

Medical Examiner's District

Serving Tarrant, Denton, Johnson, & Parker Counties

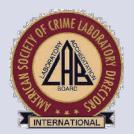


2015 ANNUAL REPORT

Accredited by:



Accreditation Council for Graduate Medical Education (ACGME)



American Society of Crime Laboratory Directors/ Laboratory Accreditation Board (ASCLD/LAB) certificate numbers *ALI-348-T* and *ALI-012-C*



National Association of Medical Examiners (NAME)

Tarrant County Medical Examiner and Forensic Science Laboratories

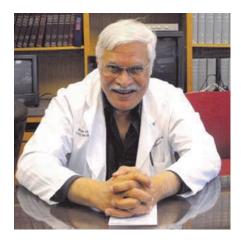
200 Feliks Gwozdz Pl., Fort Worth, TX 76104-4919 Tel.: (817) 920-5700 | Fax: (817) 920-5713

http://access.tarrantcounty.com/en/medical-examiner.html

From the Office of the Tarrant County Chief Medical Examiner

henever we are called upon to assist, even if it is outside our defined jurisdiction, beyond the scope of our duties, or otherwise removed from our responsibilities under the law, it is our general policy to help people reach the appropriate person or agency who can assist them. This is not only our philosophy, but our commitment to those we serve.

The primary purpose of the Tarrant County Medical Examiner's Office is to assist the public and law enforcement in determining the cause and manner of death whenever death occurs without medical attention, from unnatural causes, or in the wake of violence. We are proud and grateful to be able to carry out our mission using state of the art laboratory and forensic science facilities.



Sincerely,

Dr. Nizam Peerwani

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Chief Medical Exam'iner

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About Us

riginally established in 1965, the Tarrant County Medical Examiner's Office today serves four counties—Denton, Johnson, Parker, and Tarrant—with a total district population exceeding 2.8 million. As the district continues to grow, the Tarrant County Medical Examiner's Office remains committed as ever to providing the highest quality of service to the loved ones of each decedent and to the legal system.

As the district's population has boomed, so too have advances in the field of forensic science and its companion subjects of anatomy, physiology, chemistry, and biology. The staff at the Tarrant County Medical Examiner's Office understand the need to keep up with these exciting developments and they routinely apply their knowledge in these areas to the science of determining the cause of death.

In this endeavor, the staff of five highly trained, board certified forensic pathologists are aided both by an investigative team staffed round-the-clock and a full complement of support services, including human identification, toxicology, criminalistics, and forensic anthropology.





The wealth of information available at the office and our staff's passion to educate combine regularly to create knowledge-sharing opportunities like the Tuesday Morning Forensic Rounds, the annual Current Trends in Forensic Science conference, and periodic training sessions with Physicians for Human Rights. We also provide advanced forensic training at the International Forensic Science Center to scholars from abroad. Members of the staff are frequently invited to provide services, give lectures, and perform consultations both nationally and internationally.

Our staff's outstanding qualifications, our state-of-the-art equipment, our strict compliance with statutes and regulations, and our accreditation by both the National Association of Medical Examiners and the American Society of Crime Laboratory Directors/Laboratory Accreditation Board all help make the Tarrant County Medical Examiner's Office one of the premier medical examiner offices in the nation.

With this report, we aim to impart an appreciation for the depth of our commitment to deliver excellent quality and service. Every day presents new challenges for us, but we are always seeking to develop and implement new services and procedures in order to better serve you and the community.

Frequently Asked Questions

What is a Medical Examiner case?

Article 49.25 of the Code of Criminal Procedure, State of Texas clearly defines which cases fall under the jurisdiction of medical examiners. Medical examiner cases include sudden, unexpected, violent, unnatural, unattended and other deaths "affecting the public interest."

What are your business hours?

The Tarrant County Medical Examiner District Office serves the public from 8:00 am to 4:30 pm Monday through Friday, excluding County and Federal holidays. Our contact information is:

Tarrant County Medical Examiner's Office 200 Feliks Gwozdz Pl., Fort Worth, TX 76104-4919 (817) 920-5700

http://access.tarrantcounty.com/en/medical-examiner.html

The District includes three other counties with satellite offices:

Denton County

535 South Loop 288, Suite 1132, Denton, TX 76205-4502 (940) 349-2870; (972) 434-8833

http://dentoncounty.com/Departments/Health-Services/Health-Department/ Medical-Examiner.aspx

Johnson County

103 S Walnut Street, Cleburne, Texas 76033 (817) 558-2245

http://www.johnsoncountytx.org/departments/medical-examiner

Parker County

129 Hogle Street, Weatherford, Texas 76086 (817) 594-3213; (800) 233-3732 https://parkercountysheriff.net/contact-us/

Do I make complaints to your office about a doctor I am having trouble with?

No. The Texas Medical Board is responsible for complaints regarding physicians. Please visit their website at http://www.tmb.state.tx.us/page/place-a-complaint. If you have a complaint about our staff please feel free to call us at **(817) 920-5700**, extension **8330**, to speak with our Administrative Director.

What is an autopsy?

An autopsy is a dignified surgical procedure that provides a systematic examination of the body of a deceased person by a qualified physician. All the physicians performing autopsies at Tarrant County Medical Examiner's District are certified by the American Board of Pathology in anatomic pathology and forensic pathology. During the procedure, a body is inspected for the presence of disease or injury, and minimal specimens of the vital organs and/or body fluids may be taken for further analysis. The internal organs and the brain are examined, then replaced in the body for burial.

Does the law require the medical examiner to perform an autopsy on every reported death?

No. The law only stipulates that the medical examiner shall perform an "inquest", or inquiry into death. It is left up to the discretion and learned judgment of the medical examiner to perform an autopsy in cases affecting the public interest. In only about one-fifth of the cases investigated by the medical examiner is an autopsy deemed necessary. In some cases, the medical examiner may perform a limited or partial autopsy; this is allowed by the statute.

Does the family pay for any medical examiner services?

No. These are statutory examinations and families pay nothing for the medical examiner services or for the transportation of remains to the Central Morgue for examination. Families may be billed by the funeral home for transportation to the funeral home they select after completion of the examination.

How long does an autopsy take?

A standard forensic autopsy will take two to three hours. Complicated medical cases or cases of traumatic deaths with multiple injuries can take longer in order to fully document all observations.

What if objections to an autopsy are raised?

When family members object to an autopsy based on religious beliefs, cultural traditions, or other deeply-held convictions, every effort to honor the objection will be made. However, if the public responsibility cannot be fulfilled without performing an autopsy, or at least a limited autopsy, the family will be provided an opportunity to be represented by legal counsel and to have their objection presented to a judge before the autopsy is performed, whenever possible.

Are tests for drugs and alcohol performed?

In all cases investigated by the medical examiner, including those in which autopsies are not conducted, fluids may be taken for toxicological tests and DNA profile. The results of these tests are often important factors in being able to determine the cause and manner of death. Not all cases will receive toxicological testing, especially if such testing will not influence the cause or manner of death.

Can a medical examiner case still be an organ or tissue donor?

Yes. Once family members have expressed interest, the medical examiner will review the request with the organ bank. Organs are generally harvested from a heart-beating donor only in a hospital setting. Tissues, including skin, bones, and corneas may be harvested at the medical examiner's office. In the vast majority of cases, the medical examiner will impose no restrictions on organs and tissues harvested with the written consent of next of kin.

What if no one claims the body on a Medical Examiner's case?

The law provides for burial or cremation when no relative claims the body. These matters are handled through the county's social services department:

Tarrant County Human Services

1200 Circle Dr., Suite 200, Fort Worth, TX 76119 Open Monday-Friday 8:00 a.m.-3:30 p.m. (817) 531-5620

http://access.tarrantcounty.com/en/human-services.html

When is the body released?

A body is released to a mortuary or crematory once the examination is complete and the family has designated an arrangement for burial or cremation. Family members may contact the Tarrant County Medical Examiner's Office at (817) 920 -5700 to inform us of their selection of a funeral home. The family must then instruct the funeral home to call us for release of the body.

Bodies brought to the Tarrant County Medical Examiner's Office are generally ready for release to a funeral home within 24 hours. Only in rare cases are bodies held for legal purposes. Upon request, the release of remains may be expedited in order to honor the religious, cultural, or other beliefs of the family.

Can we view the body?

No. Our office does not have facilities for the viewing of bodies. Please contact the funeral home if you wish to view the body.

Do I have to identify my loved one's body?

If identification is required, the family will be contacted by a representative of the Tarrant County Medical Examiner's Office. If your loved one is missing and you have reason to suspect that their body may be among our cases, please contact us at (817) 920-5700.

What happens to clothing and personal items?

Unless it is identified as evidence, all clothing and personal items held by the medical examiner are released with the body to the funeral home or crematory. Any item identified as evidence is either retained for further testing and examination or turned over to the investigating law enforcement agency; all other personal items are returned to the family. For questions concerning these items, please contact the office at (817) 920-5700.

Does the Medical Examiner's Office ever keep parts of the body?

In all cases in which an autopsy is performed, the medical examiner will biopsy and retain a small piece of tissue in order to study the organ histologically. Occasionally, a whole organ (such as the brain or the eyes) may be retained for neuropathological examination. If the next of kin desires to have these tissues returned to the funeral home after such testing is complete, please contact us (817) 920-5700 to make this request.

What kinds of reports are produced?

The Tarrant County Medical Examiner produces at least two, and generally three, reports for each case:

- 1. The physician's examination report (with or without body diagrams)
- 2. The report of death investigation
- 3. The toxicology report (if toxicological testing was performed)

Depending on the complexity of the case there may be other reports, including bacterial/viral culture, special chemistry, heavy metal and other poisons, anthropology, human identification, criminalistics, etc.

Are my loved one's reports and test results protected under the Health Insurance Portability and Accountability Act (HIPAA)?

No. Records generated by the Medical Examiner in the performance of his duties are subject to the <u>Texas Public Information Act</u>, which requires that citizens have access to information on governmental action. This transparency provides Texans with a better understanding of how their government works and, when necessary, enables them to hold their public officials accountable.

Specifically, <u>Section §552.021</u> of the act allows public access to information that is written, produced, collected, assembled, or maintained under a law or ordinance, or in connection with the transaction of official business. Under this statute, all written records generated by the Tarrant County Medical Examiner's Office are public records and may be released upon request to any citizen. Note that death scene photographs and postmortem examination photographs are *not* subject to release under this statute.

How soon can I have the death certificate?

Effective 2007, the Texas Health and Safety Code, Section §193.005 requires medical certifiers on a death certificate to submit the medical certification and attest to its validity using an electronic process approved by the State Registrar. Additionally, the Health and Safety Code Section §193.003 requires that the medical examiner complete this medical certification not later than five days after receiving the death record.

In the majority of medical examiner cases, the exact cause of death will be pending further testing or investigation. In these cases, the medical examiner files a "pending" death certificate. This pending death certificate is then amended once the case is complete and a cause and manner of death have been determined.

Once the death record has been filed by the funeral home, certified copies of the death certificate can be obtained from the funeral home or the County Clerk. County Clerk contact information for all counties participating in the Tarrant County Medical Examiner's District is provided below:

Denton County

1450 E. McKinney St., Denton, TX 76202-2187 (940) 349-2018

http://dentoncounty.com/Departments/County-Clerk.aspx

Johnson County

P.O. Box 1986, Cleburne, Texas 76033 (817) 202-4000

http://www.johnsoncountytx.org/government/county-clerk

Parker County

P.O. Box 819, Weatherford, Texas 76086 (817) 594-7461

http://www.parkercountytx.com/index.aspx?NID=105

Tarrant County Vital Statistics

200 Taylor St., Rm. 301, Fort Worth, TX 76196-2000 (817) 884-1550

http://access.tarrantcounty.com/en/county-clerk.html

How long does it take to complete a report?

The <u>Texas Health and Safety Code</u>, <u>Section §671.012</u>, requires that a designated physician who performs an autopsy provided for by state law shall file the autopsy report not later than the 30th day after the date of autopsy, provided that required testing can be completed within that time. Depending on the complexity of the case and the number of postmortem tests ordered, a report may take up to 12 weeks or more before being completed.

Will the next of kin automatically receive copies of the reports?

No. As we recognize that some families will not want to receive copies of the reports, it is necessary for the legal next of kin desiring this information to contact our office, request the report in writing, and confirm their mailing address. The reports will then be sent upon completion of the case. Only one copy of the report will be sent free of charge.

Families interested in obtaining a copy of the report should submit a written request to the Records Custodian. For fastest processing, requests should be emailed to TCMErecords@tarrantcounty.com. If submitting a records request by mail, please use the following address:

Tarrant County Medical Examiner's Office

Attn: Records Custodian 200 Feliks Gwozdz Pl. Fort Worth, TX 76104-4919

Who can get copies of the reports?

Documents are routinely provided to law enforcement, the district attorney, special government agencies, and the hospital providing treatment at the time of death. One copy of the examination report, investigative findings, and toxicology report will be provided at no cost to the immediate next of kin upon written request.

As discussed in the earlier question, "Are my loved one's reports and test results protected under the Health Insurance Portability and Accountability Act (HIPAA)?," Section §552.021 of the Texas Public Information Act also mandates that our records be made available to any citizen upon request.

Can I get copies of the photos of my deceased relative?

Yes. Scene photographs and/or postmortem examination photographs may be released upon presentation of a properly executed medical release or 'next of kin' letter, which must contain all of the following elements to be considered valid:

- 1. The requestor's full name, address, and contact information
- 2. A statement indicating the requestor is the nearest legal next of kin and providing his/her relationship to the decedent
- 3. The specific information the requestor is seeking (e.g., all autopsy and/or scene photographs)
- 4. The requestor's notarized signature affixed to the letter
- 5. A copy of the requestor's driver license

Non-family members can make a request for the scene and autopsy photographs upon presentation of a properly executed and notarized medical release from the legal next-of-kin. All requests received from either family or non-family members will be reviewed on a case-by-case basis.

What if the next of kin cannot afford the costs of the funeral?

An application for indigent cremation may be made with the **Tarrant County Human Services Department** (see page 9 for contact information). Proof of indigent status may be required. Tarrant County Human Services is only able to provide assistance to families whose loved one(s) have died within Tarrant County. A funeral home may assist the family with the application process for the county cremation program.

What is required for cremation?

The <u>Texas Health and Safety Code</u>, <u>Section §716.004</u> prohibits a crematory establishment from cremating human remains within 48 hours of the time of death indicated on the death certificate, unless the waiting period is waived in writing by (1) the medical examiner of the county in which the death occurred or (2) a court order. In compliance with this statute, the medical examiner has established a policy outlining the process of requesting a waiver under Subsection (a) during regular business hours and outside of regular business hours, including weekends and holidays.

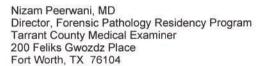
In all other cases, after the mandatory waiting period the crematory is required to obtain a permit from the county medical examiner. If the death is not a medical examiner's case, the Medical Examiner requires the funeral home to provide a death certificate before the Medical Examiner can issue a cremation permit.

Accreditations

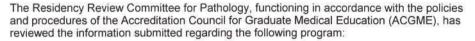
Accreditation Council for Graduate Medical Education

515 North State Street Suite 2000 Chicago, IL 60654

Phone 312.755.5000 Fax 312.755.7498 www.acgme.org 3/10/2016



Dear Dr. Peerwani,



Forensic pathology

Tarrant County Medical Examiner Program
Tarrant County Medical Examiner's Office
Fort Worth, TX

Program 3104822087

Based on the information available to it at its recent meeting, the Review Committee accredited the program as follows:

Status: Continued Accreditation Maximum Number of Residents: 1 Effective Date: 02/04/2016

The Review Committee commended the program for its demonstrated substantial compliance with the ACGME's Program Requirements and/or Institutional Requirements without any new citations.

The ACGME must be notified of any major changes in the organization of the program. When corresponding with the ACGME, please identify the program by name and number as indicated above. Changes in participating sites and changes in leadership must be reported to the Review Committee using the ACGME Accreditation Data System (ADS).







American Society of Crime Laboratory Directors Laboratory Accreditation Board

declares to all Advocates of Truth, Justice and the Law that the management and technical operations of the

Tarrant County Medical Examiner's Office Forensic Laboratory Services Breath Alcohol Calibration Program

200 Feliks Gwozdz Place Fort Worth, Texas 76104

have been found through assessment to meet the requirements of
ISO/IEC 17025:2005

"General Requirements for the Competence of Testing and Calibration Laboratories"
the ASCLD/LAB-International Supplemental Requirements for
Breath Alcohol Calibration Laboratories: 2007
and all other requirements of the

ASCLD/LAB-International

program, and is granted this

Certificate of Accreditation

in the field of

Forensic Science Calibration

for the categories of calibration listed on the corresponding Scope of Accreditation

Renee Romero, ASCLD/LAB Chair

0100,

Pamela L. Bordner, Accreditation Program Manager

Troy Hamlin, Accreditation Program Manager

Certificate Number

ALI-012-C

granted this

17th day of June, 2014

which expires on the

16th day of June, 2019



American Society of Crime Laboratory Directors Laboratory Accreditation Board

declares to all Advocates of Truth, Justice and the Law that the management and technical operations of the

Tarrant County Medical Examiner's Office Forensic Laboratory Services

200 Feliks Gwozdz Place Fort Worth, Texas 76104

have been found through assessment to meet the requirements of ISO/IEC 17025:2005

"General Requirements for the Competence of Testing and Calibration Laboratories" the ASCLD/LAB-International Supplemental Requirements for Testing Laboratories: 2011 and all other requirements of the

ASCLD/LAB-International

program, and is granted this

Certificate of Accreditation

in the field of

Forensic Science Testing

for the categories of testing listed on the corresponding Scope of Accreditation

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Troy Hamlin, Accreditation Program Manager

Certificate Number

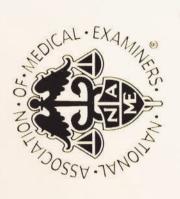
ALI-348-T

granted this

17th day of June, 2014

which expires on the

16th day of June, 2019



NATIONAL ASSOCIATION OF MEDICAL EXAMINERS

Grants Full Accreditation

Tarrant County Medical Examiner Office - Fort Worth, Texas

Inspected by and meets the Standards, Inspection, and Accreditation Criteria established by the National Association of Medical Examiners for providing and operating an effective Medicolegal Death Investigative System

Accreditation is granted for the period January 8, 2015 to January 8, 2020

GIVEN THIS 1* day of June, 2015

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Secretary-Treasurer

Bar eway MID.

Chairman of Inspections Committee

History



The Tarrant County Commissioners' Court establishes the Tarrant County Medical Examiner's Office. T.C. Terrell, M.D. is named Chief Medical Examiner.



Feliks Gwozdz, M.D. is named Chief Medical Examiner.



After Dr. Gwozdz's unexpected death, Nizam Peerwani, M.D. is appointed Chief Medical Examiner.



The first countywide central morgue is established on the campus of the Texas College of Osteopathic Medicine (now University of North Texas Health Science Center).



Toxicology and histology laboratories are added; shortly afterwards, forensic dentistry is added to the office to assist in human identification.



Parker County officially joins the Medical Examiner's Office, creating the Tarrant County Medical Examiner's District.



Denton County joins the Tarrant County Medical Examiner's District; the Medical Examiner's Office moves into a new, state-of-the-art facility at 200 Feliks Gwozdz Place, renamed in honor of the late Dr. Gwozdz.





The TCME District provides the health scene investigation and medical examiner services for McLennan County in the aftermath of the Branch Davidian incident at Mt. Carmel, Texas.



A full-time, dedicated Forensic Anthropologist position is filled, making the TCME District the only such office in Texas with a full-time Forensic Anthropologist on staff.



The Human Identity Section is established at the TCME District, comprising a Forensic Odontologist, a Forensic Anthropologist, and a Latent Print Fingerprint Examiner.



Johnson County joins the Tarrant County Medical Examiner's District.



Construction is completed on new building expansion.



Renovation of the old building is completed, expanding administrative areas and classroom facilities.

Staff Photos





Departments

Medical Examiners

Nizam Peerwani, M.D. Chief Medical Examiner

Marc A. Krouse, M.D.

Deputy Chief Medical Examiner

Susan J. Roe, M.D. Deputy Medical Examiner

Tasha Z. Greenberg, M.D. Deputy Medical Examiner

Richard C. Fries, D.O. Deputy Medical Examiner

Allison Mautone, M.D. Forensic Fellow

Administration

Nizam Peerwani, M.D. Chief Medical Examiner

Ronald L. Singer, M.S. Technical & Administrative Director

D. Chris Heartsill, B.S. Quality Control Manager

Tracye Poirier, M.B.A. Business Manager

Carol A. Lawson Exec. Asst./Public Information Officer

Marsy Key Bookkeeper

Human Identification Laboratory

Roger Metcalf, D.D.S. Chief of Identification Services

Dana Austin, Ph.D. Senior Forensic Anthropologist

ShaVonda Epps Latent Fingerprint Examiner

Histology

Mike Smith, B.S. Forensic Histotechnician

Joe D. English, Jr. Forensic Histotechnician

Forensic Death Investigation

Tarrant County Investigations

Michael Floyd, B.S. Chief Forensic Death Investigator

John Briggs Supervisory Investigator

Jimmy McDonald Forensic Death Investigator II

Larry Steffler Forensic Death Investigator II

Stephen White Forensic Death Investigator II

Robert Corley Forensic Death Investigator I

Kyle Finney, B.A. Forensic Death Investigator I

Michael Pollard, B.A.S. Forensic Death Investigator I

Amy Renfro, B.S. Forensic Death Investigator I

Jeff Honeycutt Forensic Death Investigator I

Jamie McKinney Investigative Clerk

Tracy Vancil, B.S. Investigative Clerk

Sue Ellen Brown Investigative Clerk

Christina Danforth Investigative Clerk

Denton County Investigations

Troy Taylor, B.S. Senior Forensic Death Investigator

Bill Mills, Jr., B.S. Forensic Death Investigator

Robert Murphy Forensic Death Investigator

Julie Carriker, R.N. Forensic Death Investigator

Terry Martin, B.A. Forensic Death Investigator

Janan Kline Executive Assistant

Forensic Death Investigation continued

Johnson County Investigations

Gary Morris Senior Forensic Death Investigator

Liesl Hoover Forensic Death Investigator

Jamie Smith Forensic Death Investigator

Cassie Clewis Forensic Death Investigator

Heather Brasier Forensic Death Investigator

Parker County Investigations

Bryan Wright Senior Forensic Death Investigator

Jim Nichols Forensic Death Investigator

Rachel Doyle Forensic Death Investigator

Kevin Lanham Forensic Death Investigator

Forensic Chemistry and Toxicology

Robert Johnson, Ph.D. Chief Toxicologist

Aria McCall, B.S. Senior Toxicologist/Technical Lead

Beryl Landry, B.S. Senior Forensic Toxicologist

Connie Lewis, B.S. Senior Forensic Toxicologist

Cheryl Wheeler, B.S. Senior Forensic Toxicologist

Leanne Hazard, B.S. Senior Forensic Toxicologist

John Harris, M.S. Sr. Forensic Chemist/Technical Lead

Christina Coucke-Garza, M.S. Senior Forensic Chemist

Mark Fondren, M.S. Senior Forensic Chemist

Michelle O'Neal, B.S. Senior Forensic Chemist

Sarah Skiles, B.S. Senior Forensic Chemist

Morgue and Evidence Services

Traci Wilson Director of Morgue/Evidence Services

Ronnie Redic Senior Autopsy Technician

Rufus Glynn Dill Autopsy Technician

Cynthia Esparza Autopsy Technician

Esther Gutierrez Autopsy Technician

Burshauna Hill Autopsy Technician

Marc Smiley Autopsy Technician

LeRon Warren Autopsy Technician

Christopher White Autopsy Technician

Criminalistics

Susan Howe, D.V.M., Ph.D. Crime Laboratory Director

Constance Patton, B.S. DNA Technical Lead, CODIS Admin.

Carolyn Van Winkle, M.S. Senior Forensic Biologist

Peggy Le, B.S. Senior Forensic Biologist

Heather Kramer, M.S. Forensic Biologist/Backup CODIS

Kira Tillman, B.S. Forensic Biology Specialist

Vicki Hall, M.S. Sr. Trace Analyst/Trace Tech. Lead

Anne Koettel, M.S. Senior Trace Analyst

Jamie Becker, B.S. Sr. Criminalist, Firearms & Tool Marks

Charles M. Clow, M.A. Sr. Criminalist, Firearms & Tool Marks

William Walker Latent Fingerprint Examiner

Larry Reynolds Forensic Photographer

Secretarial Services

Carol A. Lawson

Cathy Adolph

Kristen Casteleiro

Susan Daniel

Ayman Itani

Deatra Keele

Tamikka Nelson

Christie Smith, A.A.S.

Tarr Jae Wilson

Exec. Asst./Public Information Officer

Medical Secretary/Transcriptionist

Medical Secretary/Transcriptionist

Medical Secretary/Transcriptionist

Records Secretary

Medical Secretary/Transcriptionist

Medical Secretary/Transcriptionist

Vital Statistics Secretary

Records Manager

Facility Maintenance

Jun Lumadilla

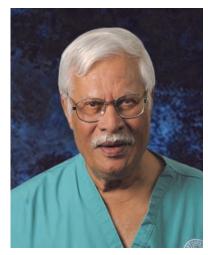
Building Superintendent



Drug Chemistry/Technical Senior Forensic Chemist Christina Coucke-Garza, MS Senior Forensic Chemist D. Michelle O'Neal, BS Senior Forensic Chemist Senior Forensic Chemist Senior Toxicologist Cheryl Wheeler, BS Senior Toxicologist Leanne Hazard, BS Senior Toxicologist Connie Lewis, BS William Fondren, MS Foxicologist/Tech Senior Forensic Chemist Beryl Landry, BS Aria McCall, BS Sarah Skiles, BS John Harris, MS Toxicologist Chief Toxicologist Robert Johnson, PhD Bookkeeper Marsy Key Backup CODIS Administrator Heather Kramer, MS Forensic Biology Specialist Senior Forensic Biologist Senior Forensic Biologist Carolyn Van Winkle, MS Trace Technical Support Carolyn Van Winkle, MS Forensic Biologist Kira Tillman, BS Tarrant County Medical Examiner's Office and Forensic Laboratories Constance Patton, BS **CODIS Administrator DNA Technical Lead** Jamie Becker, BS Susan Howe, PhD Senior Trace Analyst **Trace Technical Lead** Senior Trace Analyst Charles Clow, MA Peggy Le, BS Anne Koettel, MS William Walker **Business Manager** Vicki Hall, MS **Tracye Poirier** Crime Laboratory Director Susan R. Howe, PhD Technical and Administrative Dir. Forensic Photographer Latents Technical Lead Firearm/TM Technical Sr. Firearm/Toolmark Sr. Firearm/Toolmark Chief Medical Examiner Latent Fingerprint Nizam Peerwani, MD Charles Clow, MA Larry Reynolds Jamie Becker, BS William Walker Ronald Singer, MS Chief Human ID Sr. Anthropologist Dana Austin, PhD Roger Metcalf Shavonda Epps Latent Prints Examiner D. Chris Heartsill, BS Quality Manager Dir. Morgue/Evidence Sr. Autopsy Tech Ronnie Redic **Burshauna Hill** Leron Warren Rufus Glynn Traci Wilson Marc Smiley Christopher Esparza Cynthia Gutierrez White Esther Ξ Marc Krouse, MD Deputy Chief ME Allison Mautone, MD (Forensic Fellow) Deputy Medical Examiners: Tasha Z. Greenberg, MD Chief Forensic Death Inv. Richard C. Fries, DO Susan J. Roe, MD Michael Floyd Denton, Johnson, Parker County, 13 personnel Stephen White Robert Corley James Greenwell Tracy Vancil Inv. Clerk Jimmy McDonald Michael Pollard Amy Renfro Larry Steffler **Kyle Finney** John Briggs Supervisor Michael Smith, Histologists Joe English **Executive Assistant** Christina Danforth Inv. Clerk Sue Ellen Brown Jamie McKinney Carol Lawson Cathy Adolph Kristen Casteleiro Susan Daniel Tamikka Nelson Tarr Jae Wilson Inv. Clerk Inv. Clerk Deatra Keele Ayman Itani **Christie Smith**

Medical Examiners

Nizam Peerwani, M.D., Chief Medical Examiner



Dr. Peerwani is a graduate of the American University of Beirut (M.D. in 1976). He completed his residency in pathology at Baylor University Medical Center in Dallas, Texas, and is board certified in Anatomic, Clinical, and Forensic Pathology.

Currently, Dr. Peerwani is the Chief Medical Examiner for Tarrant, Denton, Johnson, and Parker counties in the state of Texas, and has held this position since July 1979. He is actively involved in forensic death investigation for his jurisdiction and routinely testifies in both civil and criminal trials. He has also served as an Associate Professor of Pathology at UNT Health Science Center in Fort Worth from 1979 to 2004 and on the editorial board of the *American Journal of Forensic Medicine and Pathology* from 1992 to 2009, as well as on the National Association of Medical

Examiner's Accreditation Committee from 1990 to 1995. He is an advocate of child safety and served on the first Texas Child Fatality Review Committee as an expert in forensic medicine from 1995 to 2000. His major investigations include the Delta Airline Flight 1141 crash at the Dallas-Fort Worth International Airport in 1988, the mass killings and fire deaths in McLennan County in 1993, and the Wedgewood Baptist Church mass shooting incident in September 1995 in Fort Worth, Texas.

In 1993, he led his team to investigate the mass killing and fire deaths at Mt Carmel, in the outskirts of Waco in McLennan County, after a long siege of David Koresh's religious cult compound by the Federal Bureau of Investigation, and later testified at the federal trial in San Antonio, Texas.

As an advocate for human rights, he serves as an expert consultant for Physicians for Human Rights. He has completed assignments for this organization in Rwanda, Indonesia, Iraq, Afghanistan, Israel, and Libya, investigating genocide and human rights violations under the auspices of the United Nations Tribunal. He testified in the genocide trial of George Rutaganda at the International Criminal Tribunal for Rwanda (United Nations) in Arusha, Tanzania. Additionally, he was the advance team member in the war crimes investigation in the Srebrenica killings in Bosnia in 1995 and set up a temporary morgue facility in Tuzla, Bosnia-Herzegovina. He also investigated the killings of 34 inmates at the Miquel Castro-Castro Prison by the National Peruvian Police in March 2001 and later testified at Inter-American Court of Human Rights in 2006 in San Salvador. In 2015, he and his colleagues led the investigation at the Tarrant County Medical Examiner's Office on behalf of Physicians for Human Rights and Human Rights Watch, and filed a report on the investigation of torture and killings in the Syrian Detention Camps by the current regime of President Bashar Assad.

Appointed by Governor Rick Perry in 2009, Dr. Peerwani currently serves on the Texas Forensic Science Commission. He also serves on the expert panel of Texas State Fire Marshal's Office.

Marc A. Krouse, M.D., Deputy Chief Medical Examiner



Dr. Krouse graduated in 1977 from the University of Texas Southwestern Medical School, then and now a major center of medical research and patient care, in Dallas, Texas. Dr. Krouse entered a four-year residency in Anatomic and Clinical Pathology at Baylor University Medical Center in Dallas. During residency, in 1978, he began working part time at the Tarrant County Medical Examiner. After Dr. Gwozdz's sudden death in 1979, he was sworn in as Medical Examiner along with Dr. Nizam Peerwani. He completed residency in 1981. Dr. Krouse was certified by the American

Board of Pathology in Anatomic and Clinical Pathology in 1981 and earned Special Competency in Forensic Pathology in 1984.

Dr. Krouse is a Fellow of the American Academy of Forensic Sciences and a Member and past Board of Directors member of the National Association of Medical Examiners. He has served on a number of committees in both organizations. He was Program Director of the 1993 annual meeting of NAME. He has made many peer-reviewed platform and poster presentations in annual meetings of both organizations. Dr. Krouse has taught medical and graduate students of the University of North Texas Health Sciences Center in Fort Worth, pathology and other residents from numerous hospital programs, attorneys, police, fire and paramedic workers, nurses and nursing students and the public. A program teaching recovery of buried bodies and evidence has been a part of this teaching effort. Dr. Krouse worked with US Forest Service and other archaeologists and anthropologists to analyze skeletal pre-Columbian human remains at the Museum of Northern Arizona in Flagstaff, Arizona. A continuing education program has presented in annual forensic sciences updates for more than a decade.

Dr. Krouse has been a supporter and member of a number of community programs. He worked with the Boy Scouts as an adult leader in the local troop and district. He has served on the Board of the Boys and Girls Clubs of Fort Worth and volunteered for many fundraisers for community organizations and foundations.

Susan J. Roe, M.D., Deputy Medical Examiner

Dr. Roe graduated from the University of Texas at Arlington with a Bachelors of Science in Nursing (1977) and from the University of Texas Health Science Center at Houston Medical School with an M.D. (1983). In 1988, she completed her post graduate training in Anatomic Pathology, Clinical Pathology, and Forensic Pathology at Indiana University, Hennepin County Medical Center, and the Hennepin County Medical Examiner's Office.

Dr. Roe is board certified in anatomic, clinical, and forensic pathology. She worked as a Forensic Pathologist at the Hennepin County Medical Examiner's Office, the Ramsey County Medical Examiner's Office, and the Minnesota Regional Medical Examiner's Office from 1988 through 2011. Additionally, she was a Bush Foundation Medical Fellow, Class of 2003, and worked at the Jesse E. Edwards Registry of Cardiovascular Disease from 2005 through 2011. Dr. Roe joined the Tarrant County Medical Examiner's Office in December 2011 as a Deputy Medical Examiner.

Tasha Z. Greenberg, M.D., Deputy Medical Examiner



Dr. Greenberg earned her Bachelors of Science in Kinesiology from the University of California—Los Angeles in 1989, after which she attended graduate school at Northwestern University in Chicago, Illinois, where she majored in neuroscience prior to her matriculation to medical school. Upon graduating from the Baylor College of Medicine in 1996, Dr. Greenberg completed her residency in Pathology. Her first year of study was at St. Joseph's Hospital and Medical Center in Phoenix, Arizona, after which she returned to Baylor for the remaining four years, with her final year concentrated on Pediatric Pathology under the tutelage of Edmund

Donoghue, M.D., at the Cook County Medical Examiner's Office.

During her six-year tenure at the Baltimore Medical Examiner's Office in Maryland, Dr. Greenberg was active in child fatality review at the local and state levels. She also conducted lectures and training for local universities as well as the medical examiner's homicide course, speaking primarily on pediatric forensics. In April 2008, Dr. Greenberg accepted the position of Medical Director of the Autopsy Service for the University of Texas Southwestern Medical School at Parkland Medical Center, and in September 2012 she was appointed a deputy medical examiner for the Tarrant County Medical Examiner's Office.

Richard C. Fries, D.O., Deputy Medical Examiner



After graduating with honors from the University of Texas at Dallas with a Bachelors of Science in Biology (2004), Dr. Fries went on to earn his D.O. from the University of North Texas Health Science Center—Texas College of Osteopathic Medicine in 2008. He completed his residency in Anatomic and Clinical Pathology at the Virginia Commonwealth University Health System, Medical College of Virginia Hospitals.

In July 2012, Dr. Fries accepted a fellowship in Forensic Pathology at the Tarrant County Medical Examiner's Office. After successfully

completing this one-year program, he took and passed the board exam in Forensic Pathology.

Dr. Fries joined the staff of the Tarrant County Medical Examiner's Office in July 2013. He is a member of the American Academy of Forensic Sciences (AAFS) and the National Association of Medical Examiners (NAME).

Allison Mautone, M.D., Forensic Fellow



Dr. Mautone graduated from the University of Virginia with a B.S. in Biomedical Engineering (2007) and from the University of Medicine and Dentistry of New Jersey (now Rutgers) – New Jersey Medical School in Newark, NJ with an M.D. (2011). She then completed residency in Anatomic and Clinical Pathology at New York Presbyterian Hospital – Columbia University Medical Center in New York, New York. Dr. Mautone is board certified in Anatomic and Clinical Pathology.







Administration

Ronald Singer, M.S., Technical & Administrative Director



Ronald Singer received his Bachelors of Science from Tulane University and his Masters of Science from Loyola University of New Orleans. A forensic scientist since 1972, he has served as President of the International Association of Forensic Sciences. He is also a Distinguished Fellow and Past President of the American Academy of Forensic Sciences, a Distinguished Member and Past President of the Association of Firearm and Toolmark Examiners, an Emeritus Member and Past Secretary of the American Society of Crime Laboratory Directors, and a member of

numerous other forensic associations and committees. He has been an invited speaker on forensic issues throughout the U.S., Hungary, Bosnia, England, Portugal, Turkey, the Maldives, and Sri Lanka.

Mr. Singer is a recipient of the American Academy of Forensic Sciences Criminalistics Section Outstanding Service award, the Association of Firearm and Toolmark Examiners Member of the Year award, the Gold Medal award of the Mediterranean Academy of Forensic Sciences, and the Distinguished Fellow award from the American Academy of Forensic Sciences.

D. Chris Heartsill, B.S., Quality Control Manager



Chris Heartsill received his Bachelors of Science in Chemistry from East Central University in 1991. He has been working in analytical chemistry for over twenty years with more than 19 years of forensic toxicology experience, including the areas of human performance forensic toxicology and postmortem forensic toxicology. Prior to coming to Tarrant County in 2013, he served as an analytical chemist, toxicologist, quality manager, and breath-testing technical supervisor.

Chris is currently certified by the American Board of Forensic Toxicology as a Forensic Toxicology Specialist. He is an active member of the Society of Forensic Toxicologists, the Scientific Working Group for Toxicology, and the Association of Forensic Quality Assurance Managers. Chris is also actively involved in the accreditation of forensic laboratories through volunteer activities with the American Society of Laboratory Directors/Laboratory Accreditation Board.

Tracye Poirier, M.B.A., Business Manager



Tracye Poirier received her Bachelors of Science degree in Chemistry from the University of Texas at Arlington. She came to work here in 2000 as a Senior Forensic Toxicologist. She also served as a Senior Forensic Chemist before assuming her current role as the Business Manager. Her background in the sciences provides her with unique insight into managing a Medical Examiner's office.

Ms. Poirier earned her M.B.A. degree with an emphasis in Strategic Leadership in April 2010 from the University of Dallas. She is a member of the American Academy of Forensic Sciences and the Southwestern Association of Toxicologists.

Carol A. Lawson, Executive Assistant/Public Information Officer



Accepting employment with the Tarrant County Medical Examiner in 2005, Ms. Lawson currently serves as the Executive Assistant to the Chief Medical Examiner. In this role she schedules pathologists for morgue duty, arranges court appearances and professional engagements for the Chief Medical Examiner and his staff, supervises Secretarial Services, and assists families, law enforcement agents, and attorneys with their concerns and inquiries. In addition to these responsibilities, she also serves as

the Public Information Officer of the Tarrant County Medical Examiner's District, fielding questions from the media and releasing information to the public as necessary. Ms. Lawson has reaffirmed her dedication through continued professional development in Public Information Officer awareness, leadership, and influence, as well as training with the FBI-Law Enforcement Executive Leadership Association (FBI-LEEDA).

Laboratories

Susan R. Howe, D.V.M., Ph.D., Crime Laboratory Director

Dr. Howe received a B.S. and a Doctor of Veterinary Medicine degree from the University of Illinois and a Ph.D. in Toxicology from Texas A & M University. A forensic scientist since 1996, she is an active member of the American Academy of Forensic Sciences, the Society of Forensic Toxicologists, and the Southwestern Association of Forensic Toxicologists.

Dr. Howe is board certified in Forensic Toxicology by the American Board of Forensic Toxicology and has published a number of scientific articles in peer-reviewed journals in the field of molecular toxicology.

Roger Metcalf, D.D.S., J.D., Chief of Human Identification Services

Roger Metcalf is a graduate of Baylor University and Baylor College of Dentistry. He completed a fellowship in Forensic Odontology at the Center for Education and Research in Forensics at the University of Texas Health Science Center at San Antonio Dental School under Dr. David Sinn. He received his J.D. degree from Texas Wesleyan University School of Law in 2009.

Dr. Metcalf has been a member of the Tarrant County Medical Examiner's Mass Fatality Dental Identification Team since it was established in 1980, and has participated in the identification of victims from the Delta 191 and 1141 crashes at D/FW Airport and from the Mt. Carmel incident in Waco, Texas. Since joining the Tarrant County Medical Examiner's Office in 2004, Dr. Metcalf has supervised the forensic identification of more than 300 unidentified bodies per year.

Robert Johnson, Ph.D., Chief Forensic Toxicologist



Dr. Johnson graduated from the University of Oklahoma with a Ph.D. in Analytical Chemistry in 2004. Certified as a forensic toxicologist by the American Board of Forensic Toxicology, he joined the Tarrant County Medical Examiner's Office in 2011. He is active in several professional societies, including the Society of Forensic Toxicologists, the American Academy of Forensic Sciences, and the Southwestern Association of Toxicologists.

Dr. Johnson has published over 50 scientific articles in his career, all of which deal specifically with forensic toxicology.

Morgue/Laboratory Services

Traci Wilson, Chief of Morgue/Laboratory Services



Traci Wilson began her employment with the Tarrant County Medical Examiner's Office as a Forensic Autopsy Technician in 1995. Prior to moving to Fort Worth, she had worked in Bossier City, Louisiana as a Forensic Pathologist Assistant. Ms. Wilson attended Northeast Louisiana University Monroe (ULM), where she majored in Business Administration/Business Law.

In 2009, Ms. Wilson assumed the duties of Chief of Morgue/Laboratory Services, in which role she continually develops and implements new policies to streamline recordkeeping and safeguard evidence handling.

Forensic Death Investigation

Michael Floyd, B.S., Chief Forensic Death Investigator Tarrant County

Michael Floyd began working for the Tarrant County Medical Examiner's District in 1990 as a Medical Investigator assigned to Parker County. He transferred to Tarrant County in 1993. In 1997, he was promoted to Senior Forensic Investigator, became the Supervisory Investigator in 2009, and was appointed Chief Forensic Investigator in 2010.

Prior to his employment at TCME, Michael was a Texas-certified EMT-Paramedic for 16 years and spent 35 years as a Texas Peace Officer.

Troy Taylor, B.S., Senior Forensic Death Investigator Denton County

Mr. Taylor started his career in 1990 at the Denton County Medical Examiner's Office. After multi-year tenures in Denton and Tarrant County, he transferred back to the Denton office in 2003.

Troy teaches medical examiner law, wound patterning, and decomposition changes for intermediate crime scene classes, as well as for basic peace officer certification classes. He has attended medico-legal death investigation training and psychological profiling schools.

In 2007, Mr. Taylor was promoted to Chief Forensic Death Investigator of Denton County.

Gary Morris Senior Forensic Death Investigator Johnson County



Gary Morris began his service with the Johnson County Medical Examiner's Office as a Reserve Investigator in 2006. He served in several positions with the Johnson County Medical Examiner's Office before advancing to his current position as Chief Forensic Death Investigator, a position he has held since 2011.

Mr. Morris has attended forensic death investigation training in Fort Worth, St. Louis, Arizona, and New York.

Bryan Wright Senior Forensic Death Investigator Parker County



Bryan Wright began his employment with the Tarrant County Medical Examiner's District shortly after Parker County became the first member of the district system in 1986. Mr. Wright worked as a medical investigator for 13 years and was also a peace officer with the Weatherford Police Department during that time, retiring honorably as a Lieutenant in 2009, having earned a Master Peace Officer certification, among other awards and honors, and having completed 60 college hours. He also worked with and administered the Cross Timbers Narcotics Task Force,

comprised of 18 member law enforcement agencies, during his time as a medical investigator.

Upon his retirement, Bryan was sought out and hired by the Parker County Sheriff's Office due to his extensive experience and background. He has a cumulative thirty years of peace officer experience.

Professional Involvement

Ronald Singer, M.S., Technical & Administrative Director

Chair, Exhibitor Liaison Committee, American Academy of Forensic Sciences

Member, Editorial Board, Journal of Forensic Sciences

Member, Ethics Committee, American Academy of Forensic Sciences

President (2004-2005), American Academy of Forensic Sciences

Secretary (1983-1986), American Society of Crime Laboratory Directors

President (1995-1996), Association of Firearm and Toolmark Examiners

Chair (2009-2012), Forensic Sciences Foundation

President (2005-2008), International Association of Forensic Sciences

Member, North Carolina Forensic Science Advisory Board

Award of Merit, American Academy of Forensic Sciences

Distinguished Fellow, American Academy of Forensic Sciences

Distinguished Service, Criminalistics Section, American Academy of Forensic Sciences

Emeritus Member, American Society of Crime Laboratory Directors

Distinguished Member, Association of Firearm and Toolmark Examiners

Member of the Year, Association of Firearm and Toolmark Examiners

Gold Medal, Mediterranean Academy of Forensic Sciences

D. Chris Heartsill, B.S., Quality Control Manager

Former Member, Alcohol Testing Alliance

President Elect (2002-2003), President (2003-2004), and Immediate Past President (2004-2005), Alcohol Testing Alliance

Lead Assessor (2015-present), American Society of Crime Laboratory Directors— Laboratory Accreditation Board

Technical Assessor (2003-2015), American Society of Crime Laboratory Directors—Laboratory Accreditation Board



Member (2005-2015), Toxicology Discipline Technical Advisory Committee, American Society of Crime Laboratory Directors—Laboratory Accreditation Board

Member, Association of Forensic Quality Assurance Managers in Toxicology

Chair (2012-2015), Quality Control Workgroup; Subcommittee Standards, Practices, and Protocols; Forensic Toxicology Council

Member (2010-2015), Scientific Working Group in Toxicology, Forensic Toxicology Council

Advisor, Quality Control Task Group, Toxicology Subcommittee, Organization of Scientific Area Committees, National Institute of Standards and Technology

Member (2015-present), Administrative Committee; Alcohol, Drugs, Impairment Division of the National Safety Council

Member (2014-present), Executive Board; Alcohol, Drugs, Impairment Division of the National Safety Council

Member (2015-2016), Meeting Host Committee, Society of Forensic Toxicologists

Counselor (2000-2002), Southwestern Association of Toxicologists

President Elect (2002-2003), President (2003-2004), and Immediate Past President (2004-2005), Southwestern Association of Toxicologists

President Elect (2015-2016), Southwestern Association of Toxicologists

Historian, Southwestern Association of Toxicologists

Chair (2006-present), Grant Approval Committee, Southwestern Association of Toxicologists

Member, Texas Association of Crime Laboratory Directors

Regional Award, American Academy of Forensic Sciences

Roger D. Metcalf, D.D.S., J.D., Chief of Identification Services

Diplomate, American Board of Forensic Odontology

Diploma in Forensic Human Identification, Faculty of Forensic and Legal Medicine, RCP

President (2015), American Society of Forensic Odontology

Executive Secretary (2015), Forensic Odontology Subcommittee, Organization of Scientific Area Committees, National Institute of Standards and Technology

Chair (2015), Amicus Brief Committee, American Academy of Forensic Sciences

Chair (past), Certification and Examination Committee, American Board of Forensic Odontology

Member (past), Board of Directors, Southwestern Association of Forensic Scientists

Susan R. Howe, D.V.M., Ph.D., Crime Laboratory Director

Member (2013-present), Exhibitor Liaison Committee, American Academy of Forensic Sciences

Member (2016), Meeting Planning Committee, Society of Forensic Toxicologists

Co-Chair (2016), Workshop, Society of Forensic Toxicologists

President (2011-2012), Southwestern Association of Toxicologists

Chair (2014-2015), Certification Committee, Texas Association of Crime Laboratory Directors

Member (2015-present), Education Committee, Texas Association of Crime Laboratory Directors

Secretary (2016-present), Texas Association of Crime Laboratory Directors

Jamie Becker, Senior Criminalist, Firearms & Tool Marks

Member, Ethics Enforcement Procedures Ad-Hoc Committee, Association of Firearm and Toolmark Examiners

Chairperson (1997-1999), Sickness and Distress, Association of Firearm and Toolmark Examiners

- Member (1999-2002), Board of Admissions, Association of Firearm and Toolmark Examiners
- Member (1999-2002), Research and Development Ad-Hoc Committee, Association of Firearm and Toolmark Examiners
- Member (2002), Training Seminar Host Committee, Association of Firearm and Toolmark Examiners
- Treasurer (2002-2005), Association of Firearm and Toolmark Examiners
- Member (2007-2009), Nominating Committee, Association of Firearm and Toolmark Examiners
- Member (1999-2001), Scientific Working Group on Firearms and Toolmarks

Charles Clow, Senior Criminalist, Firearms & Tool Marks

Journal Editor (2008-2013), Association of Firearm and Toolmark Examiners

Board Member (2005-2012), Scientific Working Group for Firearms and Toolmarks

- Best Research Paper (2004), "Cartilage Stabbing with Consecutively Manufactured Knives: A Response to Ramirez vs. State of Florida," National Firearm Examiner Academy
- Distinguished Member Award (2006), Association of Firearm and Toolmark Examiners
- Steve Molnar Award (2012), Outstanding Contributions to the Association of Firearm and Toolmark Examiners Journal
- Walter J. Howe Award (2012), Outstanding Contributions to the Association of Firearm and Toolmark Examiners Journal

Anne Koettel, Senior Trace Analyst

Member, Publications Committee, American Society of Trace Evidence Examiners

Robert Johnson, Ph.D., Chief Forensic Toxicologist

Member (2004-2011), Life Sciences and Biomedical Engineering Branch, Aerospace Medical Association

Fellow (2011-present), American Board of Forensic Toxicology

Member (2014-present), Toxicology Subcommittee, Organization of Scientific Area Committees, National Institute of Standards and Technology

Member (2008-present), Alcohol, Drugs, and Impairment Division, National Safety Council

Member (2013-present), Executive Board; Alcohol, Drugs, and Impairment Division, National Safety Council

Secretary (2014-present), Alcohol, Drugs, and Impairment Division, National Safety Council

Guest Editor (2016), Journal of Analytical Toxicology, Society of Forensic Toxicologists Special Edition

Member (2005-present), Society of Forensic Toxicologists

Member (2011-2014), Membership Committee, Society of Forensic Toxicologists

Member (2009-present), Southwestern Association of Toxicologists

President (2015-present), Southwestern Association of Toxicologists

Superior Accomplishment Award (2010), Office of Aviation Medicine

William E. Collins Publications Award (2006), Office of Aviation Medicine

Charles Tripp Award (2014), Southwestern Association of Toxicologists

James Garriott Award (2013), Southwestern Association of Toxicologists

Excellence in SPE Award (2014), United Chemical

Lloyd Swearingen Outstanding Graduate Student Research Award (2003), University of Oklahoma

Aria McCall, Senior Toxicologist and Technical Lead

Board Certification (2014-present), American Board of Forensic Toxicology

Member (2015-present), Society of Forensic Toxicologists

Workshop Co-Chair (2016), Society of Forensic Toxicologists

Member (2002-present), Southwestern Association of Toxicologists

Member (2013-present), Membership Committee, Southwestern Association of Toxicologists

Sarah Skiles, Senior Forensic Chemist

Member, Board of Directors, Alcohol Testing Alliance

Member, International Association of Chemical Testing

Member, Past Board of Directors, Southwestern Association of Forensic Scientists

Member, Southwestern Association of Toxicologists

Christina Coucke-Garza, Senior Forensic Chemist

Member, Southwestern Association of Forensic Scientists

Chair (past), Scholarship Committee, Southwestern Association of Forensic Scientists

Chair (present), Nominations Committee, Southwestern Association of Forensic Scientists

Member, Southwestern Association of Toxicologists

Treasurer (past), Southwestern Association of Toxicologists

Mark Fondren, Senior Forensic Chemist

President (2000), Alcohol Testing Alliance

Chairman (2014-present), Examinations, American Board of Forensic Toxicology

Member (2014-present), Executive Board, American Board of Forensic Toxicology

Chairman (2010-2014), Examination, Forensic Toxicology Certification Board

Member (2013-2014), Ethics Committee, Forensic Toxicology Certification Board

Member (2015), Breath Alcohol Task Group Subcommittee, Organization of Scientific Area Committees, National Institute of Standards and Technology

Member (2010-2015), Scientific Working Group for Toxicology



Michelle O'Neal, Senior Forensic Chemist

Certified Technical Assessor, American Society of Crime Laboratory Directors/ Laboratory Accreditation Board—International

Associate Editor (1995-1997), Southwestern Association of Forensic Scientists

Chairman of the Board (2009-2010), Southwestern Association of Forensic Scientists

Chairperson (2008-2011, 2015), Floyd E. McDonald Scholarship, Southwestern Association of Forensic Scientists

Member (1999-2000), Board of Directors, Southwestern Association of Forensic Scientists

Member (2004-2006), Board of Directors, Southwestern Association of Forensic Scientists

Member (2013-2015), Board of Directors, Southwestern Association of Forensic Scientists

President Elect (2007-2008) and President (2008-2009), Southwestern Association of Forensic Scientists

Connie Lewis, Senior Forensic Toxicologist

Board Certification (2014-present), American Board of Forensic Toxicology

Member (2012-present), Society of Forensic Toxicologists

Member (2007-present), Southwestern Association of Toxicologists

Secretary (2016), Southwestern Association of Toxicologists

James Garriott Award (2014), Southwestern Association of Toxicologists

Excellence in SPE Award (2014), United Chemical

2015 Statistics



Annual Development

rowth in the responsibilities of the Tarrant County Medical Examiner's District continued throughout 2015. To meet the increased demand for services, seven new employees were hired. These included Ana Zamora, Custodial Staff; Ayman Itani, Records Clerk; Jeffrey Honeycutt, Forensic Death Investigator; Kristen Hammonds, Forensic Biologist in the DNA Lab; Marc Smiley, Autopsy Technician; Peggy Le, Senior Criminalist in the DNA Lab; and Tamikka Nelson, Medical Secretary/Transcriptionist.

Additionally, a part-time Family Advocate position was created at the Tarrant County Medical Examiner's Office in partnership with Trauma Support Services of North Texas (TSSNT). This position is grant-funded through TSSNT and is presently staffed at the TCMEO by **Kiva T. Harper**. The Family Advocate identifies deaths related to trauma (accidents, homicides, and suicides), and refers the families of these decedents to resources and benefits that may assist them in their grief.

In 2015, the Tarrant County Medical Examiner's Office said goodbye to **Linda F. Anderson**, who retired as Executive Assistant to the Chief Medical Examiner and Public Information Officer after 21 years of dedicated service.

The following pages present statistics, beginning with an overview and progressing to more detailed case data, that demonstrate the increasing needs of the communities we serve and the myriad ways in which these needs were met by the Tarrant County Medical Examiner's District in 2015.

2015 Statistical Summary

Reported deaths ______11,013

Jurisdiction terminated Jurisdiction accepted within the TCME District scenes investigated outside the TCME District	1,385	51%	2,734	76% 24%	7,435 3,578	68% 32%
Bodies brought to facility			0	2178	3,618	33%
Medical procedures External examination Partial autopsy Complete autopsy			1,494 362 1,711	42% 10% 48%	3,567	32%
Deaths certified Natural Accident vehicular non-vehicular	228 479	32% 68%	1,384 707	52% 26.5%	2,664	
Suicide Undetermined Homicide Non-human remains			351 95 124 3	13.2% 3.6% 4.7% 0.1%		
Human identification Successfully identified by observation (visual) by fingerprints by odontology by DNA by anthropology by other means	23 601 30 8 19 11	3% 87% 4% 1% 3% 2%	692	99.6%	695	6%
Pending identification			3	0.4%		

CORRECTED

2014 Statistical Summary

Reported deaths		10,744

Jurisdiction terminated					7,347	68%
Jurisdiction accepted					3,397	32%
within the TCME District			2,587	76%		
scenes investigated	1,329	51%				
outside the TCME District			810	24%		
Bodies brought to facility					3,455	32%
Medical procedures					3,298	31%
External examination			1,238	38%		
Partial autopsy			421	13%		
Complete autopsy			1,639	50%		
Deaths certified					2,561	
Natural			1,300	51%		
Accident			747	29.2%		
vehicular	241	32%				
non-vehicular	506	68%				
Suicide			307	12.0%		
Undetermined			103	4.0%		
Homicide			98	3.8%		
Non-human remains			6	0.2%		
Human identification					562	5%
Successfully identified			554	98.6%		
by observation (visual)	21	4%				
by fingerprints	478	86%				
by odontology	22	4%				
by DNA	18	3%				
by anthropology	13	2%				
by other means	2	0%				
Pending identification			8	1.4%		

Manner of Death by County



2015 Tarrant Co	unty Deat	hs
MANNER	CASES	%
Natural	1,060	53%
Accident	530	26%
Suicide	235	12%
Homicide	105	5.2%
Undetermined	79	3.9%
Non-human remains	2	0.1%
TOTAL	2011	100%

2015 Denton Co	unty Deat	hs
MANNER	CASES	%
Natural	180	46%
Accident	112	29%
Suicide	74	19%
Homicide	10	2.6%
Undetermined	11	2.8%
Non-human remains	1	0.3%
TOTAL	388	100%





2015 Johnson Co	ounty Dea	ths
MANNER	CASES	%
Natural	72	61%
Accident	25	21%
Suicide	13	11%
Homicide	4	3%
Undetermined	4	3%
Non-human remains	0	0%
TOTAL	118	100%

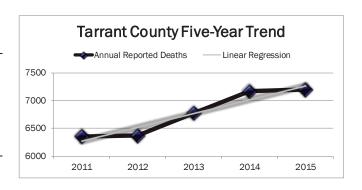
2015 Parker Cou	ınty Deatl	18
MANNER	CASES	%
Natural	72	49%
Accident	40	27%
Suicide	29	20%
Homicide	2	1%
Undetermined	4	3%
Non-human remains	0	0%
TOTAL	147	100%



Five-Year Trends

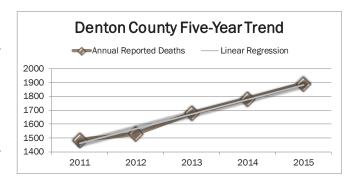
Tarrant County, 2011-2015

Manner of Death	2011	2012	2013	2014	2015
Natural	915	818	900	1006	1060
Accident	518	506	513	579	530
Suicide	190	222	222	214	235
Homicide	138	104	127	85	105
Undetermined	57	64	68	75	79
Non-human remains	16	9	13	6	2
Jurisdiction terminated	4519	4644	4932	5201	5187
Total	6353	6367	6775	7166	7198



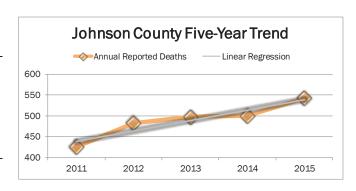
Denton County, 2011-2015

Manner of Death	2011	2012	2013	2014	2015
Natural	159	136	173	163	180
Accidental	95	103	108	103	112
Suicide	66	66	63	60	74
Homicide	11	9	7	7	10
Undetermined	11	7	8	16	11
Non-human remains	4	3	1	0	1
Jurisdiction terminated	1140	1206	1317	1432	1502
Total	1486	1530	1677	1781	1890



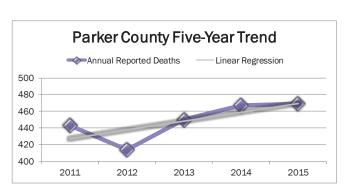
Johnson County, 2011-2015

Manner of Death	2011	2012	2013	2014	2015
Natural	57	73	60	59	72
Accidental	26	28	31	34	25
Suicide	12	13	27	19	13
Homicide	4	7	2	3	4
Undetermined	3	4	6	6	4
Non-human remains	0	3	1	0	0
Jurisdiction terminated	323	354	370	379	424
Total	425	482	497	500	542



Parker County, 2011-2015

Manner of Death	2011	2012	2013	2014	2015
Natural	72	46	54	72	72
Accidental	29	36	28	31	40
Suicide	25	15	12	14	29
Homicide	0	5	3	3	2
Undetermined	2	2	3	6	4
Non-human remains	3	0	0	0	0
Jurisdiction terminated	312	310	350	341	322
Total	443	414	450	467	469

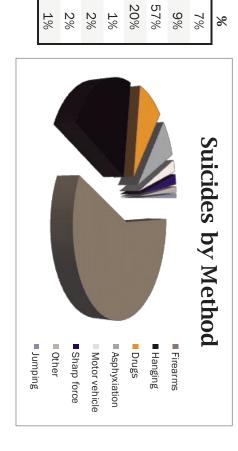


Accidents, Homicides, and Suicides

	Alcohol Asphyxiation Drowning Drugs Fall	Tarrant 4 7 24 177 118	Tarrant Denton Johnson 4 2 0 7 4 2 24 7 2 177 37 7 118 28 0	J	0 2 2 7	Ohnson Parker 0 0 2 2 2 4 7 15 0 2
Asphyx Drowni	iation	7 24	27 4	7 2 2		Δ 4 π
)rugs all	177 118	37 28	7		15
	Fire	ത	0	2		Н
	Motor vehicle	160	29	10	O) 14
	Other	34	5		2	2 2
	TOTAL	530	112	25	01	5 40
1		Tarrant	Denton	Johnson	nos	<mark>son</mark> Parker
	Asphyxiation	2	ㅂ	_	O	1
	Blunt force	ט ק	>			>

	116	4	4	11	97	TOTAL
3%	ω	0	0	0	З	Other
11%	13	0	0	2	11	Sharp force
8%	9	0	ω	0	თ	Motor vehicle
62%	72	ω	Н	œ	60	Firearms
13%	15	0	0	0	15	Blunt force
3%	4	1	0	1	2	Asphyxiation
%	Total	Parker	Johnson	rant Denton	Tarrant	

	116	4	4	<u> </u>	97
3%	ω	0	0	0	ω
11%	13	0	0	2	11
8%	9	0	ω	0	თ
62%	72	ω	Ь	œ	60
13%	15	0	0	0	15
3%	4	Ь	0	4	2
%	Total	Parker	Johnson	Denton	Tarrant
	707	40	25	112	530
6%	43	2	2	IJ	34
30%	213	14	10	29	160
1%	9	ㅂ	2	0	თ
21%	148	N	0	28	118
33%	236	15	7	37	177
5%	37	4	2	7	24
2%	15	N.	Κ.	4	,



Drugs

Asphyxiation

15 22

Tarrant | Denton | Johnson

Parker

Total

Hanging

0 1 0 0 1 5 8

0000

0 0

22

Firearms

128 49

Sharp force Jumping

Motor vehicle

Other

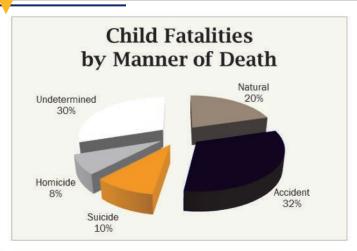
234

350



Child Fatality Review

he Child Fatality Review Team identifies community trends, creates prevention strategies, and promotes public awareness. The Tarrant County Medical Examiner's Office has contributed to these efforts, with the ultimate goal of reducing preventable childhood deaths, for over twenty years.



Manner of Death:	Natural	
CAUSE OF DEATH		
Sudden	10	
Unexplained death in childhood (SU	JDC) 2	
Infant death syndrome (SIDS)	2	
Unexplained infant death (SUID)	3	
Death associated with comorbidity	2	
Death, not otherwise specified	1	
Intrauterine/perinatal	3	
Diabetes	1	
Viral infection	1	
Bacterial infection	1	
Complications of congenital defect(s)	5	
TOTAL NATURAL DEATHS:		21

Manner of Death:	Suicide
CAUSE OF DEATH	
Firearms	3
Hanging	5
Overdose	1
Other	1
TOTAL SUICIDES:	10

fanner of Death:	Acci	dent		
CAUSE OF DEATH				
Trauma			18	
Vehicular		15		
driver	1			
passenger	8			
bicycle/skateboard/ATV	3			
pedestrian	3			
Fall		2		
Train versus pedestrian		1		
Environmental (hypo/hyperthermia))		2	
Drugs			1	
Drowning			7	
bathtub		1		
pool		5		
creek/river/lake		1		
Asphyxia			5	
choking		3		
positional		2		

Manner of Death:	Homicide
CAUSE OF DEATH	
Blunt force trauma	5
Drugs	1
Firearms	1 .
Vehicular	1
TOTAL HOMICIDES:	8

anner of Death:	Unde	eterr	nine	ed
CAUSE OF DEATH				
Sudden			25	
Death in childhood (SUDC)		0		
Infant death syndrome (SIDS)		2		
Unexplained infant death (SUID)		21		
with co-sleeping	6			
with unsafe sleep environment	9			
not otherwise specified	6			
Unexplained neonatal death (SUNE))	2		
Infection			1	
Trauma			4	
vehicular		2		
firearms		1		
other		1		
Complications of congenital defect(s)			1	
TOTAL UNDETERMINED DEATHS	S:			3

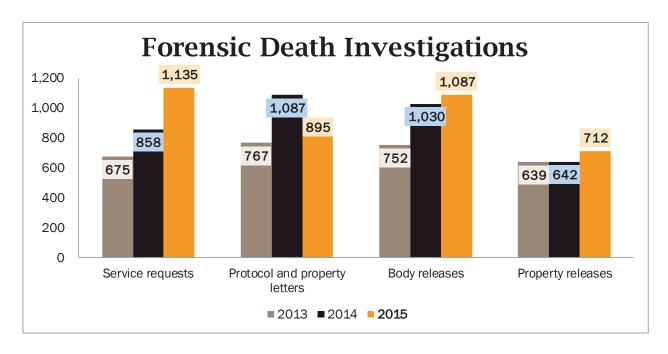
Departments in Depth

Forensic Death Investigation

orensic Death Investigation conducts investigations into the cause and manner of deaths occurring within its jurisdiction of Tarrant, Denton, Johnson, and Parker counties. Staffed around-the-clock, the department is responsible for initiating a formal response to all reportable deaths, which totaled **11,013** in 2015.

Trained across multiple disciplines, forensic investigators boast a distinctive array of knowledge, including criminal investigation techniques, relevant aspects of forensic medicine, crime scene processing skills, and methods of maintaining case integrity. Moreover, each investigator must be able to conduct effective interviews, locate and notify next of kin, and interact appropriately with law enforcement personnel.

Once the Tarrant County Medical Examiner's office assumes jurisdiction of a case, the investigator attends the scene or the hospital at which death occurred. After conducting the initial investigation, the investigator prepares a detailed case report containing biographical data on the decedent, a narrative of the events leading up to the time of death or discovery of the decedent, and a summary of all analyses and leads obtained. Investigators further coordinate with health care providers, members of law enforcement, employers, families, and other pertinent sources to gather information that may be of value in determining the cause and manner of death.





Human Identification Services





dentification of unidentified remains, a primary function of the Tarrant County Medical Examiner's Office, is a legal determination important for both legal and humanitarian reasons. The process requires a holistic approach that takes into consideration all



available scientific and contextual evidence. For most people, having a loved one at a morgue for postmortem examination is stressful; hence, the Tarrant County Medical Examiner's Office strives to mitigate this by timely identification within the scope defined by <u>Statute 49.25</u>, <u>Section §9 of the Texas State Code of Criminal Procedure</u>.

Overview



The Tarrant County Medical Examiner's Office established the Human Identification Laboratory in the mid-1990s as a standalone facility, a concept then unique among medical examiner's offices in the United States. This laboratory is charged with the responsibility of

investigating and attempting to identify all decedents presented to the District as "unidentified." The Human Identification Laboratory additionally verifies the identity of all homicide victims examined by the office.

Since 2004, the Human Identification Laboratory has identified more than **4,500** individuals in the morgue.

Identification Methods

There are a number of scientific methods employed to definitively establish an identity, including:

- Fingerprint analysis
- Comparison of dental radiographs and records
- Comparison of medical radiographs and records
- DNA analysis

Other methods, such as lip-print analysis (or cheiloscopy), ear-print analysis, and gait analysis are not generally accepted nor used in the U.S. at this time.

Staffing

The Human Identification Laboratory comprises a full-time forensic odontologist, a full-time forensic anthropologist, and two full-time fingerprint examiners. Note that the fingerprint section of the lab operates 24 hours a day, seven days a week.



Forensic Odontologist

• Roger D. Metcalf, D.D.S., J.D.



Forensic Anthropologist

• Dana Austin, Ph.D.



Latent Fingerprint Examiner

ShaVonda Epps



Latent Fingerprint Examiner

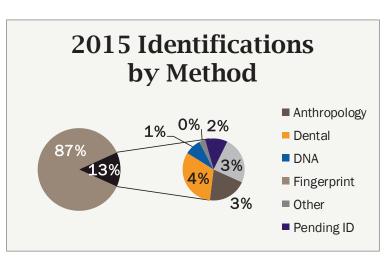
• Bill Walker

Roger D. Metcalf, D.D.S., J.D. is the director of the Human Identification Laboratory. He is board-certified in forensic odontology and holds a diploma in Forensic Human Identification from the Faculty of Forensic and Legal Medicine of the Royal College of Physicians in London. He is the only person in the U.S. to hold this qualification at this time. Dr. Metcalf is the past president of the American Society of Forensic Odontology and past chair of the Certification and Examination Committee of the American Board of Forensic Odontology.

Dana Austin, Ph.D., is the District's forensic anthropologist. She is board-certified by, and is the past president of, the <u>American Board of Forensic Anthropology</u>. In addition to performing laboratory examinations, she supervises the Field Recovery Team, which is called out from time to time to recover skeletonized human remains or assist in exhumations. Dr. Austin also works with various state agencies to repatriate Native American remains that are discovered in the District's jurisdiction.

Ms. ShaVonda Epps and Mr. Bill Walker are the lab's fingerprint examiners. They are each members of the International Association for Identification and both certified by the Texas Department of Public Safety as terminal operators of the <u>Automated Fingerprint Identification System</u> (A.F.I.S.). Whenever known antemortem fingerprints are available from stored state or national data, A.F.I.S. allows for rapid identification of decedents via fingerprint analysis and comparison.

As shown in the chart at right, the majority (about 87%) of unidentified persons at the County Tarrant Medical Examiner's Office are identified via fingerprint analysis. Identifications made way are generally complete within 24 hours of the decedent's arrival.



Identification Process

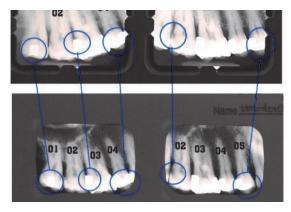


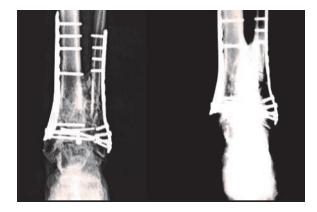
Identification Laboratory's The Human identification protocol normally begins with a fingerprint inquiry to determine if the decedent's fingers are suitable for fingerprinting. If they are, the lab can access the A.F.I.S. and/or the Generation Identification system (NextGen or N.G.I.), as well as request fingerprints from the Texas Department of Public Safety's driver's license database. International fingerprints can be obtained from the Biometric Support Center West at the U.S. Department of Homeland Security. Fingerprint identification is generally quick and cost-effective, and a major advantage of the A.F.I.S. and NextGen systems is that there is no need to have any information

regarding the tentative identity of the decedent in order to perform the database inquiry.

If fingerprint analysis is not feasible, such as in cases with badly charred human remains, the next method employed by the lab is a review and comparison of dental and medical radiographs and records. With these methods, the lab does need to have some basic information regarding the tentative identity of the decedent. The lab obtains this information through interviews with the family or friends of the putative decedent, attempting to find out which dentists and healthcare providers the individual may have seen, or whether any radiographs, such as a head CT or chest x-ray, may have been made in a hospital.

If the lab does find a dentist or hospital where the putative decedent was treated, staff request any records they may have. If radiographs are available, Dr. Metcalf will evaluate the dental films while Dr. Austin evaluates any medical imaging. A recommendation regarding the decedent's identity will then be made to the medical examiner leading the case.





When other methods fail or cannot be used, DNA analysis is the last resort of the Human Identification Laboratory. <u>Section §63.056 of the Texas Code of Criminal Procedure states:</u>

COLLECTION OF SAMPLES FROM UNIDENTIFIED HUMAN REMAINS. (a) A physician acting on the request of a justice of the peace under Subchapter A, Chapter 49, a county coroner, a county medical examiner, or other law enforcement entity, as appropriate, shall collect samples from unidentified human remains. The justice of the peace, coroner, medical examiner, or other law enforcement entity shall submit those samples to the center for forensic DNA analysis and inclusion of the results in the DNA database.

The "center" in Section §63.056 refers specifically to the University of North Texas Human Identification Center in Fort Worth, colloquially known as the UNT Lab. The TCMEO's Human Identification Laboratory submits



specimens obtained at the time of examination of human remains to the UNT Lab, and a family member or two will be asked to go to the UNT Lab to provide a family reference sample for comparison. (The sample needed is a buccal swab, obtained by swabbing the inside of the cheek.) There is no charge to the family for this procedure.

The UNT Lab then develops the decedent's DNA and compares it to the profile from the family reference sample. Occasionally, the family of a missing person will have already provided the reference sample to the database, and rarely, the decedent's own DNA profile will already be in the database.

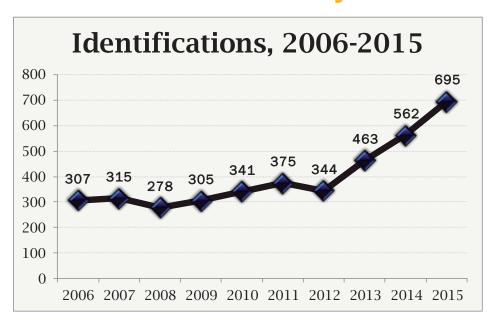
If identification cannot be made, the Human Identification Laboratory enters what information it has for the unidentified remains into the clearinghouse and the <u>National Crime Information Center's Unidentified Person File</u> within ten working days, in compliance with the Texas Code of Criminal Procedure Section §63.009(c), which states:

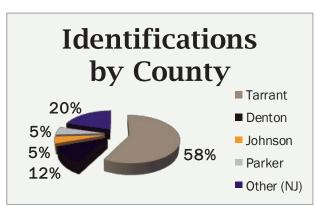
All Texas law enforcement agencies are required to enter information about all unidentified bodies into the clearinghouse and the National Crime Information Center Unidentified Person File. A law enforcement agency shall, not later than the 10th working day after the date the death is reported to the agency, enter all available identifying features of the unidentified body (fingerprints, dental records, any unusual physical characteristics, and a description of the clothing found on the body) into the clearinghouse and the National Crime Information Center file. If an information entry into the National Crime Information Center file results in an automatic entry of the information into the clearinghouse, the law enforcement agency is not required to make a direct entry of that information into the clearinghouse.

The Human Identification Laboratory also enters information regarding these cases into the National Missing and Unidentified Person System (NamUS) that is currently housed at the University of North Texas Health Science Center in Fort Worth. These various databases periodically compare the information about unidentified persons in their system to the information about missing persons that has been entered into the respective system, scanning for possible matches. Access to the N.C.I.C. database is limited to law enforcement agencies, while the NamUS missing persons' database is open to the general public.

The Human Identification Laboratory maintains a list of all unidentified individuals who have been buried by Tarrant County Human Services. Before an unidentified decedent can be released for burial, however, various samples are collected and preserved in the hope of eventual identification and in compliance with state law.

Human Identification Laboratory Statistics





Identification Average Time to Method Identify (Days)

Fingerprint	1.2
Dental	4.2
Medical	6.8
DNA	75.1



					Ca	se Numbers	S
ME Case No.	Date	Location Where Found	Funeral Home	Notes	NCIC	UNT	NamUS
0405892	7/11/2004	Field off Old Hemphill Road, 76134	Amalla	skeletal remains	U010004640	F2814.1MP	
0811321	9/23/2009	Fort Worth, 76116	Carrillo	white male, 45-65 years old		10-2929	
0812504	10/22/2008	Fort Worth, 76104	Calvario	skeletal remains from	U390021313	08-7971	
0912747	10/29/2009	Fort Worth, 76111	Gregory Spencer	partially skeletonized male remains, found behind convenience store	U460024309	11-0250	UP8508
1407300	5/28/2014	Watauga, 76148	Alpine	white male, 50-65 years old		14-1637	
1508727	6/19/2015	Cleburne, 76033	The Major	white or Latino male, 40-60 years old, Pedicab operator	U480029134		UP1440

The Morgue & Evidence Services

he heart of activity of any medical examiner's facility, the Tarrant County Medical Examiner's Office morgue was dedicated in 1989 and employs a design that centralizes morgue activity, effectively connecting interrelated morgue functions while isolating it from other



work areas of the building. This design limits pathogen exposure and enables examiners and technicians to work with minimum interruption.

The main morgue consists of four workstations, each designed to further a dynamic work environment in which examinations can be carried out with maximum efficiency. A separate major case morgue, a teaching morgue capable of seating 45 students, and a two-station isolation/biohazard morgue were included in the new construction. The morgue also contains two holding areas, each capable of holding fifty bodies; one of the areas is dedicated to incoming cases only, while the other holds bodies awaiting release.

The morgue's autopsy technicians, or deiners, assist the medical examiners in forensic examination. Each deiner is responsible for obtaining photographs, radiographs (x-rays), fingerprints, and biological samples from the decedent before autopsy.

Because the identification of foreign bodies in or on a decedent is vitally important to a comprehensive examination, the medical examiner's office relies on radiography tools like the C-arm fluoroscope, which enables imaging of the body without prior removal from the transport gurney. Other tools include a fixed flat plate device and articulated dental radiography equipment.

Evidence Services

In order to preserve evidentiary integrity, each piece of evidence collected by or submitted to the Tarrant County Medical Examiner's Office must be paired with a detailed chain-of-custody log. Forensic technicians with expertise in evidentiary preservation maintain and secure chain-of-custody to ensure that all evidence is handled and stored properly.

Forensic Chemistry & Toxicology

orensic chemists analyze drugs submitted by other agencies. Drug types received commonly range from clandestine chemical substances to the therapeutic or prescribed medications. Cocaine, heroin, marijuana, and amphetamines, all drugs of abuse, represent the most common products received for chemical assay. Daily, law enforcement agencies within the TCME District are faced with the challenge of identifying drugs found following an arrest or search warrant execution.

Intoxilyzer Program



An Intoxilyzer instrument measures a sample of breath for determinable levels of alcohol concentration, providing an objective, scientific means of testing someone who is suspected by police to have been driving under the influence of alcohol. In 1994, using grant funds supplied by the Texas Department of Transportation, the Intoxilyzer program was established at the Tarrant County

Medical Examiner's Office. Under the program, forensic chemists establish Intoxilyzer test sites, calibrate and maintain equipment, and train Intoxilyzer operators, which benefits local police agencies.

Forensic Toxicology

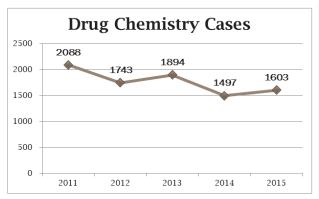
Established at the Tarrant County Medical Examiner's 1983, the toxicology laboratory has office in include subsequently expanded to mass chromatography, spectrometry, gas high-The liquid chromatography analysis. pressure toxicology laboratory provides drug testing to assist the medical examiners in determining the cause and manner of death by isolating, identifying, and

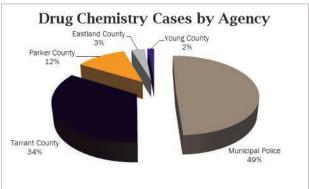


determining the level of chemicals present in specimens. The forensic toxicology laboratory also participates regularly in established analytical proficiency testing and quality assurance programs.

Drug Chemistry

O15 saw continual improvements in the efficiency of the Drug Chemistry laboratory: Cases were processed 16% faster than they had been in 2014 despite a corresponding 7% increase in the number of cases, as more agencies began using Drug Chemistry services and some State laboratories shifted backlogged cases to the TCME.





Average cases per month, 2015





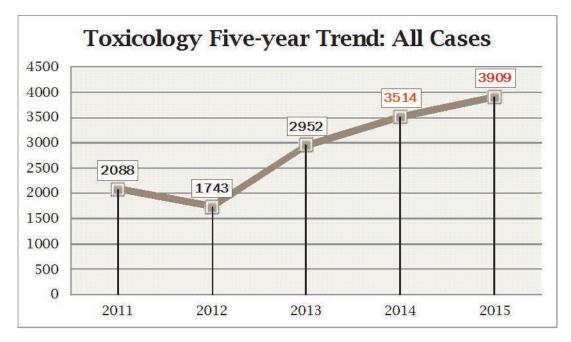
5-year average cases/month

Drug Chemistry Cases

	2011	2012	2013	2014	2015
JAN	149	191	72	132	136
FEB	171	218	83	199	104
MAR	219	139	165	131	151
APR	139	140	182	126	158
MAY	118	151	226	148	148
JUN	156	168	102	111	121
JUL	254	155	223	126	133
AUG	171	147	160	93	101
SEP	181	88	134	107	149
OCT	125	139	244	119	156
NOV	210	66	82	74	107
DEC	195	141	221	131	139
Annual Caseload:	2088	1743	1894	1497	1603

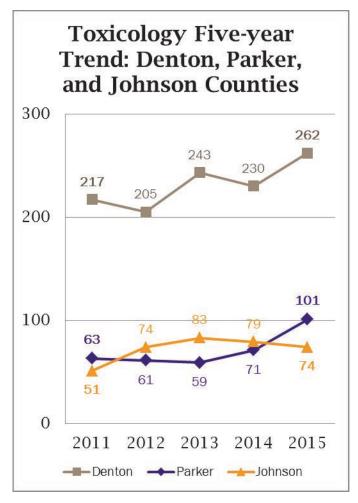
Toxicology

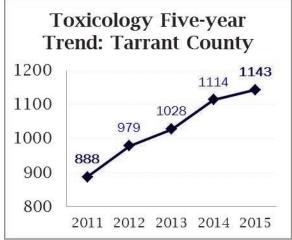
n 2015, Toxicology cases from the four counties in the Tarrant County Medical Examiner's District totaled 1,580, up 6% from 1,494 the previous year, and accounting for 40% of all Toxicology cases. Other medical examiner (783) and outside agency (1546) cases bring the total cases completed by the Toxicology laboratory in 2015 to 3,909, representing an increase of 11% over 2014's total of 3,514.

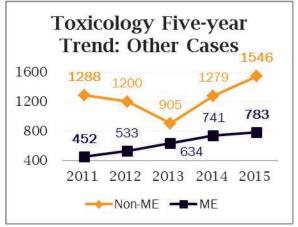


Much as they did in 2014, outside cases, which typically include DWI, DFSA (drug-facilitated sexual assault), and defense attorney cases, increased significantly, rising 21% from 1,279 cases in 2014 to 1,546 cases in 2015. Moreover, as DWI cases continue to grow in scope, with fewer cases requiring only alcohol analysis, and traditionally complex medical examiner cases steadily rise in number, significantly more work is done by the Toxicology laboratory. Despite increased caseload across the board, however, the lab delivered results 35% faster than they had in 2014, with turnaround time decreasing from 31 to 23 days in 2015.

As shown on the following page, if growth proceeds as it has for the last five years, the number of toxicology cases serviced at the Tarrant County Medical Examiner's Office annually will continue to rise.







								2015			
									Oth	ier	
_	2011	2012	2013	2014	Tarrant	Denton	Johnson	Parker	ME	Non-ME	Total
JAN	149	191	316	266	105	24	6	11	76	107	329
FEB	171	218	218	314	81	19	8	10	68	120	306
MAR	219	139	303	256	104	24	8	7	64	110	317
APR	139	140	255	328	91	17	9	6	75	113	311
MAY	118	151	229	283	108	20	6	6	63	98	301
JUN	156	168	224	289	89	27	3	8	67	112	306
JUL	254	155	221	276	110	19	5	11	82	127	354
AUG	171	147	230	277	89	24	4	7	55	129	308
SEP	181	88	263	285	75	18	4	9	50	99	255
OCT	125	139	207	312	96	24	5	7	63	182	377
NOV	210	66	235	316	87	18	6	8	49	149	317
DEC	195	141	251	312	108	28	10	11	71	200	428
TOTAL	2088	1743	2952	3514	1143	262	74	101	783	1546	3909

Criminalistics

ince 1989, the Tarrant County Medical Examiner's Office has operated a full-service crime laboratory, serving the needs of not only its medical examiners, but also of law enforcement agencies and district attorney's offices in North Central Texas and throughout the United States.

Criminalistics Cases by Laboratory

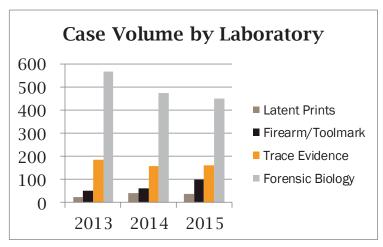
Total reports issued in 2015
Reports issued within TCMED
Reports issued outside TCMED
TCME or law enforcement on TCME case
Non-ME case

	Firearm/	Trace	Forensic
Latent Prints	Toolmark	Evidence	Biology
38	98	161	451
25	91	129	375
13	7	32	76
6	78	104	25
32	20	57	422

Equipped with modern analytical instrumentation, the various sections of the crime laboratory combine scientific technology with an experienced professional staff. The five specialized sections of the crime laboratory identify, analyze, and report on such forms of evidence as DNA, blood spatter, trace materials, chemical compounds, firearms, tool marks, and latent fingerprints.

In 2015, the Trace Evidence laboratory expanded the scope of their ASCLD/LAB International accreditation to include hair screening for DNA suitability. Trace Evidence analysts are also currently training for imprint/impression evidence comparisons (footwear and tire tread examinations), with expected scope expansion in 2016.

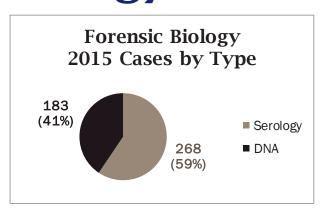


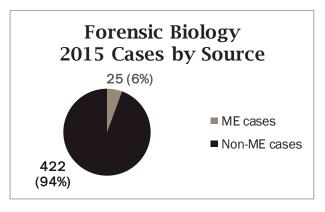


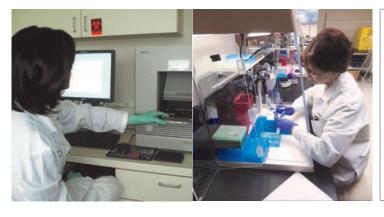
Forensic Biology

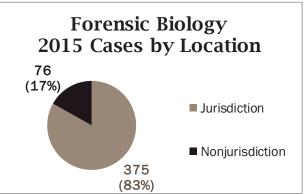
NA analysis provides the ability to restrict the potential population of persons to whom a biological sample might belong to a much smaller subset of suspects. This helps identify the source of a sample and connect it to a particular death or crime scene.

The Tarrant County Medical Examiner's DNA unit is a designated CODIS (Combined DNA Index System) laboratory. CODIS is the FBI's DNA database that ultimately links all 50 states and 18 countries in order to compare forensic casework profiles. A database search can provide significant investigative leads and may link unsolved cases to a single perpetrator.

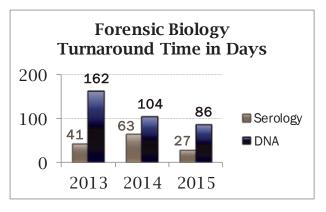




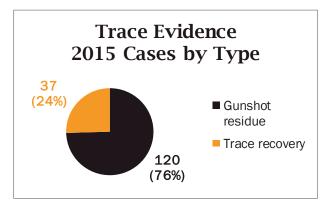




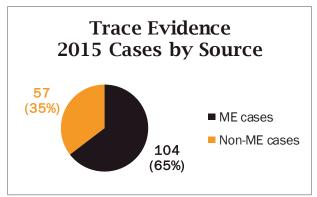
Forensic Biology issued reports on 451 cases in 2015. These cases are categorized at right by type (serology or DNA), source (requestor), and location (within or without the Tarrant County Medical Examiner's District). The lab has also reduced its turnaround time and now provides results in nearly half the time it did two years ago.



Trace Evidence

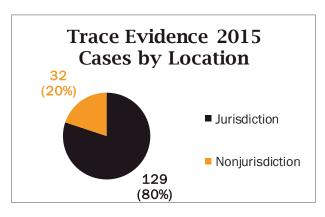


race evidence is material that can be easily transferred from one site to another because of its size or weight. During the commission of a crime, substances may be transferred between people or objects or acquired from the surrounding environment. Gunshot residue, hair, glass, paint, and fibers are items commonly submitted for examination.

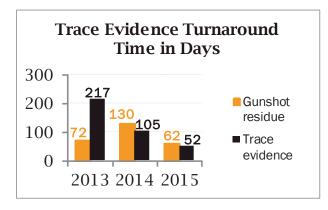


Trace analysis uses advanced technology and instrumentation to obtain chemical profiles of materials, in order to relate them to each other or to a common source. This enables investigators to potentially link a suspect and a victim to a shared location.

Trace Evidence issued reports on 161 cases in 2015. These cases are categorized at left





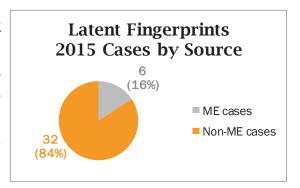


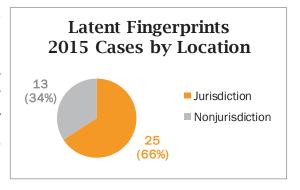
by type (gunshot residue or trace recovery), source (requestor), and location (within or without the Tarrant County Medical Examiner's District). The lab has also reduced its turnaround time over the past two years, with gunshot residue testing now completed in just over two months and trace evidence cases being finished in 52 days.

Latent Fingerprints

fundamental tool of the Tarrant County Medical Examiner's Office, latent fingerprint examination helps to identify bodies that arrive to the morgue unidentified. Latent prints can also be retrieved from submitted evidence and used to assist in identifying a criminal suspect. Using the newest technology and considerable expertise, the latent print examiner achieves remarkable results in lifting prints from various substrates.

Latent Fingerprints issued reports on 38 cases in 2015. These cases are categorized at right by source (requestor) and location (within or without the Tarrant County Medical Examiner's District).

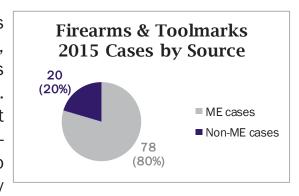


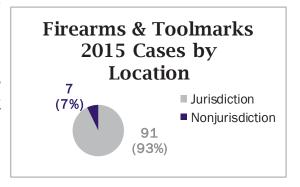


Firearms and Toolmarks

uch as its name suggests, this laboratory analyzes firearms, projectiles, ballistics, and markings imparted by any form of tool. Firearms submitted are examined for inherent characteristics, unique identifiers, and safety-related factors. They can also be test-fired to obtain reference material that can subsequently be compared to submitted evidence. The laboratory boasts a 40-foot indoor firing range, used to carry out range-of-fire determinations.

Firearms and Toolmarks issued reports on 98 cases in 2015. These cases are categorized at right by source (requestor) and location (within or without the Tarrant County Medical Examiner's District).







Forensic Photography

fully equipped forensic photography laboratory was added to the Criminalistics Laboratory of the Tarrant County Medical Examiner's Office in 1994. By 2005, Forensic Photography had replaced all film processing with digital photography.

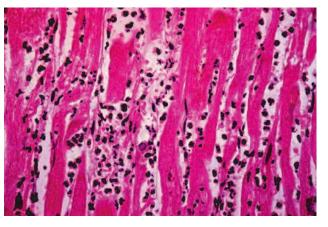
In addition to more traditional photography, the laboratory is capable of making photographs using ultraviolet and infrared techniques. Image enhancement can also be performed. Pictures, enlargements, and other services are provided to medical examiners, courts, and individuals for educational or research-based presentations.



The Forensic Photography laboratory produced 139,102 autopsy and scene photographs and worked on a total of 1923 cases in 2015. An average of 11,592 photographs were produced by the laboratory monthly.

Forensic Histology

any cause of death determinations rely upon the examination of decedent tissues and organs. Special stains and fixation methods are employed to assist the physician in identifying disease processes and tissue changes that occur in response to trauma, lifestyle habits, or other variables.

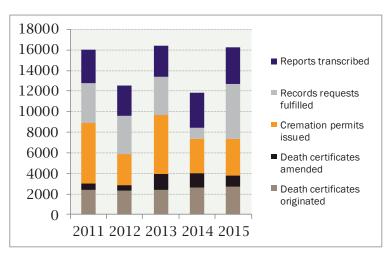


In 2015, Forensic Histology provided 42,979 services (averaging over 3500 monthly) and worked on a total of 3116 cases. Despite this significant volume, turnaround times remained in compliance in 100% of cases.

Administrative & Facility Support

Secretarial Services

Secretaries for the medical examiner's office work directly with public, assisting bereaved families, law enforcement judicial authorities. personnel, healthcare providers, and funeral directors through what many people understandably find to be a difficult and perplexing time. Each medical examiner is assigned a secretary, who provides the administrative



support services necessary to the daily operation of the business.

Additional services provided by the secretarial team include issuing death certificates and medical amendments, preparing and distributing cremation permits, transcribing autopsy reports, managing case records, documenting continuing medical education (CME) credits, and producing other business reports.

Business Office

The Business Office was established to meet the increasing complexities of the day-to-day management of the business aspects of the TCME. The Business Manager and Bookkeeper comprise the office and carry out budgeting, contracting, financial reporting, accounts payable, accounts receivable, personnel timekeeping, and other related fiscal tasks. The Business Office also maintains inventory of all supplies, office equipment, and scientific equipment, and ensures all service warranties are current. The Transportation of Human Remains contract, a key requirement of business operation, is also supervised by the Business Manager.

Building Superintendent

Responsible for all general maintenance of the building, the Building Superintendent oversees vendors and contractors to ensure work is performed properly, and supervises work-release individuals assigned to janitorial and grounds duties. This role is especially vital in maintaining the ventilation and air conditioning requirements unique to a medical examiner's office, with its inherent biohazards and significant investment in scientific instruments that cannot tolerate temperature changes.



Acting Globally: Humanitarian & Cultural Endeavors

Syria: Evaluation of In-Custody Torture and Deaths of Detainees

The Tarrant County Medical Examiner's Office received a request from the Physicians for Human Rights (PHR), a non-governmental human rights organization and a Nobel Peace Prize co-laureate, based in Boston, MA, to assist Human Rights Watch (HRW) in evaluating photographic documents of torture and death in Syrian Detention Centers.

The Syrian Conflict began March 15, 2011, when protesters marched in the capital of Damascus, demanding democratic reforms and the release of political prisoners. It now continues into its sixth year. By United Nations' estimates, over 250,000 Syrian men, women and children have been killed, over 12 million externally and internally displaced, and many thousands have disappeared. In January 2014, news emerged that a defector had left Syria with tens of thousands of images showing the bodies of detainees who died in Syria's detention centers. A team of international lawyers, as well as Syrian activists, interviewed the defector, codenamed "Caesar," who stated that he worked as a forensic photographer for the Military Police, and he had personally photographed bodies of dead detainees, as well as archiving thousands more photographs. According to the international team of experts that prepared the first report on the collection, Caesar smuggled out more than 50,000 images. No systemic evaluation of these photographs had hitherto been conducted by forensic pathologists.

A detailed report filed by the physicians of Tarrant County Medical Examiner's Office documents evidence of torture and the probable cause of death of nineteen such detainees under the control of Military and Air Force Detention Centers in Damascus, Syria. The evaluation is based on examination of 72 digital color photographs which are part of over 50,000 Caesar photographs.

Torture is an act that is deliberately inflicted on a person resulting in conscious pain and or suffering. Prohibition of torture is absolute and is enshrined in Article 5 of the 1948 Universal Declaration of Human Rights. The report details 18 males and one female; their ages ranged from peri-adolescent to middle-aged, though most of the victims were estimated to be in the age group 20s-40s. In five cases, the cause of death remained undetermined due to lack of sufficient photographic evidence. In the remaining fourteen cases, there were four deaths attributed to starvation, six deaths to violent blunt force trauma, three deaths to suffocation and one death due to penetrating gunshot wound of head.



This report also documented use of torture by Syrian authorities, starvation of detainees and prolonged standing due to over-crowding in the cells. The Syrian Government has employed several different methods of torture including "Shabeh" which consists of hanging the victim from ceiling by the wrists so that his toes barely touch the ground or completely suspended, and "Dulab", where the victim is forced to bend at the waist and stick his head, neck, legs and sometimes arms into the inside of a car tire. Thus immobilized, the victim is subjected to blows, cigarette burns and even electric shock.

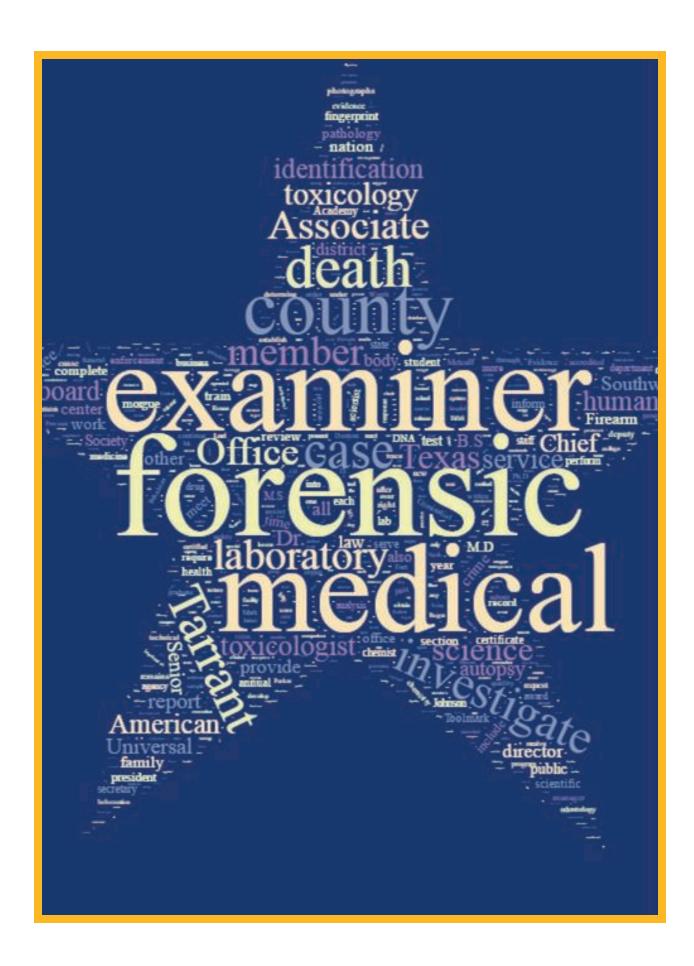


(Pictured at left: illustration of the "Shabeh" torture technique. Pictured at right: illustration of the "Dulab" torture technique.)



"If the Dead Could Speak: Mass Deaths and Torture in Syria's Detention Facilities" See Human Rights Watch Report: December 16, 2015.

https://www.hrw.org/report/2015/12/16/if-dead-could-speak/mass-deaths-and-torture-syrias-detention-facilities



Knowledge Sharing

A Passion to Educate

rom annual conferences to weekly reviews to daily meetings, opportunities to educate are always welcomed by the staff of the Tarrant County Medical Examiner's Office. Our medical examiners, criminologists, and other scientists are routinely sought for their expertise in the field of forensics and relish every chance they get to augment the collective fund of knowledge in it. In this section, we highlight some of the 2015 events at which staff of the Tarrant County Medical Examiner's Office shared their expertise:



American Academy of Forensic Sciences 67th Annual Meeting: Celebrating the Forensic Science Family February 16-21, 2015

Deputy Medical Examiner Tasha Z. Greenberg, M.D.

"Fatal Aortoesophageal Fistulae Due to Foreign Body Ingestion in Young Children: Presentation of Two Cases," Greenberg T, Roe S, Stephen D, Peerwani N

"An Uncommon Cause of Pulmonary Embolism," Segovia A, Greenberg T, Golden K

Chief of Identification Services Roger D. Metcalf, D.D.S., J.D.

"Case of the Missing Mandible," Odontology Section

Technical and Administrative Director Ronald Singer, M.S.

Criminalistics Section Presenter at "Past Presidents Future Science: Hot Leads in Contemporary Forensic Research," an interdisciplinary symposium dedicated to envisioning advancements in the forensic sciences over the next decade

Chief Toxicologist Robert Johnson, M.S.

Moderator, Toxicology Section, "Methodology"





Chief Toxicologist Robert Johnson, Ph.D.

"Advanced Analytics of Alcohol Consumption"

"Impairment by Ethanol: Impairment of Driving-Related Abilities"

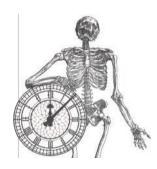
"Impairment by Ethanol: The Experimental and Epidemiological Evidence"

CARE Team Peer Review July 17, 2015

Forensic Biologist and Backup CODIS Administrator Heather Kramer, M.S.

"Forensic Serology and Biological Evidence Collection"





Current Trends in Forensic Science Where There's Smoke . . .: The Science of Investigating Fire-Related Deaths May 27-29, 2015

This annual conference carries the distinction of being organized by the Tarrant County Medical Examiner's Office. It is open to medical professionals, law enforcement, and anyone interested in the forensic sciences.

Chief Medical Examiner Nizam Peerwani, M.D.

"The Role of the Pathologist in Fire Deaths"

<u>Deputy Chief Medical Examiner Marc A. Krouse, M.D.</u>

"The Role of the Forensic Pathologist in Homicide Investigations"

Deputy Medical Examiner Tasha Z. Greenberg, M.D.

"Pediatric Death Investigations"

Chief of Identification Services Roger Metcalf, D.D.S., J.D.

"Introduction to the Human ID Lab at the Tarrant County Medical Examiner's Office"

Forensic Anthropologist Dana Austin, Ph.D.

"The Role of Anthropology and Odontology in Fire-Related Deaths"

Forensic Biologist and Backup CODIS Administrator Heather Kramer, M.S.

"DNA/Forensic Biology Laboratory Update"

Senior Toxicologist and Technical Lead Aria McCall, B.S.

"Fire Deaths and Toxicology Findings"





Deputy Medical Examiner Susan J. Roe, M.D.

"Overview of Autopsies and Related Services," August 11, 2015

"Highlights from the 32nd Annual Forensic Science Seminar," September 22, 2015

Deputy Medical Examiner Richard C. Fries, D.O.

"Celebrity Autopsies," June 23, 2015



Chief of Identification Services Roger D. Metcalf, D.D.S., J.D.

"Overview of Forensic Odontology," pp. 295-301



Chief Toxicologist Robert Johnson, Ph.D.

"Drugs and Driving"



National Judicial College Conference *Annual Meeting* **September 17-19, 2015**

Chief Toxicologist Robert Johnson, Ph.D.

"Toxicological Effects of Drugs on Driving"



Southwestern Association of Toxicologists *Annual Meeting*October 19-23, 2015

Senior Toxicologist and Technical Lead Aria McCall, B.S.

"Fire Deaths and Toxicology Findings"



Texas Bar Continuing Law Education

Handling Your First (or Next) Wrongful

Death Case

October 20, 2015

Deputy Chief Medical Examiner Marc A. Krouse, M.D.

"What a Forensic Pathologist Could Tell You About Your Wrongful Death Case"



Senior Forensic Chemist Mark Fondren, M.S.

"SWTOX Standards for Breath Alcohol Personnel"



Quality Control Manager D. Chris Heartsill, B.S.

"Ethics in the Forensic Laboratory"



Texas Wesleyan University

Guest Lecture

March 25, 2015 and October 3, 2015

Chief of Identification Services Roger D. Metcalf, D.D.S., J.D.

"Role of the Human ID Lab at the Medical Examiner's Office"

"Admissibility of Scientific Evidence and the Expert Witness"

A Passion to Learn

he field of forensics evolves rapidly, as new technological developments enable improved methods and techniques. The staff of the Tarrant County Medical Examiner's Office are committed to keeping abreast of these changes and seek out opportunities to do so, as shown below.



Alcohol Testing Alliance 2015 Conference August 2-4, 2015

Senior Forensic Chemist Sarah Skiles, B.S.



American Academy of Forensic Sciences 67th Annual Meeting: Celebrating the Forensic Science Family February 16-21, 2015

Deputy Medical Examiner Tasha Z. Greenberg, M.D.

Chief of Identification Services Roger D. Metcalf, D.D.S, J.D.

<u>Technical and Administrative Director Ronald Singer, M.S.</u>

Senior Forensic Chemist Mark Fondren, M.S.

Forensic Biologist and Backup CODIS Administrator Heather Kramer, M.S.



American Society of Forensic Odontology Annual Meeting—Scientific Section February 2015

Chief of Identification Services Roger D. Metcalf, D.D.S, J.D.





Association of Firearm & Toolmark Examiners Annual Training Seminar May 23-29, 2015

Senior Criminalist, Firearms & Tool Marks, Jamie Becker, B.S.



Association of Forensic DNA Analysts and Administrators
2015 Summer Meeting
June 11, 2015

Senior Forensic Biologist Peggy Le, B.S.



Federal Bureau of Investigations
National FBI CODIS Conference
November 17, 2015

Forensic Biologist and Backup CODIS Administrator Heather Kramer, M.S.



NIST—Organization of Scientific Area Committees Forensic Odontology Subcommittee

Training Meeting January 12-15, 2015

Chief of Identification Services Roger D. Metcalf, D.D.S., J.D.



Southwestern Association of Forensic Scientists

Annual Meeting
October 19-23, 2015

Senior Forensic Chemist Christine Coucke-Garza, M.S. Senior Forensic Chemist Michelle O'Neal, B.S.



Texas Department of Public Safety *Annual Renewal*August 2-4, 2015

Senior Forensic Chemist Mark Fondren, M.S. Senior Forensic Chemist Sarah Skiles, B.S.



Texas Forensic Science Commission

Root Cause Analysis Training

June 2, 2015

Quality Manager D. Chris Heartsill, B.S.

Education in the Office

For there are some who long to know for the sole purpose of knowing, and that is shameful curiosity; others who long to know in order to become known, and that is shameful vanity . . . others still who long for knowledge in order to sell its fruits for money or honors, and this is shameful profiteering; others again who long to know in order to be of service, and this is charity. —Bernard of Clairvaux

taff of the Tarrant County Medical Examiner's Office meet regularly to review cases, continue professional education, and exchange ideas. A lecture calendar is published and distributed each month to encourage participation.

Critical Case Review (Twice Monthly)

Generally meeting at lunch on the second and fourth Wednesdays of each month, Critical Case Review gives the medical examiners time to discuss their most complex

or high-profile cases with each other and with key members of staff from the investigative, laboratory, and identification sections of the office. Unexpected findings, unusual developments, and contradictory evidence are all reviewed and analyzed before a consensus regarding cause and manner of death is reached. In particularly difficult cases, examiners may agree to "re-pend" a case and review it again at a later Critical



Case Review, while the case's medical examiner solicits more information by ordering specialized testing, seeking law enforcement agency input, requesting more medical records, or some combination thereof.

A summary of reviewed cases and their disposition is produced by the meeting's scribe and submitted to qualify Critical Case Review meetings for Continuing Medical Education (CME) credits. In this way, Critical Case Review fulfills two needs at once and enables medical examiners to spend more of their time working on cases for the District.

Child Mortality Case Review (Monthly)

A "cousin" of Critical Case Review, Child Mortality Case Review was born of the desire to increase transparency with child welfare advocates and educate health, law, and social service agencies about the rigorous process of determining cause and manner of death in pediatric cases. It is limited to cases in which (1) the decedent is between 0 and 17 years of age at the time of death and (2) the death occurred within Tarrant County.

As with Critical Case Review, a summary of reviewed cases and their disposition is produced by the meeting's scribe and submitted to qualify these meetings for Continuing Medical Education (CME) credits, again helping medical examiners spend more of their time completing cases.

Grand Rounds (Near-Weekly)

At 8:00 a.m. most Tuesdays of the year, excluding those following Monday holidays, the Tarrant County Medical Examiner's Office hosts an hour-long presentation given by an invited speaker or by a member of our staff on a range of topics in the fields of forensics, law, health, and medicine. Audiences are typically drawn from medical students, healthcare providers, and law enforcement personnel.

Journal Club (Monthly)

The Journal Club meets for lunch in the second floor library of the Tarrant County Medical Examiner's Office. A scholarly article in forensics, medicine, or a closely-related discipline is selected ahead of time for discussion to help participants stay better informed of developments in their fields.

Morning Mortality Conference (Daily)

Each morning at 8:30 a.m., the forensic pathologists of the Tarrant County Medical Examiner's Office meet to review the day's schedule of cases, determine what procedure (autopsy, partial autopsy, or external examination) each case requires, and assign cases to each examiner. In this way cases are triaged effectively, much as they would be in a hospital or clinical setting. Morning Mortality also serves as a short-form Critical Case Review, in that guidance may be sought from the group on how best to proceed with complex or sensitive cases.



Future Forensic Scientists

In all, 47 residents enrolled in 39 accredited forensic pathology programs in 2010—low compared with many other medical subspecialties and barely on the radar of the roughly 6,000 students who go into internal medicine in the U.S. every year.

Part of the problem, experts say, is there isn't enough material support or direct connections to pathology departments in medical schools and training hospitals, where students could get more exposure to the work of forensic pathology and become more interested in pursuing it as a subspecialty. —"Forensic Pathologists: The Death Detectives," PBS Frontline Post Mortem: Death Investigation in America

s part of our commitment to those we serve, the Tarrant County Medical Examiner's Office is proud to do its part to train the next generation of forensic pathologists and other forensic scientists through the comprehensive educational initiatives described below.

Tarrant County and United Arab Emirates

In 2015, Tarrant County entered into a partnership with the Abu Dhabi Judicial Department in the United Arab Emirates, enabling scientists from the forensic laboratory to spend the beginning six months of the year training in Toxicology and Drug Chemistry.



Training included comprehensive lectures on laboratory quality, method development and validation, and forensic laboratory operations. Hands-on training was additionally provided in the analytical evaluation of drug analysis and identification, postmortem toxicology, and human performance toxicology.

Training in Abu Dhabi concluded with a comprehensive written examination and practical laboratory examination. Attendees included:



- Mr. Abdulla Alhmoudi
- Mr. Ali Almarzoogi
- Mr. Rashid Alshehhi
- Mr. Fahad Alshimmari
- Mr. Nayef Alsaadi
- Ms. Jameela Al-Braiki
- Ms. Maitha Hamed Albaloushi
- Ms. Athba Qambar

Students from Abroad

Students from a variety of programs at the American University in Beirut and the American University of Science and Technology in Achirafieh attend a long internship, rotating through the Tarrant County Medical Examiner's Office and each forensic laboratory section within it. The students observe all aspects of forensic laboratory operations and medicolegal death investigation. As they would in an apprenticeship, students progress at their own pace and are free to delve more deeply into areas that particularly excite their interest. Interactions with staff allow them to expand their knowledge of scientific, medical, and forensic issues.

The attendees for 2015 were Ms. Kamar Afra (June) and Dr. Mario Saab (July).

Medical School Rotation

The Tarrant County Medical Examiner's Office offers a month-long rotation for fourth-year medical students from qualifying educational institutions. These students get comprehensive exposure to autopsy processes, death investigation, and all aspects of forensic laboratory operation.



A rigorous schedule allows for students to spend time in each section of the forensic laboratory, in administration and investigations, and in morgue operations. One-on-one lectures given by specialized staff members provide depth and detail to the student's experience. The time spent in a comprehensive forensic facility offers educational opportunities that meet the requirements of any medical rotation. In 2015, students rotating through the Tarrant County Medical Examiner's Office were:

- Dr. Shane Rainey, University of North Texas Health Science Center—Texas College of Osteopathic Medicine (January)
- **Dr. Marissa Reuveni,** Des Moines University Osteopathic Medicine Center (February)
- Dr. Arthur Bredeweg, University of North Texas Health Science Center—Texas
 College of Osteopathic Medicine (May)
- Dr. Jonny Guerra, University of North Texas Health Science Center—Texas College of Osteopathic Medicine (November)

Other Sponsored Training

Ron Smith & Associates

For over 20 years, Ron Smith & Associates, Inc., has provided high-quality forensic training courses throughout the United States and around the world. The Tarrant County Medical Examiner's Office sponsored two courses provided by Ron Smith & Associates in 2015:

Detection, Documentation, and Recovery of Footwear and Tire Track Evidence

July 13-15, 2015

Emphasizing diverse techniques in the recovery footwear and tire track evidence and the application of these techniques to crime scene circumstances, this course provided hands-on experience, including photography and proper documentation techniques. Tarrant County personnel and students from around the nation attended.



International Association of Identification (IAI) Latent Print Certification Test Preparation Training November 9-13, 2015

The only seminar fully reviewed and approved by the IAI Latent Print Certification Board, this course consisted of timed drills and a full practice exam representative of the actual test.



Microtrace

Through a joint effort by the Tarrant County Medical Examiner's Office and the Texas Forensic Science Commission, two week-long courses in the Trace Evidence discipline were given, each emphasizing practical techniques suitable for immediate application in a laboratory setting. Both courses were instructed by world-recognized experts in hair and fiber analysis.

Hair Characterization and Comparison Workshop April 27-May 1, 2015



and practical demonstrations of examination microscopy techniques and learned differentiate animal and human hairs via the identification of hair structure characteristics. At the conclusion of the course, attended by Tarrant County personnel and students from all over Texas. underwent a practical exam covering all aspects

During this course, students attended historical

of hair comparison.

Fiber Microscopy Workshop May 4-8, 2015

This course introduced students to natural fibers, animal textile fibers, vegetable fibers, and man-made fibers. Training in basic polarized light microscopy was provided and students were taught to correlate optical properties to fiber type while additionally noting the physical properties of each fiber type. The course concluded with a practical exam covering all aspects of fiber comparison.

