238 pounds of fragmented remains collected in 126 bags. Using Polymarker DNA dot/blots, the remains were separated within 48 hours and only 10-15% of the residual tissues remained unidentified. One of the families had lost patience with the military and was to hold a press conference to make public their complaints, but withdrew the conference after the success of this identification effort.

The Branch Davidian

David Koresh led a religious sect, known as the Branch Davidians, at the Mount Carmel Center ranch near Waco, Texas. In 1993, a near two month siege of the compound ended after the ATF and then the FBI attempted to raid the compound for a suspected cache of illegal firearms when a fire broke out that engulfed the compound killing 76 residents inside, including David Koresh. Since the FBI was involved, they requested that AFDIL perform the DNA testing of the remains. Also, since many of the members were British citizens, the Forensic Science Service also conducted DNA testing. Both DNA laboratories obtained the same results and provided solid identifications; one preliminary dental identification and one preliminary fingerprint identification were shown to be mistaken and were corrected.

Establishment of the DOD DNA Registry and the DNA Specimen Repository (now AFRSSIR)

Not long after AFDIL was established I recommended the creation of a military database of DNA samples for identification purposes. I conceptualized a DNA Registry to include both AFDIL and a DNA Specimen Repository. I attempted to establish DNA collections during Operation Desert Shield, arguing that at least a few plucked hairs could be taped to the medical record. The General in charge of personnel for the Marine Corps stuck his face inches away from mine and growled “You are going to do what to my personnel?” When I responded that I wanted to take a few plucked hairs, he declared that Marines do not have hair, and I responded that I did not say from where! I was told that the walls of the Pentagon shook as Dr. Ed Martin screamed “Not this war, but next”.

The DoD DNA Specimen Repository was established pursuant to a December 16, 1991 memorandum of the Deputy Secretary of Defense Donald J. Atwood. In 1993, acting ASD(HA) Ed Martin issued detailed policy for the implementation, organization, and administration of the DoD DNA Registry (DoDD 5154.24 and DoDI 5154.30), a notice was posted in the Federal Register of the new system of records pursuant to the Privacy Act of 1974, and was later legislatively authorized (10 U.S.C. 176 and 177). In 1995, ASD(HA) Stephen Joseph decided to drop "DNA" from the name of the repository and renamed it the Armed Forces Repository of Specimen Samples for the Identification of Remains (AFRSSIR). In December 2002, following the rape of one Army soldier by another, legislation (10 U.S.C. §1565a) was promulgated which overrode prior policy which limited the use of the DNA specimens to human remains identification and permitted the specimens to be used for law enforcement purposes in felony and sexual assault cases when no other specimen is available and pursuant to a federal judicial order.

The DNA specimens were originally collected as blood stains and oral swabs. The filter paper, Schleicher and Schuell #202, is the same as used for Guthrie cards used for PKU newborn screening and had been used by Lifecodes, but had not yet been adopted by the forensics community. One blood stain card was put in the servicemember's medical record and the other was stored in a freezer in a central repository in Rockville, Maryland. The pouches were vacuum-sealed with a desiccant in a paper-poly-foil pouch. Finger needlestick devices allowed collections in the field. The oral swab handles were scored to break off into isopropanol tubes. Jill Smerick of the FBI performed a study for me on possible preservatives and found that alcohol was and an excellent preservative for DNA without PCR inhibition. It was thought that the blood stains should match the oral swab, which would be collected by a technician and thus avoid tampering. It was thought that eventually one card would be stored and one tested, and the testing funded by eliminating the oral swab; however, the swabs and the extra card were eliminated before that eventuality as a cost cutting measure. FTA cards were considered but not adopted. The freezers were eliminated and the pouches are now stored at room temperature.

On June 10, 1992, I gave the first specimen (#000001) at a ceremony at Fort Knox in Kentucky. DNA specimens were to be collected from active duty and reserve military personnel upon their enlistment, reenlistment, or preparation for operational deployment; all servicemembers were to be collected by the year 2001.

AFRSSR now contains DNA specimens from all branches of the U.S. armed forces, including reservists, national guardsman, and DoD civilians, the U.S. Coast Guard, certain other federal components and officials.

Mr. James Stavinoha, a Vietnam Cobra pilot, ably led the creation of the repository and the DoD collections. The military's DNA repository became a leader for forensic DNA databases across the country and held annual DNA repository countries for many years.

There are now over 6 million specimens, with over a quarter million DNA specimens are collected per year at over 1,000 sites. The repository has been used in over 5,000 death investigation cases since 1992.

Sued

The collection of DNA specimens from all servicemembers was seen as a threat by many concerned with genetic privacy rights and I and the program became a lightning rod on the issue. In speeches that I gave, there was nearly always someone who would ask if I had thought about the genetic privacy implications of our DNA collections. Often, as part of my response, would point out the DNA given voluntarily by millions of Americans when they licked the stamp and sent their tax payment in to the IRS. I had concerns about imposing this new requirement for a DNA collection retroactively, but the DoD attorneys pointed out that imposition of new rules was commonplace and necessary and that when a soldier signs up, he agrees with the rules then in effect and future rules imposed.

After the announcement of mandated DNA collections, the media sent scores of reporters out to far flung military posts to ask servicemembers what they thought of this program. To their surprise and my relief, they nearly always were not so concerned with privacy, but very pleased with the assurance that their remains would be identified, should they pay the ultimate sacrifice. Nonetheless, despite the widespread support for the program, there were some individuals, who expressed their objection to big brother by filling in "Mickey Mouse" for their name on the bloodstain paperwork.

In 1995, two Marines (Lance Corporal John Mayfield, Corporal Joe Vlacovsky) in Hawaii refused to give their DNA specimens prior to deployment, even after ordered to do so. They were charged with refusing an order of a superior officer. The charges were dismissed by the Court Martial judge and the Marine Corps appealed. They then brought a class action lawsuit in federal court against the Secretary of the Navy, the Commandant of the U.S. Marine Corps, the Base Commander, the Superior Officer, and others arguing that the requirement was an unconstitutional seizure. The District Court dismissed the case and the appellate hearing was televised throughout the 1996 Thanksgiving holiday on Court TV. The court threw out the case as moot and speculative (*Mayfield v. Dalton*, 109 F.3d 1423 (9th Cir. 1997)).

Aircraft Crashes

Most multiple fatality events handled by the AFMES requiring DNA identification aircraft crashes. The first aircraft crash which AFDIL worked involved a C-130 cargo plane from the West Virginia Air National Guard on a routine training mission out of the Martinsburg airfield crashed killing all 6 aboard on October 7th, 1992. This was personal to me because, I had been flying with this unit and these individuals to log flight time as a flight surgeon.

The first commercial aircraft accident worked by AFDIL was USAir Flight #427 that crashed in Aliquippa, PA, just north of Pittsburgh, Sept 8th, 1994, on killing 132 passengers and crew. 1,800 bags of fragment and debris were collected, generally weighing 1 to 2 pounds each. AFDIL performed testing on only on the pilot and co-pilot, because OAFME leadership was

unsure of how to draw the line between what is tested and what is not. There was an interest in a good identification of the pilot and copilot remains found in the cockpit in case toxicology might come back positive. However, only the sole of the foot of the pilot was recovered and the family of the copilot refused to give DNA reference specimens.

American Eagle Flight #481 crashed in Roselawn, Indiana on October 31st, 1994, killing all 64 passengers and crew. Again, AFDIL performed DNA testing only on the pilot and copilot.

TWA Flight #800 crashed off Long Island, NY on July 17, 1996 with 230 passengers and crew into the Sound. Remains were recovered from 120 feet below the surface in the deep salt water. Between 1,200 and 1,500 separate fragments were recovered. The Suffolk County Medical Examiner's office performed the DNA testing, except the last 14 skeletal remains that were successfully DNA tested by AFDIL. Remains from the entire manifest were identified—this was a first for a large commercial aircraft mishap.

EgyptAir Flight #900 crashed into the Atlantic Ocean off Rhode Island on October 31st, 1999 with 217 passengers and crew. The remains were recovered in sea water at a depth of 200 feet. 1,300 specimens were recovered. The success rate of the DNA testing was 94%. 354 family reference specimens were tested. The DNA testing was completed by October 2001 and resulted in 217 nuclear DNA profiles (94% success rate) with 139 DNA identifications; there were also 35 non-DNA identifications and 43 remained unidentified due to a lack of DNA reference specimens.

Alaska Airlines Flight #261 crashed into the Pacific Ocean, near Ventura, California, on January 31st, 2000, killing 88 passengers and crew. The human remains were recovered from 700 feet below the ocean surface. Ten bodies were mostly intact, otherwise there were 500 fragments. DNA testing was 93% successful and profiles were obtained for 85 victims. 58 individuals were non-DNA identifications, 30 were primary DNA identifications, and 3 were unidentified because their remains were not recovered.

The NTSB now has an MOA with AFDIL to perform DNA identifications for them as needed. AFDIL has worked many commercial airplane crash incidents since.

The 9/11 Attack

The September 11th, 2001 terrorist attacks involved American Airlines Flight #11 and United Airlines Flight #175 crashing into the twin towers of the New York City World Trade Center resulting in over 2,700 deaths, United Airlines Flight #93 crashing in Somerset, Pennsylvania resulting in 44 deaths, and American Airlines Flight #77 crashing into the Pentagon resulting in 189 deaths. By contrast, the attack on Pearl Harbor resulted in 2,400 deaths.

AFDIL performed the DNA identity testing for the UA Flight #93 Somerset and AA Flight #77 Pentagon crashes. The UA #93 Somerset crash, which involved 44 dead—including 4 terrorists, yielded the recovery of 583 specimens (71% bone, 24% soft tissue, 4% teeth, and 1% other).

104 reference specimens were tested. DNA testing was 92% successful and was completed in 65 days. DNA profiles were obtained for all 44 victims, but the 4 terrorists remained unidentified due to lack of family reference specimens. The AA Flight #77, which involved 189 dead, yielded the recovery of 983 specimens (62% bone, 31% tissue, 2% teeth, and 4% other). 50 repository reference specimens and 377 other reference specimens were tested. DNA testing was 99% successful and was completed in 60 days. DNA profiles were obtained for all 184 victims, but 5 victims (four individuals in the building and one aircrew not recovered) and the 5 terrorists remained unidentified.

The World Trade Center identifications were the responsibility of the New York City Office of the Chief Medical Examiner. The New York City identification effort was overseen by Dr. Charles Hirsh and their DNA identification effort overseen by Robert Shaler, then head of their DNA unit, however significant work was contributed by others. LabCorps, working with the New York State Police Department were responsible for the reference specimens. Bode Technology and Myriad Genetics performed STR nuclear DNA analysis, Orchid Cellmark performed SNP nuclear DNA analysis and Celera performed mitochondrial DNA testing. The NYC OCME laboratory also did bone and soft tissue STR testing. Significantly, the Bode, Myriad, and Celera efforts were headed by former forensic scientists from AFDIL (Mitchell Holland, John Ryan, and Rhonda Roby respectively). Also, the NIJ-funded Kinship and Data Analysis Panel (KADAP) established to facilitate the standards for the DNA identification effort, also included AFDIL leadership (Tom Parson).

The Unaccounted from Past Conflicts

Mitochondrial DNA and the Unaccounted Victims of Past Conflicts

In 1981, President Reagan placed the issue of accounting for American servicemembers from Southeast Asia as a matter of highest national priority. According to the Defense POW/MIA Accounting Agency (DPAA), there are currently 73,171 still *unaccounted for* from WWII, 7,819 from the Korean War, 1,621 from the Vietnam war, 126 from the Cold War, and 6 from Iraq and other conflicts (see: http://www.dpaa.mil/OurMissing/PastConflicts.aspx); and more before the AFDIL began.

The identification of remains from past conflicts was seen as an important mission of AFDIL. This would involve skeletonized remains with severely degraded DNA. We recognized that mitochondrial DNA (mtDNA) is far more abundant than nuclear DNA (nDNA) and thus would more likely to yield successful results. Unlike nDNA which is inherited from both parents, mtDNA is inherited from the mother as an exact copy. MtDNA had been pioneered as an identification method by Chuck Ginther in Mary-Claire King's lab to identify the Argentine disappeared. Mark Stoneking had used it to identify a set of remains found in the desert and Alec Jeffreys and Erika Hagelberg used it to identify the remains of Josef Mengele. AFDIL conducted research on the recovery of DNA from Civil War remains, using "ancient DNA" techniques, used by scientists to obtain DNA from insects in amber, frozen mammoth remains,

and neanderthal skulls. AFDIL also brought mitochondrial DNA testing into routine use for forensic identity testing.

In December 1991, AFDIL sent a team to the U.S. Army Central Identification Laboratory—Hawaii (CILHI) to develop a strategy for AFDIL support of CILHI casework. In 1992, with the establishment of Joint Task Force–Full Accounting (JTF-FA), the CILHI requested through the U.S. Army Deputy Chief of Staff for Personnel that AFDIL scale-up operations to increase case output. With approval from ASD (HA), initial funding was made available from the U.S. Army Casualty and Memorial Affairs Operations Center (CMAOC). AFDIL now continuously works on the identification of remains from past conflicts. Statistics for the identification of remains from past conflicts included:

As of March 2011, the DNA Registry had received 11,388 family references (78%) for the identification of 6,284 missing servicemembers from the Korean conflict, 3,008 family references (69%) for the identification of 1,817 missing from the Southeast Asian conflict, 1,929 family references (0.02%) for the 1,278 missing from WWI, 145 family references (72%) for 88 missing from the cold war, and 58 family references for 34 other missing; in all 16,528 references representing 9,501 families.

The Defense Science Board Study

On February 3, 1994, the Army suspended the use of mtDNA testing for identification after some families expressed concern over the technique and the Central Identification Laboratory in Hawaii obtained conflicting results from an outside laboratory. In May 1994, the Defense POW/MIA Office funded a Defense Science Board study of AFDIL's mtDNA testing efforts. The Task Force was chaired by Nobel Laureate Joshua Lederberg and included Jan Bashinski, Bruce Budowle, Peter Gill, Mark Stoneking, Douglas Wallace, Bruce Weir, and George Whitesides. In January 1995, they concluded that they had confidence in the AFDIL testing results and approved a set of quality assurance measures.

Abraham Lincoln

In June of 1989, Darwin J. Prockop of the Thomas Jefferson Medical School wrote to the Director of the AFIP to requesting access to biologic specimens of President Abraham Lincoln in the National Museum of Health and Medicine to test for Marfan's disease. An association of Marfan's disease with a mutation in the fibrillin 1 gene had been recently discovered. In 1991 and 1992, two panels were convened, each chaired by Dr. Victor McKusick. I participated in

both. In the first panel, we decided that it was ethically responsible to conduct the DNA testing. In the second panel, we decided that it was too early to conduct the genetic testing and that more research had to be conducted on the genetics of Marfan's disease. However, the panel did suggest that the putative biological specimens in the National Museum and others in private hands should be more carefully preserved and that they should be tested to authenticate them. Leadership in the military decided to postpone any testing indefinitely.

Tsar Nicholas II

On July 17, 1918, Russian Tsar Nicholas Romanov II, his family, and entourage were killed by the Bolshevik government, presumably on the orders of Lenin. However, the execution was kept secret and the remains were buried. In 1991, the primary remains site was discovered. Initial anthropologic examination appeared supportive but not conclusive and there was some controversy of which of the daughters was present. Pavel Ivanov, on behalf of the Russian government approached the UK-based Forensic Science Service (FSS), led by Peter Gill, in 1992 to perform DNA testing. They confirmed the genetic relationships of the remains, but could conclude only a 95% likelihood that the remains of Nicholas were present. Also, the results showed a double peak in Nicholas' DNA which was argued by critics to have been contamination, or poor technique. Pavel Ivanov then approached AFDIL in 1995 for further testing. He also exhumed Nicholas' brother Georgi. AFDIL was able to confirm the testing of the FSS, but also showed that the double peak was a "heteroplasmy" also present in Georgi, but lost to more distant relatives. In announcing these results at the Washington Press Club, a critic, Magerovski, at a microphone from the back of the room asked "Could be a KGB hoax?" Subsequently, more remains of the group were found and their identification made by AFDIL. Also, the DNA of Anastasia impostor, Anna Anderson Manahan was found to match that of Franziska Schanzkowska, a Polish factory worker with mental illness, by AFDIL, the FSS, and Mark Stoneking. AFDIL tested others claiming to be long lost relatives as well, but, of course, none turned out to be what they purported to be.

The ICMP

The International Commission on Missing Persons (ICMP) has become an internationally recognized for its forensic DNA identity testing capability and experience. It began operations identifying the 40,000 bodies in mass graves from the 1992-1995 ethnic cleansing/war in the former Yugoslavia. The first scientific director was ed Huffine and the second and current scientific director is Tom Parsons, both of which were AFDIL staff.

DoD Consolidated Genetics Program

Army Surgeon General Alcide LaNoue in 1992 appointed me to be the lead for a Process Action Team to create a consolidated genetics program for the military. I completed my report and such a program was created, but I declined to lead the effort and left the AFIP and the active duty Army shortly thereafter. Instead, Colonel Barry Thompson led this effort. However, the program did not last.

Lt Michael Blassie

The Tomb of the Unknowns in the Arlington National Cemetery (better known as the Tomb of the Unknown Soldier) began with the burial of the WWI unknown. Unknown remains from WWII, Korea, and Vietnam were added. As early as 1994, investigations suggested that the Vietnam unknown was Lt Michael J. Blassie, shot down near An Loc, Vietnam in 1972. His remains were exhumed in 1998, mitochondrial DNA testing confirmed the identity, and on June 30, 1998, the identification was announced. Blassie's body was returned to his family in St Louis, MO and he was reinterred in the Jefferson Barracks National Cemetery. This identification occurred shortly after I left the OAFME, but I was quickly informed, because I had made it a point that there should be no more servicemembers buried in tombs of the unknown—and there has not been.

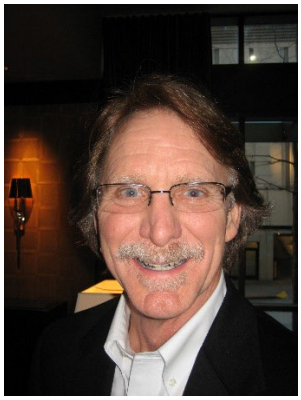
Move to Dover AFB

The Defense Base Closure and Realignment Commission (BRAC) voted to close the AFIP in 2005 and after a struggle to keep it open, the AFIP was finally closed (disestablished) in September 2011. The 50 million paraffin blocks and 10 million formalin-fixed tissue specimens, along with many rare and unusual specimens were given over to a newly created Joint Pathology Center.

The Armed Forces Medical Examiner System (AFMES) transitioned from the AFIP to the Medical Research and Material Command (MMRC) and physically moved to the Dover AFB, Delaware. Bodies of servicemembers who die abroad enter the U.S. through Dover. The Dover Port Mortuary was established in 1955 and was replaced by the Charles C. Carson Center for Mortuary Affairs in 2003. In August 2015, the AFMES was transferred from MRMC to the Defense Health Agency.

The AFMES and the DNA Registry continues to be involved in high profile cases, including the DNA identification of enemy combatants (e.g. 2003 Uday, Qusay, and Saddam Hussein), in addition to the identification of our own servicemembers. A Joint Federal Agencies Antiterrorism DNA Database was established for detainees and others from OIF/OEF.

NAME Research and Development Director



Steve Clark, Ph.D.

May 2016

In 1993, Jeffrey Jentzen, MD, PhD (then Chief Medical Examiner, Milwaukee, WI) became increasingly frustrated with county hiring practices; specifically, those related to the selection of individuals eligible to interview for "medical examiner investigator" positions. During a holiday gathering, Dr. Jentzen asked his lifelong friend Steve Clark, PhD if he would be interested in developing a training program for his death investigators. Dr. Clark (who had spent most of the nineteen-eighties developing custom curriculum and assessment standards [i.e., written tests and pass/fail criteria] for education and industry applications at Michigan State University) agreed; thinking it will be "fun" to work with Jeff.

In early 1994, Drs. Clark and Jentzen deployed a needs assessment survey to NAME members (Chief Medical Examiners and Coroners) hoping to determine the scope of the problem, if any. The survey results appeared to indicate that Dr. Jentzen was not the only Chief dissatisfied with their death investigator candidate pool. The decision was made to assemble a team of death investigators from around the country (i.e., the Milwaukee Taskforce) to create a training curriculum. This curriculum became the framework for the Medicolegal Death Investigator training text (basis for the National Guidelines for Death Investigation, NIJ 1997, 1999, 2010) and the MDI test item bank (Clark, 1994), that would become the foundation of the American Board of Medicolegal Death Investigators (ABMDI 1998) spearheaded by Mary Fran Ernst of Saint Louis University and the St Louis County Medical Examiner Office.

In 2003, after a two-day workshop titled: "The Medicolegal Death Investigation System" held at the National Academies in Washington DC; which highlighted (amongst other things) the jurisdictional differences that exist between medicolegal agencies and the barriers to national consistency; NAME Inspection and Accreditation Chair Garry Peterson, MD, JD (outgoing Chairmen of the Board) and Victor Weedn realized the need and opportunity to more specifically define the "forensic" autopsy and its role in medicolegal investigation. These "standards" would be reasonable, valid and most importantly; cut across jurisdictional

boundaries regardless of state or local leadership (Medical Examiner, Coroner, Justice of the Peace). After the meeting, Drs. Peterson and Weedn approached Dr. Clark and asked him to consider directing a NAME project similar the *National Guidelines for Death Investigation* project (which involved several NAME members and staff), but focusing on creating forensic autopsy standards.

Dr. Clark felt the proposed autopsy standards project was possible if the NAME leadership would support it and allow a fully executed consensus methodology for validation to proceed. Dr. Peterson agreed and created a "standards" subcommittee within the inspection and accreditation committee and began to solicit members. Dr. Clark was concerned about funding the effort, which he knew (given the validation process and committee member's schedules) would span several months or years to accomplish and contacted Susan Narveson (who he'd met at the National Academies workshop) for advice. Susan was acting director of the NIJ's Investigative and Forensic sciences division and a former crime lab director (Phoenix, AZ) who appreciated standards in the forensic sciences. Although the meeting with Ms. Narveson and other NIJ program managers was educational, Dr. Clark always felt the lack of an "official" R&D position within the NAME was a limitation with funding agencies (i.e., lack of commitment).

In 2007, Dr. Clark addressed the NAME Board of Directors (BOD) and asked them to consider creating the non-paid position of NAME Research and Development (R&D) Director. The title was officially established by President Joseph Prahlow and approved by the BOD soon after. The position allows the R&D Director to solicit membership involvement in activities which have potential for future grant procurement and advancement of the mission of the NAME.

Although the position of R&D Director was not officially established until 2007, the NAME leadership and its members have consistently been involved in forward-thinking (R&D) activities. The relationship between the NAME, Dr. Clark and his company Occupational Research and Assessment (ORA) was/is forward-thinking and has produced a number of significant and useful training, standards and assessment products for medical examiners and coroners nationally. In addition, many of these products provided funding for the NAME office and its members as consultants and educators. Some of these efforts continue to produce revenue for both organizations and employ dozens of people, full and part-time - from the staff at the ABMDI to the regional system administrators at NamUs.

- NAME Needs Assessment Survey (Unpublished research document, J. Jentzen, S. Clark 1994)
- Medicolegal Death Investigator Training Text (1996)
- National Guidelines for Death Investigation (1997)
- American Board of Medicolegal Death Investigators (ABMDI 1998)
- Sudden, Unexplained Infant Death Investigation Guidelines (2004)
- NAME Forensic Autopsy Performance Standards (2005)
- National Missing and Unidentified Decedent Reporting System (NamUs 2005)
- NAME Inspection and Accreditation Self-Assessment and Management System (I&A Online 2007)

- NAME Death Registry (2007)
- Electro Muscular Disruption Literature Review System (2008)
- NAME Pediatric Toxicology Registry (2008)
- Medical Examiner/Coroner Information Network (2014)
- NAME Drug Overdose Registry (2015)

History of the NAME Executive Vice President



Kurt B. Nolte, MD
NAME EVP 2009-2015

June 2016

Kurt B. Nolte, MD from the New Mexico Office of the Medical Investigator (OMI) and the University of New Mexico (UNM) School of Medicine became the second NAME Executive Vice President in March 2009 and served until December 2015. Dr. Nolte brought leadership experience as the OMI Assistant Chief Medical Investigator and the UNM Assistant Dean/Vice President for Research. NAME contracted for Dr. Nolte's time through a professional services contract with the University of New Mexico.

During his almost 7 year tenure as EVP, Dr. Nolte galvanized NAME's role in political advocacy including regulatory, legislative and judicial initiatives. This process involved soliciting and building support from other professional societies especially the College of American Pathologists as well as meeting with congressional staffers and authoring/editing NAME responsive documents. For example, Dr. Nolte led the development of NAME's response to the National Academy of Sciences report "Strengthening Forensic Science in the United States." Within NAME, Dr. Nolte served in an ex-officio capacity on the Government Affairs Committee where he focused and edited the committee material into documents for approval by the NAME Executive Committee. These documents included responses to position statements from the Scientific Working Group for Medicolegal Death Investigation, the Forensic Science Commission and other federal working groups, amicus briefs on topics involving the medicolegal death investigation system, as well as letters of support for a variety of programs.

Dr. Nolte also served as the "face of NAME", representing the organization in interactions with Federal agencies such as the Centers for Disease Control and Prevention (CDC), National Institute of Justice (NIJ), and the Food and Drug Administration. He was an interface with other outside groups that were focused on forensic pathology issues including the Innocence Project, and the Sudden Death in the Young and Sudden Unexpected Death in Epilepsy programs.

Dr. Nolte developed grant and contractual opportunities for NAME. He obtained CDC funding as the principal investigator for the combined NAME-American College of Medical Toxicologists position paper "Recommendations for the Investigation, Diagnosis, and Certification of Deaths

Related to Opioid Drugs" and served as a co-author. He also obtained funding from the CDC to provide data support for the National Violent Death Reporting System.

When hired as EVP, NAME leaders envisioned that Dr. Nolte would serve as continuity for projects that exceeded the term of elected leaders. During his tenure, he provided continuity for several long term projects including the relationship of the organization with the journals American Journal of Forensic Medicine and Pathology and Academic Forensic Pathology, advocacy for a model medical examiner law, and collaboration with the NIJ on issues of research and outreach.

Dr. Nolte participated in weekly conference calls with NAME leaders and the Executive Director, Denise McNally, monthly conference calls with the Executive Committee and twice a year meetings with the Board of Directors. While Dr. Nolte did not have a vote in committee meetings, he participated in all discussions. He served as an advisor and mentor to NAME leaders and assisted in providing strategies for NAME processes and responses. In 2015 Dr. Nolte stepped down as NAME EVP to become the Chief Medical Investigator for the New Mexico OMI.

History of NAME-L: Listserv of the National Association of Medical Examiners



Randy Hanzlick, MD

NAME-L Founder

From NAME International Relations Newsletter, March 2017

In the early 1990's, there was no regular communication vehicle for NAME members. In 1993, the *NAME NEWS* monthly newsletter emerged, but that did not allow for active communication among members. As a result, the CDC Medical Examiner/Coroner Information Sharing Program (MECISP) developed an internet-based bulletin board on which NAME members could read or post comments and information, and this was referred to as the "NAME Information Center" (NIC). The system had the drawback that users had to go to a specific web address to access the information.

As use of email dramatically increased in the 1990s and Listerv software emerged and was available through the Emory University IT department, NAME member and Emory faculty member Randy Hanzlick established "NAME-L" in 1994. The purpose was mainly to allow NAME to disseminate information to its members and to create a vehicle through which NAME members could seek assistance, share interesting case information, or engage in discussions about specific topics simply by sending an email to the NAME-L email address NAME-L@listerv.cc.emory.edu .

Of the roughly 1000 NAME members and affiliates, historically, about 700 are NAME-L subscribers. Participation is optional and there is no fee. About 500 messages are posted monthly, the majority of these from 100 or so regular users who tend to post messages rather

than just read them. There are a considerable number of "lurkers" who read messages but virtually never post messages. The number of messages per day in recent years has ranged from zero to about 50, with a mean of 12.

NAME-L has been the subject of occasional controversy. First, some users had expressed philosophical or even religious views that at best, only tangentially related to current topics on NAME-L. Second, an occasional user has levied personal verbal attacks against others. Third, the NAME-L archives had to be discontinued because some users were providing archived information to outside, non-NAME member parties and Emory also began to get subpoenas for archived information and did not wish to deal with that. These circumstances led to NAME's development of specific guidelines for NAME-L use which contain sanctions for those who violate the rules.

On a positive note, NAME-L has been of help to the financial status of NAME. When a member is delinquent in NAME annual dues payments, he/she is removed from NAME-L until dues are paid. This has been an effective tool to get membership dues paid up.

In general, NAME-L subscribers are limited to NAME members in all membership categories, with a few exceptions for people in public health and research approved by NAME in cases where access to NAME-L appears beneficial to both parties. With recent expansion of NAME membership categories, however, the need to grant special exceptions has essentially ceased.

Overall, NAME-L has brought NAME members closer together. The continual postings engage people. Members learn other member's names and how they think. There is sharing of information and a sense of collegiality. The positive things probably explain why NAME-L has now existed for 22 years.

<u>The rules for using NAME-L were published in July of 2015 and are as follows:</u>

The NAME listserv is an electronic forum for the members of NAME. The purpose is to have a convenient, rapid and global tool for death investigation related conversations, questions and announcements. NAME listserv conversations must be conducted with good manners and a tone that communicates respect for all members.

By posting to the NAME listserv, a member implicitly agrees to the following rules and potential sanctions. Further, the member agrees that it is the sole discretion of the listserv administer and NAME to determine if a violation of these rules occurred.

<u>NAME Listserv Rules:</u>

1. **Professionalism.** Communicate in a professional manner. Do not use foul language or inappropriate slang.

2. **Threats/Attacks**. Flaming or "personal attacks" have no place on the listserv of a professional association. A disagreement is not a personal attack if expressed respectfully and with courtesy. Varying opinions on a topic stimulate professional development, and must be expressed with civility and respect. Disrespecting one's right to express an opinion is not allowed. Language that can be interpreted as obscene, racist, sexually explicit or defamatory in any way is not allowed.

3. **Solicitations**. Solicitations or commercial advertisements are prohibited. Spam or blatant promotion of businesses, commercial products or services is not allowed. Announcements of new commercial products, events or services known to you or even from your own company are acceptable as long as they are not direct solicitations. A post may include links to advertisements on websites but do not include the advertisement in the message.

4. **Copyright**. There will be no infringement of intellectual property. Users may not use the discussion board to post a message that infringes copyright, trademark, patent, or other intellectual property law.

5. **Religion**. There will be no promotion or disrespect of religious beliefs. Respect the sensibilities of all and avoid using religious based salutations and other expressions of religious identity or preference. It is acceptable to discuss how religion may play a role in the work of medicolegal death investigation or how religious issues could be studied in research (e.g., permissibility of an autopsy in different religions).

<u>Violation of NAME Listserv Rules:</u>

The NAME listserv administrator and NAME reserve the right to discontinue listserv access or end posting privileges of a member who violates Listserv Rules. Suspension of an account may occur without prior notice to the member. The listserv administrator or NAME will notify the individual through a private email after the action.

1. **First Violation – Warning**. A member who violates the above rules for the first time will generally receive a communication from NAME or the listserv administrator about the inappropriate nature of the post(s). There are several exceptional conditions that could lead to immediate removal from the list (see #4).

2. **Second Violation – Suspension**. If a second violation occurs, the member will be denied posting privileges for a period of time commensurate with the seriousness of the incident.

3. **Third violation - Permanent Removal.** A third violation will result in non-time limited removal of the individual from the listserv. Mitigating circumstances may be cause for avoiding removal but this would be based on private correspondence with the listserv administrator and

NAME. Reinstatement will only be allowed under unusual circumstances and is entirely at the discretion of the administrator and NAME.

4. **Extreme incident**. Posting of illegal material, purposeful dissemination of viruses or intentional unprovoked personal attacks will result in immediate revocation of posting privileges.

An appeal may be submitted to the NAME Executive Committee. The EC may seek assistance from the NAME Ethics Committee to evaluate an appeal.

The initial posting of these occurred on NAME-L on July 6, 2015.

The NAME Inspection and Accreditation Process



Dave Fowler
MB.ChB. M.Med. Path (forens)

From NAME International Relations Newsletter, January 2016

The National Association of Medical Examiners developed an inspection and accreditation process over 30 years ago. To date, almost 80 of the larger offices in the United States and Singapore are accredited either at the full accreditation level, provisional accreditation, or are in process of obtaining accreditation. The number of offices applying for accreditation both in the US and overseas has accelerated rapidly over the last 5 to 10 years.

The population served by offices that are accredited in the United States alone is approximately 129 million residents. So while the number of offices appears relatively small, many of the larger metropolitan areas have achieved full accreditation. This peer review accreditation provides the office with independent proof that they have appropriate resources in the way of equipment, facility, staffing and have this backed up with appropriate protocols to ensure that death investigations in the jurisdiction are being done appropriately. The National Association of Medical Examiners also reviews the autopsy practice standards and verifies that all of the important practice standards are mirrored within the accreditation checklist.

To become accredited is a relatively simple process. The checklist is available online and can be downloaded, and the office staff can perform a self-evaluation which is usually very close to the final outcome. This allows the office to identify any deficiencies and correct these before moving forward. In conversations with most offices, it appears that the generation of the appropriate protocols seems to be the greatest stumbling block. However, there are many colleagues in other offices that are already accredited that will share their own protocols which can then be adapted to meet the needs of the local workflow, statute, and regulations. Generating these protocols is usually not difficult especially if shared across multiple staff members.

Once the office considers itself relatively well prepared, it can apply for inspection by going to the online access for inspection accreditation. The office needs to be registered. Once this is completed, individuals within the office can be assigned the responsibility of completing certain sections of the checklist. Hence one can take the chief investigator and assign the investigation checklist questions to that individual and the same is true for autopsy services etc.

The checklist is divided into appropriate sections, and next to each of the checklist items is a place for the user to attach documents and all photographs. This is extremely useful in that you can photograph certain items that the inspectors will need to see to prove that you have these resources in place. This greatly speeds up the inspection process. Many offices will also attach other evidentiary documentation that is required such as licenses of the medical staff, board certifications, and the policies and procedures that need to be reviewed by the inspectors. So the checklist can be used as a wonderful repository of all essential documents that may be needed.

Once the entire checklist is completed, the user will click the submit button which sends an email to the NAME office. The NAME executive director then issues an invoice. Upon payment of the invoice, the inspector selection begins. Typically, an email is sent to all active trained inspectors calling for volunteers to inspect that particular office. If the office is very large, then two inspectors may be assigned. In some circumstances, one inspector plus a trainee inspector will be assigned.

The inspection is arranged at the convenience of the office and the inspector(s). The inspection typically takes two days. The inspection process starts out with a pre-inspection conference where the inspector meets all of the key individuals within the facility. This is generally followed by a tour of the facility to identify the facility checklist items that need to be validated. The inspectors have the right to validate each of the checklist items by multiple means. This may be direct observation, review of documents, discussion with staff, or any other appropriate methods. At the end of the two-day process, a post inspection conference is held where the inspector will inform those present of any identified deficiencies. While this is a provisional result, as the final review has not yet been done by a secondary reviewer, in most circumstances it generally does reflect the final outcome.

The inspector will submit a written report which goes to a secondary review. If there are any differences of opinion, these are resolved either between the inspector and reviewer or between the inspector and the inspection committee. Once this is completed, the final decision is communicated to the office. If the office qualifies for accreditation, then a certificate is issued and mailed to the office.

To qualify for full accreditation, the office must have no phase 2 deficiencies and 15 or less phase 1 deficiencies. For provisional accreditation, the office must have five or fewer phase 2 deficiencies and 25 or fewer phase 1 deficiencies. Full accreditation is given for a period of five years, with an annual review. Provisional accreditation is given for one year and can be

renewed annually for up to five years providing there is evidence given to the inspector of a good faith attempt to resolve all deficiencies.

The checklist is one which is approved by the NAME board of directors and hence any changes to it are voted on by that body. Permission was recently granted by NAME for sections of the checklist to be used in the generation of a similar inspection process to be used in Europe.

NAME also offers a pre-inspection which is very similar to the inspection process but does not count as an official inspection. It is largely directed at educating the office with regard to how the inspection process takes place. This is occasionally requested by offices that have never been inspected before. The other product that the inspection and accreditation committee offers is a full audit/assessment. This is a very in-depth assessment of the death investigation system in that jurisdiction. It delves very deep into statutes, regulations, budget, staffing, resources and facility, equipment etc. A comprehensive report is then provided by the three inspectors describing all the issues that the jurisdiction faces with regard to death investigation. This is an expensive process and typically the inspectors are three very senior forensic pathologists, usually past board members and often medical examiners who have been chief medical examiners in the past. This type of assessment is typically undertaken by jurisdictions that are in transition or experiencing difficulties for one reason or another.

Any questions concerning the NAME inspection and accreditation process can be directed to the inspection and accreditation committee. Many questions may be answered by visiting the NAME website.

The NAME Foundation



Joseph A. Prahlow, MD
Chair, NAME Foundation

From NAME International Relations Newsletter, April 2016

INTRODUCTION & HISTORY:

The NAME Foundation was conceived of and created by Tom Noguchi, MD, retired Chief of the Los Angeles Coroners Office, former President of the National Association of Medical Examiners, and Co-Chair of NAME's International Relations Committee. The NAME Foundation is a nonprofit charitable corporation established in 1996. It is organized and operated exclusively for public charitable, educational, and scientific uses and purposes, in such ways as the Board of Trustees of the corporation shall determine at its discretion. Over the years, the Foundation has largely remained "behind the scenes," visible only to NAME members, typically at the Annual and Interim NAME meetings, and occasionally via postal or electronic communications. The overall goals of the Foundation are to advocate for the profession of Forensic Pathology, particularly via maintaining its history and promoting education and research. Over the years, the Foundation has, through the generous donation of its members, built a fund of more than $300,000. As we move forward, the NAME Foundation hopes to substantially build its financial resources and commit to more actively promoting forensic pathology. It's quite easy to become a member of the Foundation. Membership is open to all NAME members, including affiliate members. Required annual donation: $50 US for NAME members and $20 US for NAME Affiliates. Membership is also open to non-NAME individuals and entities.

ACTIVITIES: The Foundation exists to promote forensic pathology and death investigation, specifically via advocating for research and education, and by preserving history. Four times a year, the NAME Foundation creates and electronically distributes a Newsletter, informing NAME members of various activities. In most issues, a particular individual is highlighted. Prior issues are available via the NAME website. Specific activities and highlights of the Foundation include the following:

- Sponsoring the Awards for Best Papers and Posters (by Residents and Students) at the NAME Annual meeting.
- Sponsoring NAME Annual Meeting activities, such as the silent auction, the 50/50 raffle, morning yoga sessions, and entertainment activities (such as magicians and celebrity impersonators at the opening banquet).
- Financially supporting guest speakers at NAME meetings.
- Providing scholarships to students and residents to offset the costs associated with attending meetings to present papers/posters.
- Participating in a recent campaign in honor of Dr. Noguchi's late wife, Hisako, where donations totaled greater than $20,000, including the $10,000 matching contribution from the Fredric Rieders Family Foundation.
- Celebrating NAME's 50th Anniversary in 2016 by producing a commemorative coin (see image).

MEETINGS & LEADERSHIP: An annual meeting of the Foundation membership occurs in conjunction with the NAME Annual Meeting. The leadership of the Foundation consists of a Board of Trustees (BoT), elected by the Foundation membership, who serve 3-year terms, with a maximum of 2 consecutive terms. The BoT annually elects a Chair, a Vice Chair, a Secretary, and a Treasurer, who serve as the Officers of the corporation. Tom Noguchi is the Foundation's "Founding Director," and serves as a lifetime Board member. The BoT has two face-to-face meetings per year, in conjunction with NAME's Annual and Interim meetings. In addition, conference calls occur throughout the year, at least once every two months. A list of the current NAME Foundation BoT is included at the end of this article. In addition to the BoT, the Foundation now has an official "Advocate," Dr. Jan Garavaglia. In certain ways, she will become the "face of the NAME Foundation," as we move forward in advocating for forensic pathology and death investigation. Please refer to Volume 2, Issue 3 of the Foundation Newsletter for more details about our official Advocate. A number of Foundation Committees exist to ensure that the Foundation can be successful in achieving its goals. Committees include: Membership, Bylaws, Investment/Finance, Fundraising, Advocacy, Newsletter, Silent Auction/Meeting, Research, Education, History, and Long-Range Planning. While BoT members lead and serve on committees, committee membership is open to all Foundation members. International member participation is welcome!

INVITATION: The NAME Foundation welcomes all NAME members (and others) who have a desire to advance the causes of research, education, and history preservation within the world of forensic pathology and death investigation. In this inaugural issue of the International Newsletter, the NAME Foundation would especially like to invite NAME's international members to consider joining this organization that was started by our very own Tom Noguchi. Remember that nonindividual, corporate/institutional membership is also an option. Thank you for your consideration.

NAME Foundation Board of Trustees (2016)

Chair – Joseph A. Prahlow
Vice Chair – Margaret S. Greenwald
Secretary – Gregory A. Schmunk
Treasurer – Michael Graham
Founding Director – Thomas Noguchi
Trustees: John Butts, Mary Case, Joe Felo, Marcella Fierro, Jan Garavaglia, Mary Goolsby, Jim Luke, Amy Martin, Yvonne Milewski, Chris Milroy, Michael F. Reiders, Joel Sexton
Ex-Officio: Steve Cina, David Fowler, Marcus Nashelsky

NAME Organ and Tissue Procurement Committee



Samantha Wetzler, MD
Chair

From NAME International Relations Newsletter, November 2016

The idea of organ and tissue transplantation has roots in early art and literature. World War II, and the returning disabled veterans gave modern medicine the first real push to develop the science. The U.S. Navy established the first tissue bank in 1949, where they stored and processed bone. By the 1980's there were over 300 nonprofit bone banks. Today, tissue donation has expanded to include skin, nerves, cornea, heart valves, vascular tissues, cartilage, and many different forms of bone. Solid Organ transplantation in medicine began slowly in the 1960's but with continued advances in vascular anastomoses, improved immunosuppressive management, and new storage and preservation solutions transplantation is now only limited by the shortage of suitable donor organs. There were over 30,000 solid organ transplants and 1,000,000 tissue transplantations in the U.S. alone in 2015. These numbers are truly fantastic, except when one considers the 123,000 people currently on the waiting list for an organ. There are also crossover tissue/ organ transplants which are vascularized whole limbs, or even a face. Medical science has truly caught up with the previously only fictional possibilities.

Modern transplantation successes are both miraculous, and commonplace. More so than in any other facet of medicine, human factors come into play making the stories of transplantation tragic, selfless, hopeful, and incredibly moving, much like our own forensic cases. It is no surprise that there is huge overlap in the prematurely ended lives of a previously healthy person (who becomes a medical examiner's case) and an ideal organ and tissue donor. It has been said that up to 70 % of donors are also medical examiner cases. There is no wonder, that as transplantation science evolved and improved so did the demand for healthy donors, and hence the ever-increasing involvement of the medical examiner's (caseload) patients.

The NAME organ and tissue procurement committee is a long-standing ad hoc committee that was established in some form, but by a different name in 1992 to address the increasingly more common intersection of postmortem anatomical donations and medical examiner cases. The

first iteration was chaired by Dr. Tom Hegert, who continued to chair the committee and its changing names until Dr. Wetli became chair of the Ad Hoc committee: developing guidelines for the relationship between tissue procurement agencies and medical examiners/ coroners in 2002. It finally became known by its present title, The Ad Hoc Organ and Tissue Procurement Committee in 2009. Early minutes of the committee meeting (Nashville 2004) suggest basic office and workflow procedures for interactions between organ and tissue procurement agencies and death investigations. The minutes also discussed the plans for the sentinel Organ and Tissue donation position paper which paved the way for the successes of ME/ Coroners facilitation of donation and transplantation we currently celebrate.

The charge of the committee remains much the same today – to discuss best practices, brainstorm solutions to difficulties encountered, and spread awareness of the cooperative possibilities between the agencies and to facilitate relations. The committee meeting itself is a forum for lively discussions and education as it is attended by many NAME members, as well as being open to guests who mostly represent organ, eye, and tissue banks, or their associated national representatives. Many of the difficulties medical examiners/ coroners encounter with donor cases stem from misunderstandings, and miscommunication regarding the timing, goals, and needs of the ME to adequately complete their death investigation. So having all parties around a friendly table, hearing all sides of the issue from several different viewpoints and working together to find a solution is one of the best features of the committee. Sparked from these discussions came the platform and open discussion presentation Sustaining and Saving Life – Understanding Organ and Tissue recovery (NAME Portland 2014.) Additionally, several committee members worked to update the Medical Examiner Release of Organs and Tissues for Transplantation position paper published in 2014.

Even more fun, and educational are the newly established Sunday evening informal presentations at the very popular “Bring your own stories” event during the NAME annual meetings. Through the work of Dr. Dan Schultz and myself we have arranged for the American Association of Tissue Banks (AATB), and the Association of Organ Procurement Organizations (AOPO) to fund the venue and light fare for these very frank discussions of complications, difficulties, complaints, and occasionally highlighting the rarely seen benefits of our involvement in these donation cases. Last year we had a donor mother speak about the incredible comfort her family took in the knowledge that her son’s fetal tissue donation has had wide reaching impacts on medical research and preventative health treatments for so many people they will never meet. It is a story we do not often hear, and a thanks we rarely get. Too often death investigation teams do not get thanked for the vital role they play in saving lives or contributing to the basic understanding of medical knowledge with vast preventative health implications. Allowing access to previously consented organs or tissues for donation, transplantation or research is essential to the public health aspect of our calling.



The Organ and Tissue Procurement Committee
"Bring your Own Stories" 2014



"Bring Your Own Stories" 2015 hosted by Dan Schultz and Samantha Wetzler



"Bring Your Own Stories" in Minneapolis, 2016.
Samantha Wetzler and Dan Schultz at the podium.



All were welcome! A great deal of questions were asked and answered, stories told, information shared, and progress made in the area of organ and tissue procurement in forensic cases.

Everyday people, as well as the lawmakers representing them, have embraced the altruistic ideal of donation, as recent legislation favoring (or lamentably requiring) donation despite medical examiners protests have demonstrated. In fact, more than half the Unites States adult population is registered to be an organ or tissue donor. While the US averages 26 donors per million people, other countries are more successful, namely Spain (35.3 donors per million population) Croatia, and Portugal. Many of these countries have the "opt out of being a donor" system, which assumes a person wants to be a donor unless they actively opt out of being one. Regardless of donor status most countries still seek family agreement as well. There are similar organ and tissue banks in Europe and around the world to combat similar diseases and conditions. There are over 56,000 people on the organ waiting list in the EU. But not everything is the same, Iran has nearly eliminated its waiting lists for kidneys by making it legal to sell one. Much of the rest of the developed world has donation and transplant programs, similar to the US practices, but many also import tissues from the U.S. All countries have laws to regulate the practices, (ethically and financially) and to monitor safety, but so far we have not had any

international visitors come to the committee meetings to share their perspective. Hopefully that will change with this open invitation!

NamUs



Randy Hanzlick, MD and Steven Clark, PhD

The National Missing and Unidentified Persons System – 10 Year Update

From NAME International Relations Newsletter, December 2017

The National Missing and Unidentified Persons System (NamUs) has been fully functional online for ten years. Although the original system(s) were developed in 2005-06, the National Institute of Justice (NIJ) officially funded the NamUs project (namus.gov) as a sustainable program in 2007. Since its launch, the NamUs sites (NamUs consists of three databases: NamUs-MP [Missing Persons], NamUs-UP [Unidentified Persons] and NamUs- UC [Unclaimed Persons]) have logged over 50 million visits, and been credited for assisting in the identification of over 1200 deceased individuals and locating over 1800 missing persons. The system has established itself as the primary database for unidentified persons by the National Association of Medical Examiners (NAME) and the International Association of Coroners and Medical Examiners (IAC&ME). Both professional associations require accredited offices enter their unidentified cases into national databases, and NamUs is the only national database with universal access across all medicolegal jurisdictional types, both legal (law enforcement) and medical (medical examiner, coroners, and justice of the peace officials).

In the last decade, NamUs has been used by national agencies like the US Department of Justice (USDOJ), National Crime Information Center (NCIC), the Violent Criminal Apprehension Program (ViCAP), the Bureau of Justice Statistics (BJS), the National Center for Missing and Exploited Children (NCMEC), the FACES Laboratory at Louisiana State University, the DOE Network, and many more to improving and refining their search criteria while investigating missing and unidentified persons cases. Even more significant is that the majority of the 50 million plus visitors for the NamUs system have been members of the public. The ability for public users to search and comment on presented case data has been critical to the success of the program.

NamUs starting as a pilot on-line system named the Unidentified Decedent Reporting System (UDRS) in 2005 after discussions at meetings held by the International Association of Homicide Investigators (IHIA) and the National Center for Forensic Science at the University of Central Florida (UCF). These meeting were held in 2003-04 to develop best practices for the investigation of missing and unidentified person cases. During this time, there were also multiple awareness meetings held by the US Department of Justice to emphasize the need for improved investigations. Since its launch, NamUs has been recognized as a true innovation in the fields of technology, investigation and service. Including: the 2009 International Association of Chiefs of Police iXP Excellence in Technology Award, the Computerworld 2010 Laureate award for software the serves society, the 2011 Samuel J. Heyman Service to America Medal, the 2011 August Vollher Award for Excellence in Forensic Science and the 2012, Paul H. Chapman Award from the Foundation for Improvement of Justice. Although the author and his staff continue to serve as national system administrators for NamUs, day-to-day operations and administration is run by staff at the University of North Texas Health Science Center and its Center for Human Identification.

Like all data systems, NamUs is only as good as the data in it. Trust, distrust, and lack of confidence are critical components to online data use (American Press Institute and the Associated Press – NORC Center for Public Affairs Research, 2017). In today's social media-sharing communities, research appears to indicate that "who is sharing" the information, is more important to users, than "who is creating" the data. NamUs attempts to avoid the pitfalls associated with extraneous/garbage data in two simple ways, 1) limiting the number of data fields and 2) respecting the user. From the early stages of development, NamUs instituted a formal structure for data review and vetting. The NamUs Regional System Administrators (RSA) are the gatekeepers and eventual "sharers" of NamUs data online.

Data vetting is critical, however NamUs has one other unique advantage over other on-line "tools" attempting to identify human remains; NamUs receives all UP data from primary sources; the medical examiner, coroner and Justice of the Peace [ME/C/JP]) users, and its missing persons (MP) data from verified law enforcement users. NamUs is a "data system" which processes information using algorithms developed using "textbook" investigative and forensic science practice. In addition, NamUs takes advantage of what computers do well – mathematics. For example, unidentified human remains discovered in 2016 and estimated to be 20-30 years old can be excluded as "the" missing person born in 1955. The most notable auto-search function is the "possible matches" search. This feature runs 24/7 and tags unidentified cases with missing persons cases on data fields such as a decedent's physical characteristics (e.g., estimated height, sex, etc.) with known date-ranges and discovery history. These possible matches help investigators narrow their searching and rule-out cases as possible matches, which in-turn helps all NamUs users.

Fortunately, medical examiner and coroner (ME/C) investigators identify most individuals within hours of discovery, and rarely have cases that remain unidentified beyond 30 days. This results in a manageable average of three or four "new" unidentified cases daily and (depending

on local resources) another dozen or so submissions of what are commonly considered “cold” cases, or “changes” to existing cases already in the system, which are also reviewed before going “live.” In addition, case “entry” privileges are limited to official agency representatives (ME/C, law enforcement, etc.) or their designees, which makes verification of cases easier.

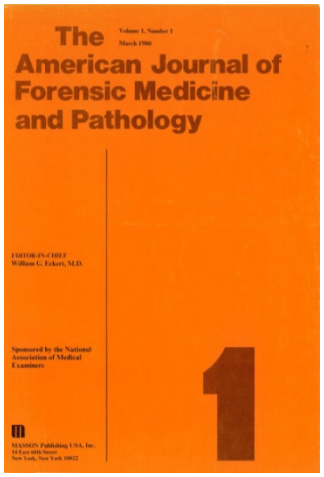
Timely review and publication ensures broad-based distribution of case information to a growing internet community of NamUs “users” - who review cases daily. By harnessing the power of the public, NamUs becomes a powerful tool for both investigative agency personnel and the general public who seek answers to questions about missing persons and unidentified decedents. NamUs is an online system with powerful search capabilities, functions that allow users to construct and save custom searches looking for the smallest details in a case. From a single missing tooth - to specific clothing details, if the data was entered, you can search for it. Complex searches can be saved and rerun periodically, as new cases are entering the system daily.

NamUs was an “early adapter” of today’s 100% webbased cloud computing. The idea of using the internet as an investigative system was not an easy “sell” in 2005, today the model has been embraced as the “internet of things” by largest companies in the Dr. world. As technology becomes more interactive and accessible, NamUs will continue to evolve and has the potential to become more global is use and effectiveness in the resolution of these complex cases of missing and unidentified persons cases.

The American Journal of Forensic Medicine and Pathology

The American Journal of Forensic Medicine and Pathology (AJFMP), affectionately known as the "orange journal", is happy to renew their affiliation with the National Association of Medical Examiners (NAME), a relationship which goes back over 30 years.

AJFMP History



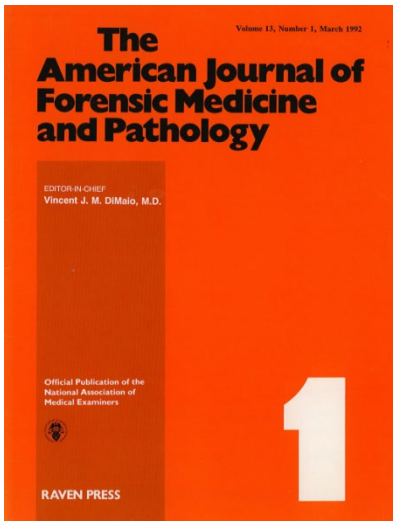
First Issue of the AJFMP (March 1980)

The development and publication of the *American Journal of Forensic Medicine and Pathology* is largely due to the efforts of the first Editor-in-Chief, Dr. William Eckert. Dr. Eckert ushered in a new era in Forensic Medicine with its development, being the first journal dedicated solely to the medical side of forensics. Dr. Eckert served as Editor in Chief for just over ten years before retiring. For more about Dr. Eckert's life and contributions, please see Dr. Thomas Noguchi's tribute to him in the December 1999 issue of the AJFMP (*Noguchi, T William Gamm Eckert, M.D. (1926-1999), AJFMP, 20(4): 388-389*).

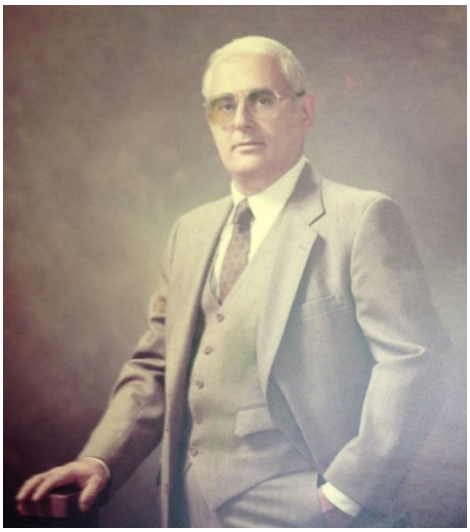


Dr. William Eckert

In 1991, Dr. Vincent DiMaio followed Dr. Eckert as Editor. Under Dr. DiMaio's leadership, the journal grew from its initial readership of mainly NAME members to acceptance by foreign medical centers and libraries, increasing not only the international readership but also overseas submissions and expanding the realm of the journal. Dr. DiMaio led the journal for 25 years.



First issue of AJFMP with Dr. DiMaio as the Editor in Chief (March 1992)



Dr. Vincent DiMaio

Dr. DiMaio retired as Editor-in-Chief at the end of 2017. His legacy will be celebrated in the inaugural AJFMP feature *The Scalpel is Passed*, to be published later this year.

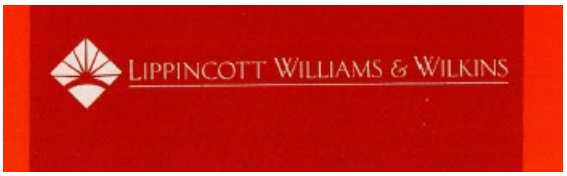
Publishing History

Shortly into Dr. DiMaio's tenure, the journal also underwent a series of publishing changes. At its inception, AJFMP was published by Raven Press which merged with Lippincott publishing in 1995, becoming Lippincott-Raven.





In 1998, Lippincott-Raven merged again, this time with Williams & Wilkins publications, and the AJFMP was published under the Lippincott, Williams & Wilkins publishing house.

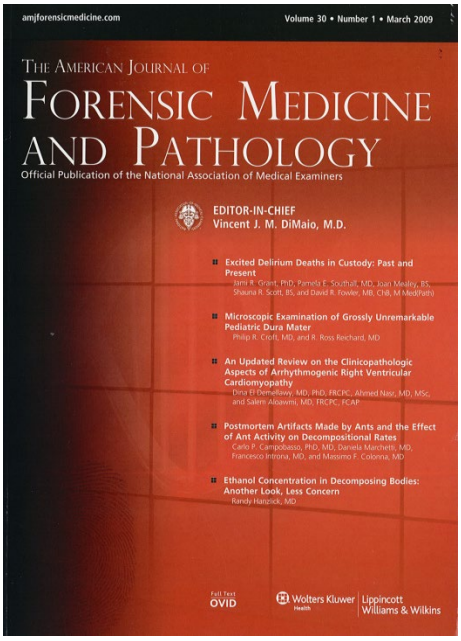




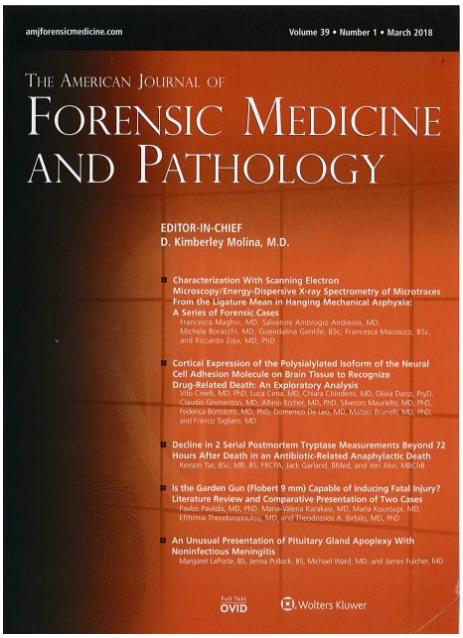
Between 2007 and 2009, Wolters Kluwer, which owned LWW, published the journal under the LWW-Wolters Kluwer name before dropping LWW altogether in 2009, and publishing the journal under the parent company of Wolters Kluwer.



Also in 2009, the iconic "orange" journal saw its first cover art change, to a more modern and dynamic artistry, but without losing that traditional orange color.



First issue debuting new cover art (March 2009)



AJFMP with Dr. Molina as Editor in Chief (March 2018)

AJFMP Now

In 2018, Dr. Kimberley Molina took over as Editor-in-Chief of the AJFMP, renewing its relationship with NAME and introducing new content areas and benefits to the readers and reviewers alike. The journal remains dedicated to providing its readers with the most informative and up to date information in the field with articles like Correctly Identifying Deaths Due to Drug Toxicity Without a Forensic Autopsy by Dye et al. (in AJFMP, 40(2):99-101. 2019) and Applied Force During Prone Restraint: Is Officer Weight a Factor? By Kroll et al (in AJFMP, 40(1):1-7. 2019)



FIGURE 2. Local handcuffing techniques. Double knee (A) and single knee (B). (From Kroll et al)

As well as unique and educational case reports like Horticultural Homicide: Stab Wound to the Chest Masquerading as Impalement by Rose Bush by Hlavaty and Sung (In: AJFMP, 39(4):341-344. 2018) and Suicide Decapitation by a Detonating Cord by Khara and Herath (In: AJFMP, 40(2):140-143. 2019).



FIGURE 2. Close-up of detachment site. (From Khara and Herath)

The AJFMP also now publishes *Historical Reviews* which offer a look at historical topics or cases through a 21st century lens. For example, the most recent issue of the AJFMP featured an article by Behera, Chauhan and Sikary discussing the various artifacts that can be seen on a body due to the various pigments used during celebrations in India.



FIGURE 1. (A) Reddish purple discoloration of face after cleaning due to the color used in *Holi*, (B) the worn clothes are also stained with the color. (from: Behera C, Chauhan M, Sikary AK Body Coloration Artifacts Encountered at Medicolegal Autopsy in India, AJFMP, 40(2):129-135)

The journal has also invited reviews from leading experts on topics ranging from Sudden Unexplained Deaths in Epilepsy to Gunshot Residue analysis.

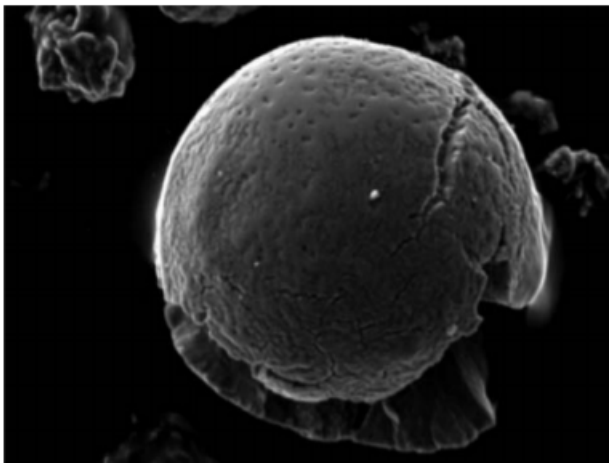


FIGURE 3. Lead, barium, and antimony GSR particle. (From: Vachon CR and Martinez MV, Understanding Gunshot Residue Evidence and Its Role in Forensic Science, AJFMP, Publish ahead of print)

Premiering later this year is a new series entitled *The Scalpel is Passed* where mentors in forensic pathology are interviewed by those they trained. The inaugural interview is of Dr. Vincent DiMaio as conducted by Dr. Suzanna Dana. Included with this series will be audio recordings of the interviews which will be available online.



Dr. DiMaio and Dr. Dana
from
The Scalpel is Passed: A Conversation with Dr. Vincent DiMaio

AJFMP Future

Building from its solid foundations, the AJFMP is focused on continued improvement and growth in the future. It is proud to offer Continuing Medical Education credits to its reviewers and hopes to offer CME credits to its readers in the coming year. Additionally, new features, both online and in print, are in design as well as new cover art.

Fun Facts and Quick Stats

The AJFMP:

- is indexed by Index Medicus/MedLine, Web of Science, Current Contents/ Clinical Medicine, Excerpta Medica/ EMBASE, & SCISEARCH
- is available worldwide to nearly 3,000 institutions online
- has an average of 4,500 article views each month
- is now available online to all NAME members at: https://journals.lww.com/amjforensicmedicine/pages/default.aspx

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"I am my own man" – Dr. John F. Edland and his legacy of truth in the story of Attica



Presented by his daughter, Gretchen Edland Perry, to the NAME Annual Meeting October 24, 2021, West Palm Beach, FL

The PowerPoint presentation is available here

Thank you very much to Dr. Mary Ann Sens and the NAME organization for reaching out to me, my mother, and sisters to participate in the 2021 NAME Annual Meeting to honor my father, the late Dr. John F. Edland.

It is hard to believe that it has been 50 years since the events of the Attica prison riot and its aftermath. (Title slide here.) My father was only 36 years old when he was thrust into the national spotlight by revealing the truth after performing autopsies on the hostage and prisoner casualties following the forced retaking of the Attica state prison by NY state police. His appointment as the Medical Examiner of Monroe County in Rochester, NY and his legacy of truth in the story of the Attica events were the greatest challenges of his career. At the time he was one of 114 forensic pathologists in the United States and considered by his peers to be one of the foremost in his field. (Rochester Times Union, September 17, 1971.) His office in the city of Rochester, NY performed about 500 autopsies a year of the roughly 6300 deaths that occurred annually in Monroe County. (Power Point slide of John F. Edland in his office with his chief photographer, Ed Riley.)

A short background history of how the riot happened and later how my father got involved is important to tell. Before September 9, 1971, the day the riot happened, tensions were building

between the prison population which was predominantly black and Hispanic and correction officers who were white. Poor conditions existed at the Attica prison; a desperate need for reform was voiced, only to get answered with mere lip service. The prison that housed the inmates was divided into four lettered sections and recreation yards, designated A – D. (Slide of Attica prison layout here.) In the months and days leading to the riot itself, there were several incidents which escalated tensions. The spark leading to the actual explosion on September 9 involved a misunderstanding between inmates from A block and correction officers the day before. Horseplay in one of the recreation yards between two inmates on September 8 was deemed an altercation by correction officers. These two inmates were subsequently taken to solitary confinement – the rest of the company from A block from where these inmates were housed protested. The next day on September 9, the protesting inmates from A block jumped their guards in letter A tunnel after being denied recreation access. After chaos ensued, A block inmates then attempted an attack on the central location of the prison called Times Square. At Times Square a defective weld in one of the gates broke because of immense pressure being put on the gate by the storming prisoners. One of the guards at the Times Square location, William Quinn, was severely beaten. Mr. Quinn died two days later on September 11, 1971.

After storming and breaking into Times Square, keys at this location were obtained giving the prisoners further access to other parts of the prison. Ultimately, 1281 prisoners took over 40 hostages and congregated in D yard, an open-air recreation yard in the interior of the prison. Prisoners submitted a list of 31 demands for reform. 28 of the demands were agreed to rather quickly such as less pork in the prison diet out of respect for Muslim inmates, better communication privileges for all inmates, and more recreation time. (McKay Commission.) The leader of the prisoners undertaking negotiations, named L. D. Barkley, sums up the conditions that many prisoners were experiencing at Attica as quoted in the following statements: “We are men: We are not beasts and we do not intend to be beaten or driven as such… What has happened here is but the sound before the fury of those who are oppressed.” (Blood in the Water by Heather Ann Thompson, p. 78.)

However, after 4 - 5 days of attempted negotiations, an impasse was reached, particularly as related to the demand asking for amnesty which would prohibit any reprisals for crimes that may have occurred during the riot by inmates. Because of the stalemate, the state police at the authorization of Governor Nelson Rockefeller, began an assault to forcibly retake the prison on the rainy morning of September 13, 1971. The assault left 43 dead, 10 of whom were hostages. 39 nine were actually killed in the assault, 43 altogether during the Attica uprising and ensuing events. Four others, a guard and three inmates, were killed during the riot but under different circumstances. Billy Quinn was that particular guard – killed at Times Square on the day the riot first started. L. D. Barkley, the prison leader for the negotiations, was killed in the police assault.

In the early morning hours of September 14th, my father began undertaking the autopsies of the slain hostages. Prior to the autopsies, it had been initially released to the press by a representative of the NY State Department of Corrections that the hostages were killed by

prisoner's knives. Indeed, in the moments before the assault began, some of the hostages were held at knife point on catwalks by prisoners.

Upon conclusion of the autopsies of the hostages, however, my father released the news that all the hostages and prisoners were killed by police gunfire. None were killed by knives. The prisoners had no guns. (23 second video clip of press release of Attica autopsy findings by Dr. John F. Edland here.)

As a young child, I have vivid memories of the early days following the retaking. There was an amazing flurry of activity. At first it was exciting because of the attention that my father was getting. Dad was engaging with the press more than usual. He was used to being in the public eye with local cases, particularly homicides, and made frequent appearances as an expert witness in court. However, Attica of course was a national case, with a wider audience. Letters and calls from relatives and friends from different parts of the country – and even from those visiting abroad - were pouring in letting our family

know that that they saw Dad in the news. My father was even featured on the front page of the NY Times. (Slide of NY Times with article of Attica autopsy findings here.) It didn't take long though to realize that adverse effects associated with my father's findings were becoming apparent. Abusive phone calls started coming to our house. People would call claiming my father was siding with the prisoners; callers used racial epithets. After several of these calls, we were admonished not to answer the phone. Mom even had notes attached to our phones. (A childhood memory - the notes said "Ferme la Bouche" which means "keep the mouth closed" in the French language – my mother was fond of French – a second language she learned in her native Canada, to remind us all not to say anything to callers.) From what I read about in the papers at the time and from what I heard from my parents, their contemporaries, and our relatives, I remember grasping the fact that my father's findings were being questioned. Another doctor, Michael Baden, was called in to verify Dad's autopsy results. We were also aware as a family that my father was being harassed by state officials.

From those early years on, my family and I were extremely proud of my father and his professionalism. It wasn't until my mid-twenties when I realized the gravity of what my father went through by having his integrity and expertise questioned. I have memories of what he shared with me personally in later years. ("I Call Them As I See Them" headline here.) In an article from the Rochester Democrat & Chronicle dated September 15, 1971 my father was asked "who was in charge of this (Attica) autopsy – you or the State Police?" My father was quoted as saying "The State Police requested my services to perform the autopsies. I am my own man. I call them as I see them." (Slide of related newspaper excerpt here.) Dad grew up in Fairport, NY – a town he dearly loved. His Fairport High School class presented him with a plaque, which I now have in my possession, that states: "I AM MY OWN MAN - EDLAND" (slide of plaque here). In 1985, Malcolm Bell, the prosecuting attorney tracking the cover-up of the crimes committed at Attica, published a book in called The Turkey Shoot - Tracking the Attica Cover-Up. On the dedication page, Dad wrote a personal inscription to me when I completed

the book and had the opportunity to discuss the substance of the Attica events with him and his role in them. The inscription, dated Labor Day 1987, states "This is family history. It explains me. I hope it helps you understand why it all happened. Love, Dad" (Slide of my father's inscription here.)

Over the years, I have had the opportunity to read everything I can on the subject of Attica. Before my father's untimely death at age 57 in 1991, I broached the subject on occasion with my father. He would tend not to talk about that time in his life that much. In fact, after several moves, he tried to focus on other parts of life. I did ask him once, "Dad, do you know how great you are for what you did by telling the truth about what actually happened?" Dad subsequently quoted from the play Twelfth Night, by William Shakespeare: "Some are born great, some achieve greatness, and others have greatness thrust upon them." Dad felt the latter circumstance applied to him.

All of us saw what effects the Attica aftermath had on Dad. As time progressed from the 1971 events, my father suffered deeply. He unfortunately experienced some breakdowns. We had hardships as a family also. We left Rochester in 1977 in hopes that Dad could start afresh in academia in the pathology department of the medical school at Vanderbilt University in Nashville, TN. In 1981 my parents and sisters moved to Omaha, NE where Dad took a full professorship in the Creighton University medical school's department of pathology. At that time, I was a freshman at Vanderbilt and stayed behind in Nashville to finish a bachelor's degree in engineering. Even after a couple of restarts, Dad never seemed to be able to overcome the deleterious effects of the era of Attica. He left us too soon at the age of 57 in October of 1991. Tomorrow, October 25th, will mark the 30th anniversary of his death. It was also his birthday, which makes it difficult. My mother has helped with that difficulty by reminding me and my sisters that that date is "his day."

My mother, sisters, and I felt the effects as family members, too – being uprooted and having to adjust to new situations; however, the plus side to all this is we have been able to adapt well to unforeseen situations that arise, and we are happy with where all of our lives have led us.

Reflecting to this day – the circumstances of the retaking and the loss of life at Attica were egregious. If you have ever had the opportunity to see a video of the retaking, it is quite shocking. The shooting is obviously indiscriminate. I have also seen some of the autopsy slides of the hostages. Even to my untrained eye, it is obvious that gunshots were involved in the deaths. A quote from Malcolm Bell's 1985 edition of The Turkey Shoot sticks out to me as an example of how my father's integrity was questioned. On page 199, Howard Shapiro, Assistant Counsel to Governor Rockefeller at the time, initially reacted to my father's Attica findings by saying "Who is this guy, Edland? We've got to get something on him."

From the Rochester Times Union on September 15, 1971, my father opened up to the reporter about revealing the truth about the results of the autopsies of the slain hostages. With regards to the attention he was getting, his exact words were "This is sort of embarrassing" he said, "all

this attention, especially in this tragedy." Of his work as a forensic pathologist, which mingles medicine and the law, he said: "This field is my whole life. And this is the worst day of my life."

The silver lining to the tragedy: over the years I have met some amazing icons that either survived that part of history or were major players in getting the truth out. To name a few: Surviving hostage, Mike Smith, who was held on the catwalk before the assault and was subsequently shot when the assault was occurring - and his wife Sharon; Dee Quinn Miller, whose father, Billy, was killed when Times Square was breached in the prison the day the riot started; and Malcolm Bell, author of The Turkey Shoot and a subsequent edition, The Attica Turkey Shoot published with updates in 2017. Incidentally, the 1985 edition has a very clever poem about an autopsy written by Mr. Bell on pp. 269 - 272.

My husband Jay and I, along with my son Jayson, his wife Ally, and our grandson, Jack (who is my father's namesake) were able to go to the 50th memorial on the Attica prison grounds this past September. Every year on the anniversary of the retaking (September 13th), a memorial is held in front of the prison. There are two groups who are remembered: The Forgotten Victims of Attica – which includes those who perished in the retaking, those who survived the ordeal but are emotionally scarred, and family members who lost loved ones in the tragedy. My father has been deemed a member of this particular group; the other group is remembrance for the facility itself. This was my second opportunity to attend the memorial. The last memorial I attended was with my mother back in 2018. It was something to actually see the prison in person – especially the first time. I was nervous even as I drove up to prison knowing the impact this site had on so many people, particularly my father, and our family. It is quite evident at the memorials how much the community of Attica and those affected by this part of history come together in solidarity.

I have been designated our family historian on the subject of Attica. My mother kept excellent records of newspaper articles and correspondence which I have referred to many times so I can tell the story of Attica and how it affected my father and our family. And as I have said before, I have read everything I can on this part of history. For more understanding on the subject, I recommend several works. (Slide of recommended reading of Attica history and events.) The first book is Malcolm Bell's The Turkey Shoot - Tracking the Attica Cover-up published in 1985 (a subsequent 2017 The Attica Turkey Shoot - Carnage, Cover-Up, and the Pursuit of Justice includes updates.); another is Attica, The Official Report of the New York State Special Commission on Attica. This nine-member citizens' commission, headed by Robert B. McKay, dean of the NYU school of law at the time, gives a full factual report and investigation of the Attica tragedy and was published in the early years following the retaking; finally, Heather Ann Thompson's book Blood in the Water published in 2016. Dr. Thompson received the Pulitzer Prize in history for her work. All books highlight my father's work; The Turkey Shoot and Blood in the Water have quotes by my father. I noticed in Dr. Thompson's book that more information and truth has been revealed than in previous books. More truth continues to come out about the Attica retaking even up to this day.

In the family archives, I have newspaper articles, family letters, and even letters from my father to my grandmother while Dad was in medical school. He received his MD from the State University of New York Upstate Medical Center at Syracuse in 1960. I understand why he chose forensics. Such a fascinating field! I am fascinated by the field myself and often followed some of the cases my father was involved with. I also understand the field can have its dark side. In one of the past Rochester D & C articles dated March 3, 1972, Dad is again quoted as saying "You have to call them as you see them." In the same article he states, "I'm used to not finding what people tell me I'll find." In his words from another article in the Rochester Times Union dated December 10, 1971, his office would investigate a death if the cause was "traumatic, violent, suspicious or unknown" – circumstances that would involve about a third of his office's cases at the time. My father helped the deceased have voices – like the 43 who died tragically at Attica when they could not speak for themselves. When misinformation can be attempted to supersede the truth, a person like my father is to be revered. My father was grateful for a "free press" as he told members of the professional journalism fraternity in Rochester adding, if it weren't for the press, "it would have been months, probably years, before the story was out." (Times Union, December 10, 1971.)

Thank you for honoring my father – he would be very moved and humbled by the award you are bestowing in his memory. My mother, sisters, and I also respect and admire all of you for the medical examiner field you have chosen. We hold its principles which my father stood by in highest esteem. And, once again, a sincere thank you for allowing us to be a part of the NAME organization's events this year.

NAME Meetings

NAME Annual Meetings

NAME was established in 1966.
1966 No meeting
1967 No meeting
1968 Knickerbocker Hotel, Chicago, IL Feb 21
1969 Knickerbocker Hotel, Chicago, IL, Feb 26
1970 Drake Hotel, Chicago, IL, Feb 25
1971 Del Webb's Towne House, Phoenix, AZ, Feb 22
1972 Sheraton Biltmore Hotel, Atlanta, GA, Mar 1
1973 International Hilton hotel, Las Vegas, NV, Feb 20
1974 Statler Hilton Hotel, Dallas, TX, Feb 12
1975 Hyatt Regency, Chicago, IL, Feb17-18 (1st 2-day mtg)
1976 Sheraton Jetport Inn, Orlando, FL, Oct 14-16 (1st 3-day mtg; 1st mtg separate from AAFS)
1977 Gault House, Louisville, KY, Oct 5-8 (1st 4-day mtg)
1978 Sheraton Islander Inn, Newport, RI, Nov 8-11
1979 Olympic Hotel, Seattle, WA, Nov 7-10
1980 Sea Pines, Charleston, Hilton Head, SC, Nov 12-15
1981 Drake Hotel, Chicago, IL, Nov 1-5 (1st 5-day mtg)
1982 Newporter Inn, Newport Beach, CA, Nov 9-13
1983 Williamsburg Hilton, Williamsburg, VA, Nov 13-18
1984 La Mansion, San Antonio, TX, Nov 13-17
1985 Peabody Hotel, Memphis, TN, Sept 23-27
1986 Lowe's Ventana Canyon, Tucson, AZ, Nov 18-22
1987 Sir Francis Drake Hotel, San Francisco, CA, Sept 18-23 (1st 6-day mtg)
1988 Parker House, Boston, MA, Nov 4-9
1989 Sundial Beach Resort, Sanibel Island, FL, Oct 13-18
1990 Brown Palace, Denver, CO, Sept 14-19
1991 Cruise/Dockings, Hawaii, Sept 20-27 (25th Anniversary Meeting)
1992 Wyndham Milwaukee Center, Milwaukee, WI, Sept 18-23
1993 Worthington Hotel, Ft. Worth, TX, Sept 10-15
1994 Wild Dunes Resort, Charleston, SC, Sept 24-28
1995 Hyatt Islandia Hotel, San Diego, CA, Oct 20-25
1996 Grand Traverse Resort, Traverse City, MI, Sept 13-18
1997 Sheraton Inner Harbor Hotel, Baltimore, MD Sept 12-17
1998 Hyatt Regency, Albuquerque NM, Oct 30-Nov 4
1999 Minneapolis Marriott City Center, Minneapolis, MN, Oct 15-20
2000 Westin Indianapolis, Indianapolis, IN September 14-19
2001 Omni Richmond Hotel, Richmond, VA October 12-17
2002 Harrah Shreveport Casino/Hotel, Shreveport, LA Sept 27-Oct 3
2003 Fairmont Hotel, San Jose, CA Sept 19-24
2004 Loews Vanderbilt Hotel, Nashville, TN Sept 10-15
2005 Millennium Biltmore Hotel, Los Angeles, CA Oct 14-19

2006 Hyatt Regency San Antonio on the Riverwalk, San Antonio, TX Oct 13-18
2007 Savannah Marriott Riverfront, Savannah, GA Oct 12-17
2008 The Seelbach Hilton Hotel, Louisville, KY Sept 5-10
2009 Hyatt Regency San Francisco in Embarcadero Center, San Francisco, CA Sept 11-16
2010 Renaissance Cleveland Hotel, Cleveland, OH Oct 1-6
2011 Cruise/Dockings MS Westerdam, Seattle, WA and Alaska Aug 6-13
2012 Hyatt Regency on the Inner Harbor, Baltimore, MD Oct 5-9
2013 Hyatt Regency Milwaukee, Milwaukee, WI Oct 11-15
2014 Marriott Portland Downtown Waterfront, Portland, OR Sept 19-24
2015 Westin Charlotte, Charlotte, NC Oct 2-6
2016 Hyatt Regency Minneapolis, Minneapolis, MN Sept 9-13 (50th Anniversary Meeting)
2017 DoubleTree Resort by Hilton Paradise Valley, Scottsdale, AZ Oct 13-17
2018 Hilton West Palm Beach, West Palm Beach, FL Oct 12-16
2019 Sheraton Kansas City Hotel at Crown Center, Kansas City, MO Oct 18-22
2020 Hyatt Regency Denver at Colorado Convention Center, Denver, CO Oct 9-13 (changed to virtual meeting Oct 16-17 due to COVID pandemic)
2021 Hilton West Palm Beach, West Palm Beach, FL Oct 16-19
2022 Fairmont Dallas, Dallas, TX Oct 14-18

NAME Interim Meetings

Interim meetings were held during the American Academy of Forensic Sciences annual meeting until going virtual in 2021.

1986 Hyatt Regency Hotel, New Orleans, LA Feb 12
1987 Town & Country Hotel, San Diego, CA Feb 17
1988 Wyndham Franklin Plaza, Philadelphia, PA Feb 16
1989 Riviera Hotel, Las Vegas, NV Feb 21
1990 Clarion Hotel, Cincinatti, OH Feb 20
1991 Marriott Hotel, Anaheim, CA Feb 19
1992 Hyatt Regency, New Orleans, LA Feb 18
1993 Marriott Copley Place, Boston, MA Feb 16
1994 Marriott Rivercenter, San Antonio, TX Feb 15
1995 Washington Trade Center (Hilton), Seattle, WA Feb 14
1996 Opryland Hotel, Nashville, TN Feb 20
1997 Marriott Marquis, New York, NY Feb 18
1998 San Francisco Hilton & Towers Hotel, San Francisco, CA Feb 10
1999 Disney's Coronado Springs Resort, Orlando, FL Feb 16
2000 John Ascuaga's Nugget, Reno, NV Feb 22
2001 WA State Convention Center (Sheraton), Seattle, WA Feb 20
2002 Atlanta Marriott Marquis, Atlanta, GA Feb 12
2003 Hyatt Regency Chicago, Chicago, IL Feb 18
2004 Adam's Mark, Dallas, TX Feb17

2005 Hyatt Regency, New Orleans, LA Feb 22
2006 WA State Convention Center (Sheraton), Seattle, WA Feb 21
2007 Henry B. Gonzalez Convention Center (Hyatt), San Antonio, TX Feb 20
2008 Marriott Wardman Park Hotel, Washington, DC Feb 19
2009 Colorado Convention Center (Hyatt), Denver, CO Feb 17
2010 WA State Convention Center (Sheraton), Seattle, WA Feb 23
2011 Hyatt Regency Chicago, Chicago, IL Feb 22
2012 Marriott Marquis, Atlanta, GA Feb 21
2013 Marriott Wardman Park Hotel, Washington, DC Feb 19
2014 WA State Convention Center (Sheraton), Seattle, WA Feb 18
2015 Hyatt Regency Orlando, Orlando, FL Feb 17
2016 Rio All-Suite Las Vegas Hotel and Casino, Las Vegas, NV Feb 23
2017 Hyatt Regency New Orleans, New Orleans, LA Feb 14
2018 Grand Hyatt Seattle, Seattle, WA Feb 20
2019 Hyatt Regency Baltimore Inner Harbor, Baltimore, MD Feb 19
2020 Hilton Anaheim, Anaheim, CA Feb 18
2021 *virtual* Feb 9
2022 *virtual* April 12

NAME Membership Numbers

Year	Fellows	Members	Affiliates	Intl	Residents	FIT	Emeritus	TOTAL
2003								863
2004								849
2005								964
2006		698	124		27		91	940
2007		713	142		26		99	980
2008	330	423	159		34		98	1044
2009	360	370	147		24		104	1005
2010	426	306	138		36	18	106	1030
2011	446	316	154		43	16	110	1085
2012	487	297	174		54	22	105	1139
2013	493	268	171		51	28	104	1115
2014	571	243	177		75		102	1168
2015	698	242	186		83		103	1312
2016	644	223	205		119		106	1297
2017	514	158	155	13	136		108	1084
2018	567	189	157	31	180		139	1263
2019	468	145	137	31	102		121	1004
2020	581	194	193	55	324		122	1469
2021	731	63	207	61	259		121	1442

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