ANNUAL REPORT

FY2011

# TEXAS FORENSIC SCIENCE COMMISSION

JUSTICE THROUGH SCIENCE

**TFSC ANNUAL REPORT: 2011**
**TABLE OF CONTENTS**

***Exhibits***

## I. Introduction

Welcome to the first annual report of the Texas Forensic Science Commission ("TFSC" or "Commission"). Upon creating the TFSC in 2005, Texas emerged as a leader among states seeking to advance the integrity and reliability of forensic science in criminal courts. Texas is one of a handful of states to establish an independent agency for forensic oversight of accredited crime laboratories. Other states with various types of forensic boards include: Arizona, Minnesota, Missouri, Montana, New Mexico, New York, Rhode Island and Washington.

Since 2005, the Commission has worked to meet the challenges inherent in establishing a new agency. The TFSC operated without funding for two consecutive biennia; it hired its first staff member (the Commission Coordinator) in June 2008 and a second (the General Counsel) in December 2010. The Commission anticipates that other states will look to Texas as a resource for developing similar forensic oversight commissions.

The purpose of this report is to provide the reader with insight into the most significant investigations and forensic development initiatives undertaken by the Commission in 2011. Because this is the first edition of the annual report, we also include a section summarizing the Commission's development from 2005-2010.

## II. History and Evolution of the Texas Forensic Science Commission: 2005 to 2010

### A. Background

The Texas Legislature created the Texas Forensic Science Commission in 2005 to address concerns about the integrity and reliability of forensic science in Texas courts. The concerns emanated in part from problems at the Houston Police Department's ("HPD") crime lab in the early 2000's. Serious deficiencies were found in many areas of forensic analysis at the HPD lab, including the handling, labeling, storing and examination of evidence.

### B. Legislative History: Accreditation of Crime Labs

During the 78th Legislative Session (2003), the Texas Legislature passed House Bill 2703, which conditioned the admission of evidence in criminal actions upon the accreditation of the examining laboratory. The bill also delegated to DPS the responsibility for accrediting "crime laboratories … and other entities" and authorized DPS to establish rules for the process. The link to DPS rules is: http://www.txdps.state.tx.us/CrimeLaboratory/LabAccreditation.htm. For a current list of DPS-accredited crime laboratories, see **Exhibit A**.

In fulfilling its statutory mandate, DPS requires each laboratory to demonstrate that it is accredited by a nationally recognized accrediting body for the forensic discipline(s) practiced by the laboratory. DPS accepts accreditation from the following five national accrediting bodies: (1) American Association of Crime Laboratory Directors—Laboratory Accreditation Board (all disciplines); (2) Forensic Quality Services (all disciplines); (3) American Board of Forensic Toxicology (toxicology only); (4) Substance Abuse and Mental Health Services Administration (toxicology sub-discipline of urine drug testing); and (5) College of American Pathologists (toxicology only).

### C. Legislative History: Creation of the TFSC

The Texas Legislature created the TFSC during the 79th Legislative Session (2005). The TFSC's enabling statute is House Bill 1068, codified in article 38.01 of the Texas Code of Criminal Procedure. As passed, HB-1068 was a 36-page omnibus bill dealing with several related criminal justice issues. The TFSC's enabling legislation occupies only a few pages of the bill. See **Exhibit B** for a copy of the Commission's enabling statute as codified in articles 38.01 and 38.35 of the Texas Code of Criminal Procedure.

Legislation creating the TFSC was originally contained in SB-1263, authored by Senator John Whitmire. In the version of SB-1263 that passed in the Senate, the TFSC had the authority to investigate negligence or misconduct related to a "forensic analysis" arising from "an accredited laboratory, facility or entity." The same bill also placed authority for accreditation of a laboratory, facility or entity in the TFSC. However, when SB-1263 was voted out of the House Law Enforcement Committee, the word "accredited" was dropped. The House committee substitute bill also dropped authority for the TFSC to accredit a laboratory, facility or entity, and shifted that authority back to DPS. This version of the bill died in the Calendars Committee without further consideration.

A separate piece of legislation (HB-1068) authored by Representative Joe Driver, passed in the House with no mention of the TFSC. Senator Juan "Chuy" Hinojosa sponsored Representative Driver's bill in the Senate. During floor debate, Senator Hinojosa amended HB-1068 to add the TFSC language originally contained in SB-1263. HB-1068 passed in the Senate. However, the House refused to concur in the changes made by the Senate. Yet another version

of HB-1068 emerged from conference committee, and it included the TFSC. The Senate and House approved the final version of HB-1068 and the Governor signed the bill into law on June 18, 2005. HB-1068 took effect on September 1, 2005.

**D. Duties of the TFSC**

The TFSC "shall investigate, in a timely manner, any allegation of professional negligence or misconduct that would substantially affect the integrity of the results of a forensic analysis conducted by an accredited laboratory, facility or entity." TEX. CODE CRIM. PROC. art. 38.01 § 4(a)(3). The term "forensic analysis" is defined as a medical, chemical, toxicological, ballistic, or other examination or test performed on physical evidence, including DNA evidence, for the purpose of determining the connection of the evidence to a criminal action. *Id.* at art. 38.35(4). The statute specifically excludes certain types of analyses from the "forensic analysis" definition, such as latent fingerprint examinations, a breath test specimen, and the portion of an autopsy conducted by a medical examiner or licensed physician. *Id.*

The TFSC must prepare a written report upon conclusion of each investigation. TEX. CODE CRIM. PROC. art. 38.01 § 4(b). That report must identify and describe the methods used to identify:

- the alleged negligence or misconduct;
- whether negligence or misconduct occurred; and
- any corrective action required of the laboratory, facility or entity.

The TFSC may include retrospective re-examination of cases as part of its recommended corrective action. *Id.* It may also conduct follow-up evaluations of the lab to ensure implementation. *Id.* The Commission may contract with outside subject matter experts during

investigations. *Id.* at art. 38.01 § (4)(c). It may also require that the lab pay the costs required to ensure compliance with the statute's investigative duties. *Id.* at art. 38.01 § (4)(d).

### E. Appointment History

To date, the TFSC has had 21 different Commissioners and 2 staff members. Biographies of current members and staff are found at **Exhibit C.** The following is a table of each Commissioner's years of service and appointing authority:

| **Current Members*** | **Original Appointment** | **Appointment Office** | **Reappointment Dates** |
|---|---|---|---|
| Adams, Garry | 3/16/2006 | Lt. Governor | 3/16/2010 |
| Alpert, Richard | 10/31/2011 | Governor | First term |
| Barnard, Jeffrey | 10/31/2011 | Lt. Governor | First term |
| Di Maio, Vincent J. | 10/31/2011 | Governor | First term |
| Eisenberg, Arthur J. | 3/16/2006 | Attorney General | 10/30/2006, 9/1/2009 |
| Hampton, Jean M. | 3/16/2006 | Lt. Governor | 9/1/2009,10/31/2011 |
| Kerrigan, Sarah | 12/1/2007 | Attorney General | 9/1/2009 |
| Lerma, Richard "Bobby" | 10/31/2011 | Governor | First term |
| Peerwani, Nizam | 9/1/2009 | Governor | 10/31/2011 |
| **Historical List** | | | |
| Bassett, Samuel E. | 1/26/2006 | Governor | 11/16/2007 |
| Benningfield, Debbie | 1/18/2006 | Governor | Resigned 11/2007 |
| Bradley, John M. | 9/1/2009 | Governor | N/A |
| Evans, Lance | 9/1/2009 | Governor | N/A |
| Farley, Norma J. | 9/29/2009 | Governor | N/A |
| Frost, Randall | 10/9/2009 | Governor | Resigned 12/2009 |
| Hamilton, Stanley | 3/16/2006 | Lt. Governor | 9/1/2009 |
| Levy, Alan | 1/26/2006 | Governor | 11/16/2007 |
| Natarajan, Sridhar | 1/26/2006 | Governor | 11/16/2007 |
| Veasey, Sparks P. III | 11/1/2005 | Attorney General | Resigned 10/2006 |
| Ward, Richard | 10/30/2006 | Governor | N/A |
| Watts, Aliece | 11/19/2007 | Governor | N/A |
| | | | |
| *All members are appointed for a term of two years. | | | |

### F. Initial Funding

The Legislature did not appropriate funds to the TFSC in 2005, and initial appointments were not made until 2006. After appointments were made, the TFSC did not receive funding to conduct investigations in compliance with its statutory duties until mid-2007. Funding for the TFSC was appropriated to Sam Houston State University ("SHSU"), the agency to which the TFSC is administratively attached. The TFSC received $250,000 per year for cost of meetings, investigations, office supplies and personnel. Funding has remained level since the initial allocation. In mid-July 2008, a central office was established on the SHSU campus, and in August 2008, the TFSC began deliberating over several pending complaints.

### G. Hiring of Commission Coordinator

In June 2008, the Commission voted to hire a Commission Coordinator with a paralegal background to manage the TFSC office at SHSU in Huntsville. The duties of the Commission Coordinator include handling all office correspondence, processing complaints, organizing and negotiating contracts for TFSC meetings and serving as the Public Information Officer for the TFSC. The TFSC voted to hire Leigh M. Tomlin as the Coordinator in June 2008. Ms. Tomlin began her work for the TFSC later that month. She has continued to serve as Commission Coordinator since 2008.

### H. Administrative Development: 2008-2009

The TFSC developed significantly throughout 2008 and 2009. For example, the Commission created a reporting process to streamline complaints, drafted complaint forms and established a process for receipt and review by the Coordinator and Commissioners.

The TFSC also sent letters and informational posters to Texas laboratories notifying them of the Commission's establishment and oversight authority. The TFSC developed a website, published information about the Commission, and provided direct access to complaint forms and other important TFSC information.

### I. Early Complaints: 2008

In late 2008, the TFSC voted to investigate two major residential fire incidents involving the loss of life (the "Willis/Willingham Complaint"). After accepting the complaint, the TFSC elected to contract with an outside subject matter expert to review each of the arson cases simultaneously. Further discussion of the investigative report for these cases is provided in Section VI.A below.

Also in late 2008, the TFSC voted to investigate an El Paso, Texas sexual assault case which resulted in the defendant's exoneration after post-conviction DNA testing proved his innocence (the "Moon Complaint"). The report on this case is discussed in Section VI.B below.

The Commission reviewed, deliberated over and dismissed many other complaints during 2008 and 2009. A discussion of these complaints is provided in Section V below.

### J. Establishment of Written Policies and Procedures: 2010

In January 2010, the TFSC adopted written policies and procedures to guide the complaint and investigation process. The TFSC also adopted definitions for "professional negligence" and "misconduct" for use in its investigations. The TFSC's policies and procedures continued to develop throughout 2011. For example, the Commission added a conflict of interest policy and a complaint reconsideration policy in 2011. A copy of the TFSC's current policies and procedures may be found at **Exhibit D**.

Pursuant to the policies and procedures, the TFSC meets at least once per quarter. The Presiding Officer may call other meetings as necessary, and committees may also meet between quarterly meetings. The Commission currently has three standing committees: Legislative, Forensic Development and Complaint Screening. Investigative panels may also be appointed to aid the Commission in complying with the timeliness requirement of its enabling statute. A list of all meetings held in 2011 is provided at **Exhibit E**.

**K. Development of General Counsel Position**

On April 23, 2010, Commissioners voted to add a General Counsel position to the TFSC staff, and created an interview committee to work with SHSU in hiring a candidate. At its December 14, 2010 meeting, the TFSC voted to hire Lynn M. Robitaille as its General Counsel. The General Counsel is responsible for providing legal advice to the Commission, ensuring the comprehensive and timely execution of TFSC investigations, tracking developments in legislation relevant to the FSC's mission, ensuring compliance with the Open Meetings Act and Public Information Act, and representing the Commission at various conferences and stakeholder meetings among other duties. Ms. Robitaille has remained in that role since December 2010.

**L. Office Move**

The TFSC moved its offices to Austin, Texas in early August 2011. The office was previously in the Criminal Justice building at SHSU in Huntsville, Texas. The TFSC moved to be closer in proximity to the Capitol and other stakeholders in the forensic science community as well as to support a consistent and centralized quarterly meeting location. The TFSC's office is located in the Stephen F. Austin building on the Capitol complex in Suite 445. Both members of the TFSC staff have permanent space in the Austin office.

### M. Attendance at TACLD Meetings

The Texas Association of Crime Lab Directors was officially formed in 2011. The TACLD provides a forum for lab directors across Texas to share information, track legislative and policy developments, and discuss issues of concern to forensic practitioners. The TACLD meets at least twice a year. TFSC staff attends TACLD meetings regularly to educate members about TFSC investigations and forensic development activities. TFSC staff also brings information from the TACLD back to Commissioners at subsequent quarterly meetings. The current TACLD President is Timothy Fallon, Director of the Bexar County Criminal Investigation Laboratory.

## III. Texas Forensic Science Commission Budget

When the Texas Legislature created the Commission in 2005, it did not appropriate any funding for Commission activities. The Commission received its first allocation of funds in 2007, when HB-15 designated $250,000 per biennium as a line item in the SHSU budget. In mid-July 2008, a central office was established on the SHSU campus and a Commission Coordinator was hired. At that time, the Commission began making decisions regarding the investigation of several pending complaints. Approximately 12% of the Commission's $250,000 allotted funds were used in fiscal year 2008, primarily for meeting and communication expenses. A small percentage of the funds was also dedicated to the Commission Coordinator's salary for the one-month period from July 2008 to August 2008.

As the Commission evolved and membership changes were made in 2009, the Commission began reviewing more complaints with the assistance of the Commission Coordinator. In fiscal year 2009, the Commission's budget was divided into the following

categories: (percentages are approximate): staff salary/benefits: 17%; subject matter experts: 13%; office administrative expenses: 1%; travel and meeting expenses: 3%; office equipment: 2%; other miscellaneous expenses: 1%. In fiscal year 2009, the Commission used approximately $92,500 of its allotted $250,000.

In fiscal year 2010, the Commission had a budgetary breakdown as follows (percentages are approximate): staff salary/benefits: 18%; subject matter experts: 1%; office administrative expenses: 1%; travel and meeting expenses: 4%; office equipment: 3%; other miscellaneous expenses: 1%. In fiscal year 2010, the Commission used approximately $70,000 of its allotted $250,000.

In December 2010, the Commission voted to add a General Counsel to the Commission staff. The addition of this position was instrumental to the Commission's resolution of the Willingham/Willis and Moon complaints, as well as to the ongoing investigation of complaints regarding the El Paso Police Department crime lab and the Austin Police Department crime lab, among other initiatives. The fiscal year 2011 budgetary breakdown was as follows (percentages are approximate): staff salary/benefits: 53%; subject matter experts: 2%; office administrative expenses: 1%; travel: 3%; office equipment: 14%; other miscellaneous expenses: 1%. In fiscal year 2011, the Commission used approximately $185,000 of its allotted $250,000. The Commission also completed its move to Austin during fiscal year 2011, and thus had numerous one-time expenses related to the move.

The Commission anticipates using the full amount of its budgetary allocation during the 2012 fiscal year due to increased investigative and forensic development activities (*See* **Exhibit**

**F**). The Commission's top priorities for the year are to: (1) develop an effective laboratory self-disclosure program; (2) ensure comprehensive and timely investigations of complaints and self-disclosures; (3) host various statewide forensic science stakeholder meetings; (4) sponsor a forensic science conference in collaboration with the Texas Criminal Justice Integrity Unit; and (5) increase communication efforts with the public, including through the annual report, periodic newsletters and a new website.

## IV. TFSC Attorney General Opinion

On January 28, 2011, the Commission asked Texas Attorney General Greg Abbott to respond to three questions regarding the scope of its jurisdiction under its enabling statute. (TEX. CODE CRIM. PROC., Art. 38.01) (*See* **Exhibit G**). Various stakeholders had raised questions regarding the scope of the Commission's jurisdiction during the course of the Willis/Willingham investigation. Interested parties submitted briefs on the legal issues contained in the opinion request. On July 29, 2011, the Attorney General issued the following legal guidance (*See* **Exhibit H**):

1. The TFSC lacks authority to take any action with respect to evidence tested or offered into evidence *before* September 1, 2005. Though the TFSC has general authority to investigate allegations arising from incidents that occurred prior to September 1, 2005, it is prohibited, in the course of any such investigation, from considering or evaluating evidence that was tested or offered into evidence before that date.

2. The TFSC's investigative authority is limited to laboratories, facilities, or entities that were accredited *by DPS* at the time the analysis took place.

3. The Commission may investigate a field of forensic science that is neither expressly included nor expressly excluded on DPS' list of accredited forensic disciplines, as long as the forensic field meets the statute's definition of "forensic analysis" (*See* Article 38.35 of the Act) *and* the other statutory requirements are satisfied.

During its September 8-9, 2011 quarterly meeting, the Commission voted unanimously to follow the guidance contained in the opinion, and will apply the opinion to future cases on a case-by-case basis.

## V. Summary of Complaints and Dispositions

Commission staff receives complaints from a range of public sources. The TFSC relies upon accredited crime laboratories and interested members of the public to bring issues of concern to the TFSC's attention. The intent of this section is to provide the reader with a summary of the number and type of complaints the Commission has received since its inception. We also provide the disposition status for each complaint. A complete matrix detailing each complaint is provided at **Exhibit I**.

### A. Complaint Sources

Of the 51 complaints received through the end of 2011, 3 were filed by the national Innocence Project, 1 was filed by the Innocence Project of Texas, 4 by former lab employees, and the remaining 43 by current inmates or relatives of inmates.

Of the complaints received from inmates, 10 were submitted without complaint forms, and the Commission was unable to obtain completed forms from the inmates after sending follow-up requests. Commission staff works diligently to ascertain the facts of each complaint. In some cases, it is impossible to identify the nature of the complaint due to either a lack of information or the submission of unintelligible information. The Commission tries to solicit additional information from inmates whenever possible. The following table summarizes those complaints for which the Commission could determine the nature of the complaint. Note that some complaints fall into more than one forensic discipline.

## B. Complaint subject matter summary

| Discipline | Name of Laboratory or Other Entity |
|---|---|
| Arson Investigation and/or Gas Chromatography/Mass Spectrometry testing for presence of accelerant | State Fire Marshal's Office, City of Corsicana Bexar County Medical Examiner's Office, Waco Fire Marshal, two unidentified agencies (referred to Innocence Project of Texas), two out-of-state complaints (TN, PA) |
| Autopsy | Lufkin Pathology Laboratory, Tarrant County Medical Examiner, Harris County Medical Examiner, Southwestern Institute for Forensic Science, Travis County Medical Examiner, Ellis County (agency unclear), Hidaldgo County (agency unclear) |
| Ballistics, trace evidence and/or firearms | Southwestern Institute of Forensic Science, Houston Police Department Crime Lab, Plano Police Department Crime Lab, Orange County Sheriff's Department, Department of Public Safety (unidentified facility) |
| Controlled substance | El Paso Police Department Crime Lab, DPS (Waco), Austin Police Department Crime Lab |
| DNA (usually requests for testing or complaints about lack of remaining evidence for testing) | Southwestern Institute of Forensic Science, Houston Police Department Crime Lab, UNT Health Science Center, Department of Public Safety (unidentified facility), Department of Public Safety (Austin), Fort Worth Police Department |
| Dog scent lineup | Deputy Sheriff Pikett, Fort Bend County |
| General complaints regarding quality assurance and/or HR issues | Southwestern Institute of Forensic Science, Austin Police Department Crime Lab |
| Handwriting analysis, forensic photography/ digital evidence, and/or fingerprinting | Federal Bureau of Investigation, Austin Police Department Crime Lab |
| Serology | DPS (El Paso), DPS (Lubbock), Southwestern Institute of Forensic Science, Houston Police Department Crime Lab, Fort Worth Police Department Crime Lab, Hidalgo County (agency unclear) |
| Toxicology | Labcorp (Dallas), Harris County Medical Examiner's Office, Tarrant County Medical Examiner, Forensic DNA & Drug Testing Services, Inc. (civil case) |
| Other complaints with no specific forensic discipline listed (usually includes eyewitness ID, police and/or prosecutorial misconduct allegations) | Dallas County District Attorney, Pasadena Police Department, various unidentified agencies |

### C. Dispositions

The Commission began receiving complaints on a consistent basis in 2008. As of December 2011, the Commission has accepted four complaints for investigation. They include the combined Willingham/Willis complaint (arson), the Brandon Lee Moon complaint (serology), the Austin Police Department Crime Lab complaint (DNA) and the El Paso Police Department Crime Lab complaint (controlled substance). Of these cases, the Commission has issued reports in the Willingham/Willis, Brandon Moon, and Austin Police Department (DNA section) cases. All three of these reports were released in 2011. They are discussed in detail in Section IV below. A copy of the full text of the reports may be found at http://www.fsc.state.tx.us/reporting.html.

The Commission's investigation of the El Paso Police Department Crime Lab is ongoing at this time. The Commission expects to release a report in the case by August 2012. In addition, Commissioners voted at the April 13, 2012 meeting to investigate two new complaints against the controlled substance division of the Austin Police Department's crime laboratory. The Commission anticipates that accredited crime laboratories will begin submitting voluntary self-disclosures using a new disclosure form approved at the Commission's April 13, 2012 meeting. Disclosure guidelines were developed to assist laboratories in understanding what types of issues should be reported to the Commission in compliance with the statute. (TEX. CODE CRIM. PROC. § 38.01(4)(a)(2)). The Commission has already received one laboratory self-disclosure related to concerns with serology analysis in sexual assault kits examined by a single examiner in the Tarrant County Medical Examiner's crime laboratory. On April 13, 2012, the Commission voted to investigate the issues set forth in the disclosure.

To understand the disposition of many complaints, it is important to recall the limitations placed on the scope of the Commission's jurisdiction. As discussed in Section IV describing the Attorney General's legal guidance released on July 29, 2011, the Commission's jurisdiction is limited to cases in which the forensic analysis was conducted by an accredited crime laboratory and the analysis was performed or entered into evidence on or after September 1, 2005. The Commission is also prohibited from analyzing forensic disciplines that are explicitly exempt by statute or DPS rule.

In the vast majority of complaints dismissed by the Commission, either one or a combination of the following circumstances was clearly present: (1) the analysis was performed or entered into evidence *before* September 1, 2005; (2) the analysis was not performed by an accredited laboratory; or (3) the discipline is not subject to the Commission's jurisdiction (*e.g.,* autopsy).

When the Commission must dismiss a complaint due to lack of jurisdiction, Commissioners attempt to refer the matter to an entity that is in a better position to address the issues in the complaint. For example, the TFSC was prohibited by article 38.35(4)(F) of the Texas Code of Criminal Procedure from considering a complaint involving toxicology testing performed for a civil case in Dallas. Though the Commission dismissed the complaint, it referred the matter to other appropriate agencies with jurisdiction, and action was taken by those agencies to address the matter within the civil court system.

In the remaining cases, the Commission dismissed the complaints due to lack of information or lack of merit on the face of the information submitted.

## VI. Summary of Reports Issued

### A. Willis/Willingham

On October 28, 2011 the Commission approved a 13-page addendum to a previously issued April 15, 2011 report regarding the arson cases of Cameron Todd Willingham and Ernest Ray Willis. The April report highlighted developments in arson science from the early 1990's to the present, described the incendiary indicators used at trial, and proposed recommendations to improve arson investigation in Texas. The full text of the report with addendum may be found at the following link: http://www.fsc.state.tx.us/documents/FINAL.pdf.

The Commission's recommendations, including subsequent feedback from the State Fire Marshal's Office, are attached as **Exhibit J**.

### B. Brandon Lee Moon

On September 8, 2011, the Commission closed its investigation and issued a brief report in the Brandon Lee Moon ("Moon") case, which resulted from a complaint filed by the national Innocence Project in August 2008. Mr. Moon was wrongfully convicted of sexual assault on January 14, 1988. He had served 18 years of a 75-year sentence when he was released from prison in December 2004. He was exonerated based on the results of a DNA test showing that he was not the donor of the seminal fluid found on two key pieces of evidence at the crime scene.

The Commission voted to close its investigation of the Moon case based on the legal guidance contained in Attorney General Greg Abbott's July 2011 legal opinion. The opinion limits the scope of the TFSC's jurisdiction to cases in which the evidence was tested or entered

into evidence on or after September 1, 2005. However, before the AG's opinion was released, the Commission had already reviewed the serology analysis and related testimony delivered by a DPS analyst at Mr. Moon's trial as well as subsequent attempts by Mr. Moon to obtain DNA testing while incarcerated, and thus issued a brief report summarizing key facts, lessons learned and recommendations developed in consultation with DPS. The full text of the report may be found at the following link: http://www.fsc.state.tx.us/documents/Moon091311.pdf.

**C. Austin Police Department Crime Lab Memorandum (DNA Section)**

At its September 8-9, 2011 meeting, Commissioners approved a final memorandum regarding a complaint against the Austin Police Department Crime Laboratory ("APD"). Travis County District Attorney Rosemary Lehmberg and Austin Police Department Chief Art Acevedo forwarded the complaint to the Commission on July 8, 2010. The complaint originated with a former APD lab analyst in the DNA section, and alleged broad-based problems with the APD lab's quality assurance program as well as concerns regarding analyst training and competency exams. The APD investigative panel recommended that the full Commission prepare a brief memorandum to: 1) review the facts of the complaint; 2) provide a history of the various audits and internal investigations conducted in response to the employees' concerns; and 3) make observations regarding best practices for similar cases.

The Commission's memorandum provided the following observations and recommendations:

1) *Consistent Adoption of Review Standards Across Texas.* The Commission strongly encourages all crime laboratories to take proactive steps whenever they are faced with complaints regarding the integrity and reliability of the forensic science practiced in their labs.

2) *Alerting the Criminal Justice System.* APD's policies and procedures make clear that leadership may contact the District Attorney and/or appropriate accrediting agency regarding a complaint. All laboratories should alert the criminal justice system and the appropriate accrediting agency whenever substantive allegations are made regarding the integrity and reliability of forensic analysis, especially where the outcome of a specific criminal case may have been impacted.

3) *Further Clarity on Contacting Outside Investigative Agencies.* Though the APD's policies and procedures discuss the possibility of contacting outside resources to perform independent investigations, there are no specific criteria listed to guide decision-makers in determining when a case is significant enough to contact such an agency. The decision appears to be left to the judgment of leadership. APD management exercised its discretion for independent consultation appropriately in this case.

The full text of the memorandum may be found at the following link:

http://www.fsc.state.tx.us/documents/M_APD%20090811%20FINAL%20executed%20092811.pdf

## VII. Texas Exonerations: The Role of Forensic Science

Texas legislators created the Commission in 2005 in part due to concern over the increasing number of exonerations based on new DNA evidence, in Texas and across the nation. Many of the exonerations occurred after Texas passed landmark post-conviction DNA testing legislation in 2001, codified in Chapter 64 of the Texas Code of Criminal Procedure. The legislation streamlined the process used by inmates to seek post-conviction testing. Of the 45 exonerations in Texas, it is estimated that 21 cases involved the use of unvalidated or improper forensic science at trial. The following is key data regarding exonerations:[1]

[1] Data courtesy of the Innocence Project of Texas. Data current through 2011.

**General Statistics:**

Number of DNA Exonerations in Texas: 45
Average Number of Years Incarcerated: 13.5
Number of DNA Exonerations before 2001 post-conviction testing law passed: 7
Number of DNA Exonerations Since 2001 post-conviction testing law passed: 37

**Texas DNA Exonerations by County:**

Collin County: 1
Dallas County: 22
Ellis County: 1
El Paso County: 1
Harris County: 8
Lubbock County: 1
McLennan County: 1
Montgomery County: 2
Smith County: 1
Tarrant County: 1
Travis County: 4
Uvalde County: 1

## VIII. Legislation Impacting the Forensic Science Commission: 82nd Session

### SB-1658 (Hinojosa)

During the 82nd Session, Senator Juan C. Hinojosa (D-McAllen) proposed legislation (SB-1658) (*see* **Exhibit K**) to set clear parameters for the Commission's jurisdiction. Though the bill passed unanimously in the Senate, it was not considered in the House before adjournment was reached. The Commission expects that legislation similar to SB-1658 will be introduced during the 83rd Session, and thus includes a summary here for informational purposes. In its final form (including draft House amendments), SB-1658 may be summarized as follows:

**A. Accredited Crime Labs and Accredited Forensic Disciplines.**

For complaints in which the forensic analysis in question is on the DPS list of accredited forensic disciplines and was conducted by an accredited laboratory, the TFSC would be required conduct an investigation and issue a written report that:

- Identifies whether negligence or misconduct occurred;
- Issues observations regarding integrity and reliability of the forensic analysis; and
- Identifies best practices and recommendations.

For this category of complaints, the TFSC *would also*:

- Conduct a retrospective reexamination of other forensic analysis involving the same kind of negligence or misconduct; and
- Conduct follow-up evaluations of the lab and identify corrective action.

**B. Non-Accredited Crime Labs and Non-Accredited Forensic Disciplines**

For complaints in which the forensic analysis in question is not on the list of DPS-accredited forensic disciplines or was not conducted by an accredited laboratory, the TFSC would conduct an investigation and issue a written report that contains:

- Observations regarding the integrity and reliability of the forensic analysis;
- Best practices identified by the Commission during course of the investigation; and
- Other relevant recommendations as determined by the Commission.

**C. Addition of Reviews Initiated by the TFSC for Educational Purposes**

This provision would allow the TFSC to initiate an investigation of a forensic discipline for educational purposes without receiving a complaint, but only if the Commission determines by majority vote that the investigation would advance the integrity and reliability of forensic science in Texas. A report in this category may include:

- Observations regarding the integrity and reliability of the forensic analysis;
- Best practices identified by the Commission; and
- Other relevant recommendations as determined by the Commission.

**D. Appointments**

- All members of the Commission would be appointed by the Governor, and therefore would be subject to confirmation by the Senate. The language regarding attachment of members to specific Texas universities would be retained, and all seven of the scientists on the Commission would be required to have specific forensic science expertise.

**E. Reports Inadmissible as Evidence**

- This section clarified that "a written report prepared by the Commission under the Forensic Science Commission statutes is not admissible in a civil or criminal action." In addition, the bill clarified that the Commission may not make a determination of innocence or guilt in any legal action.

## IX. National Developments in Forensic Science

**A. Oversight and Reform: NAS Report (2009)**

Current interest in improving forensic science across the nation was prompted in part by the release of a 2009 National Academy of Sciences report entitled *Strengthening Forensic Science in the United States: A Path Forward* (the "NAS Report"). (Exec. Summary is attached

as **Exhibit L**). Link to the full NAS Report: http://www.nap.edu/catalog.php?record_id=12589. The National Institute of Justice's Response to the NAS report is attached as **Exhibit M**.

The NAS Report contains thirteen recommendations designed to improve forensic science and establish consistency and predictability. Following is a summary of those recommendations:

1. Congress should establish a National Institute of Forensic Science (NIFS).
2. NIFS should establish standard terminology and model laboratory reports for use in reporting on results of investigations.
3. NIFS should competitively fund peer-reviewed research in key forensic disciplines.
4. Congress should authorize incentive funds to NIFS for purpose of removing public laboratories from the control of law enforcement.
5. NIFS should encourage research programs on cognitive bias and human error.
6. Congress should appropriate funds to NIFS for the purpose of developing standards in examination, measurement, validation, reliability, information sharing and proficiency testing.
7. Laboratory accreditation and individual certification should be mandatory. NIFS should develop appropriate standards for accreditation and certification.
8. Forensic laboratories should develop and implement best practice quality assurance control procedures to ensure accuracy of analyses.
9. NIFS should establish a national code of ethics for all forensic disciplines and explore mechanisms of enforcement for ethical violations.
10. Congress should appropriate funds to NIFS to work with educational institutions in the development of forensic graduate education programs, forensic science research efforts and continuing education.
11. Congress should appropriate funds to NIFS to replace and eventually eliminate existing coroner systems, and replace them with medical examiner offices.

12. Congress should appropriate funds for NIFS to achieve nationwide fingerprint data interoperability.

13. Congress should provide funding to NIFS to prepare forensic scientists and crime scene investigators to manage and analyze evidence from events affecting homeland security.

Though many of these recommendations have yet to be implemented, the NAS Report remains at the forefront of the national dialogue on efforts to improve forensic science.

**B. National Committees and Working Groups**

Following are some ongoing research and policy initiatives to improve forensic science at the national level that may have a significant impact on Texas crime laboratories:

1. NIST/NIJ Technical Working Group on Biological Evidence Preservation

The NIST/NIJ Technical Working Group on biological evidence is examining current policies, procedures, and practices in biological evidence storage and will publish a report of its findings and recommendations in June 2012.

2. National Science and Technology Council, Committee on Science, Subcommittee on Forensic Science

The National Science and Technology Council, Committee on Science, Subcommittee on Forensic Science is a group of experts charged with developing practical and timely approaches to enhancing the validity and reliability of forensic science activities. State and local representatives of the criminal justice community were also invited to participate in Interagency Working Groups ("IWGs") to provide input on specific topics. The Subcommittee will provide recommendations on policies and plans related to forensic science in the national security, criminal justice context as well as the medical examiner/coroner systems at local, state, and federal levels. The TFSC's Dr. Sarah Kerrigan is one of the state/local representatives participating in the IWGs.

3. NIST/NIJ Expert Working Group on Human Factors in Latent Print Analysis

An expert working group assembled by NIST and NIJ is expected to release a report in the first half of 2012 containing its findings on how to lessen the impact of the "human factor" on latent print analysis. The diverse working group includes members of the criminal justice and fingerprint community, such as latent print examiners, psychology researchers, cognitive scientists, legal academics, forensic scientists, and computation experts.

### C. Resources for Lawyers and Judges

1. The FJC and NRC's Reference Manual on Scientific Evidence Publication

The Federal Judicial Center and the National Research Council of the National Academies published the third edition of the Reference Manual on Scientific Evidence in October 2011. The Reference Manual has evolved to become a leading guide for resolving difficult issues in scientific testimony. The book represents extensive discussion among the judicial and scientific communities to identify creative ways of bringing science and law together and to study the process by which scientific and technical information informs legal issues. It is a useful reference guide for judges and attorneys alike in discerning some of the technical scientific issues that might arise in a particular case. For a link to the manual, go to: http://www.nap.edu/catalog.php?record_id=13163.

## X. On the Horizon

### A. El Paso Police Department Crime Lab Investigation

The Commission is in the process of investigating the El Paso Police Department's Crime Laboratory, with specific focus on concerns regarding controlled substance testing expressed in a June 2011 ASCLD-LAB assessment report. To date, the Commission has released a number of

recommendations which the laboratory is in the process of implementing. They are set forth in the letter attached as **Exhibit N**. The Commission anticipates releasing a final report in the case by August 2012.

**B. Austin Police Department Crime Lab Complaints (Controlled Substance)**

The Commission received two complaints against the Austin Police Department Crime Lab's controlled substance section in January and February 2012. On March 3, 2012, the Commission's Complaint Screening Committee voted unanimously to recommend that the full Commission begin an investigation into the complaints. The Commission voted to begin an investigation of the complaints at its April 13, 2012 meeting.

**C. Laboratory Self-Disclosure Program**

Section 4(a)(2) of the Texas Code of Criminal Procedure requires all laboratories, facilities, or entities that conduct forensic analyses to report professional negligence or misconduct to the Commission. In April 2012, the Commission released a disclosure form with guidelines for laboratories so that they have a clear understanding of what categories of information should be reported to the Commission. The Commission received its first disclosure from the Tarrant County Medical Examiner's crime laboratory in March 2012, and voted at its April 13, 2012 meeting to conduct a review of the issues describe in the disclosure.

**D. Joint TFSC/CJIU Conference (June 4-5, 2012)**

To promote forensic science education and encourage collaboration among judges, lawyers, scientists, legislators, advocacy groups and other stakeholders, the TFSC and the Texas Criminal Justice Integrity Unit will host a forensic science conference at the Texas State Capitol on June 4-5, 2012. Please visit our website for registration information. www.fsc.state.tx.us.

### E. Stakeholder Meetings

The TFSC will be soliciting input from stakeholders regarding a number of statewide and national forensic science issues. As a first step, the Commission will host a series of roundtable discussions on a number of topics, including but not limited to: 1) trends in certification of forensic examiners; 2) quality and timeliness of services; 3) ethical dilemmas in forensic science; 4) independence of crime laboratories; 5) research and reliability of methods; 6) strategies for improving consistency; 7) training of scientists, lawyers and judges; and 8) addressing pseudo-science. Roundtable discussions will be held on June 6, 2012 at the Texas State Capitol. Participants will include scientists, lawyers, judges, law enforcement, executive/legislative staff, and advocacy groups.

## XI. Public Information Requests

Pursuant to the Public Information Act, Texas Government Code, Chapter 552, the Texas Forensic Science Commission accepts public information requests for information currently existing in its records. The Commission strives for open and transparent deliberations and values the importance of public input.

The Commission accepts requests for information via email at info@fsc.state.tx.us, via facsimile at 1(888) 305-2432, or via regular U.S. mail. You can access the public information request form on the Commission's website at www.fsc.state.tx.us/pia-request.html.

If you have any questions on how to submit a public information request to the Commission, please feel free to contact our office.

**2011 Annual Report Exhibit List**

Exhibit A – List of DPS-Accredited Crime Laboratories

Exhibit B – Current FSC Statute (art. 38.01 and 38.35)

Exhibit C – Bios for Current Members and Staff

Exhibit D – Copy of Current TFSC Policies and Procedures

Exhibit E – 2011 TFSC Meeting Dates and Locations

Exhibit F – TFSC Projected Budget: FY 2012

Exhibit G – TFSC Opinion Request to Attorney General: January 2011

Exhibit H – Attorney General's Opinion: July 2011

Exhibit I – Complaint Matrix

Exhibit J – Willingham/Willis Recommendations with SFMO Feedback

Exhibit K – SB-1658 with Amendments

Exhibit L – NAS Report Executive Summary

Exhibit M - NIJ Response to NAS Report

Exhibit N - El Paso PD Crime Lab Initial Recommendations

# EXHIBIT A

# Texas

## FEDERAL

### 1 DEA South Central Laboratory, (972) 559-7955

10150 Technology Blvd. East, Dallas, Texas 75220

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 2/26/2010 - 2/25/2015 | ☑ | ☐ | ☐ | ☐ | ☐ | ☐ | Current |
| ASCLD/LAB-Int | 2/26/2005 - 2/25/2010 Extension | ☑ | ☐ | ☐ | ☐ | ☐ | ☐ | **Withdrawn** |

## STATE

### 1 Texas Department of Public Safety Abilene Laboratory, (915) 795-4040

2720 Industrial Blvd, Abilene, Texas 79605

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 12/2/2007 - 12/1/2012 | ☑ | ☑ L | ☐ | ☐ | ☐ | ☐ | Current |
| ASCLD/LAB | 2/16/2002 - 2/15/2007 Extension | ☑ | ☑ | ☐ | ☐ | ☐ | ☐ | **Withdrawn** |

### 2 Texas Department of Public Safety Amarillo Laboratory, (806) 468-1430

4200 Canyon Drive, Amarillo, Texas 79109

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 12/2/2007 - 12/1/2012 | ☑ | ☐ | ☐ | ☐ | ☐ | ☐ | Current |
| ASCLD/LAB | 2/16/2002 - 2/15/2007 Extension | ☑ | ☐ | ☐ | ☐ | ☐ | ☐ | **Withdrawn** |

### 3 Texas Department of Public Safety Austin Laboratory, (512) 424-2105

5805 N Lamar Blvd, Austin, Texas 78752

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 12/2/2007 - 12/1/2012 | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | Current |
| ASCLD/LAB | 2/16/2002 - 2/15/2007 | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | **Withdrawn** |

### 4 Texas State Fire Marshal's Office Forensic Arson Laboratory, (512) 305-7971

7915 Cameron Road, Austin, Texas 78754-3803

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB | 10/12/2010 - 10/11/2015 | ☐ | ☐ | ☐ | ☐ | ☐ | ☑ L | Current |
| ASCLD/LAB | 2/17/2006 - 2/16/2011 | ☐ | ☐ | ☐ | ☐ | ☐ | ☑ | **Withdrawn** |
| ASCLD/LAB | 2/17/2001 - 2/16/2006 | ☐ | ☐ | ☐ | ☐ | ☐ | ☑ | **Withdrawn** |

### 5 Texas Department of Public Safety Corpus Christi Laboratory, (361) 698-5641

1922 S Padre Island Dr, Corpus Christi, Texas 78416

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 12/2/2007 - 12/1/2012 | ☑ | ☑ L | ☑ | ☐ | ☐ | ☐ | Current |
| ASCLD/LAB | 2/16/2002 - 2/15/2007 Extension | ☑ | ☑ | ☑ | ☐ | ☐ | ☐ | **Withdrawn** |

### 6 Texas Department of Public Safety El Paso Laboratory, (915) 849-4120

11612 Scott Simpson, El Paso, Texas 79936

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 12/2/2007 - 12/1/2012 | ☑ | ☑ L | ☑ | ☑ | ☐ | ☐ | Current |
| ASCLD/LAB | 2/16/2002 - 2/15/2007 Extension | ☑ | ☐ | ☑ | ☑ | ☐ | ☐ | **Withdrawn** |

**7 University of North Texas Center for Human Identification, (817) 735-5014**
3500 Camp Bowie Boulevard, Fort Worth, Texas 76107

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| FQS-I | 12/6/2010 - 12/6/2014 | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | Current |
| FQS-I | 1/16/2009 - 12/31/2010 | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | **Withdrawn** |
| FQS-I | 11/1/2006 - 11/1/2008 Extension | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | **Withdrawn** |
| NFSTC | 11/1/2004 - 11/1/2006 | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | **Withdrawn** |
| NFSTC | 10/1/2003 - 10/1/2004 | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | **Withdrawn** |

**8 Texas Department of Public Safety Garland Laboratory, (214) 861-2190**
350 West IH 30, Garland, Texas 77043

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 12/2/2007 - 12/1/2012 | ☑ | ☑ L | ☑ | ☑ | ☐ | ☑ | Current |
| ASCLD/LAB | 2/16/2002 - 2/15/2007 Extension | ☑ | ☑ | ☑ | ☐ | ☐ | ☑ | **Withdrawn** |

**9 Texas Department of Public Safety Houston Laboratory, (281) 517-1380**
12230 West Road, Houston, Texas 77065

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 12/2/2007 - 12/1/2012 | ☑ | ☑ L | ☑ | ☐ | ☐ | ☑ | Current |
| ASCLD/LAB | 2/16/2002 - 2/15/2007 Extension | ☑ | ☑ | ☑ | ☐ | ☐ | ☑ | **Withdrawn** |

**10 Texas Department of Public Safety Laredo Laboratory, (956) 728-2245**
1901 Bob Bullock Loop, Laredo, Texas 78043

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 12/2/2007 - 12/1/2012 | ☑ | ☐ | ☐ | ☐ | ☐ | ☐ | Current |
| ASCLD/LAB | 2/16/2002 - 2/15/2007 Extension | ☑ | ☐ | ☐ | ☐ | ☐ | ☐ | **Withdrawn** |

**11 Texas Department of Public Safety Lubbock Laboratory, (806) 472-2832**
1302 West 6th Street, Lubbock, Texas 79401

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 12/2/2007 - 12/1/2012 | ☑ | ☑ L | ☑ | ☑ | ☐ | ☑ | Current |
| ASCLD/LAB | 2/16/2002 - 2/15/2007 Extension | ☑ | ☑ | ☑ | ☑ | ☐ | ☑ | **Withdrawn** |

**12 Texas Department of Public Safety McAllen Laboratory, (956) 984-5624**
1414 N Bicentennial, McAllen, Texas 78501

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 12/2/2007 - 12/1/2012 | ☑ | ☑ L | ☑ | ☑ | ☐ | ☑ | Current |
| ASCLD/LAB | 2/16/2002 - 2/15/2007 Extension | ☑ | ☑ | ☑ | ☑ | ☐ | ☑ | **Withdrawn** |

**13 Texas Department of Public Safety Midland Laboratory, (915) 498-2190**
2405 South Loop 250W, Midland, Texas 79704

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 12/2/2007 - 12/1/2012 | ☑ | ☑ L | ☐ | ☐ | ☐ | ☐ | Current |
| ASCLD/LAB | 2/16/2002 - 2/15/2007 Extension | ☑ | ☑ | ☐ | ☐ | ☐ | ☐ | **Withdrawn** |

**14 Tx Parks and Wildlife Law Enforcement Forensic Lab,**
507 Staples Road, San Marcos, Texas 78666

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB | 2/1/2011 - 1/31/2016 | ☐ | ☐ | ☑ L | ☐ | ☐ | ☐ | Current |
| ASCLD/LAB | 9/30/2006 - 9/29/2011 | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | **Withdrawn** |
| Texas DPS | 6/26/2006 - 6/26/2007 | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | **Withdrawn** |

**15 Texas Department of Public Safety Tyler Laboratory, (903) 939-6021**
4700 University, Tyler, Texas 75707

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 12/2/2007 - 12/1/2012 | ☑ | ☑ L | ☐ | ☑ | ☐ | ☐ | Current |
| ASCLD/LAB | 2/16/2002 - 2/15/2007 Extension | ☑ | ☑ | ☐ | ☑ | ☐ | ☑ | **Withdrawn** |

**16 Texas Department of Public Safety Waco Laboratory, (254) 759-7180**
1617 Crest Drive, Waco, Texas 76705

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 12/2/2007 - 12/1/2012 | ☑ | ☑ L | ☑ | ☐ | ☐ | ☐ | Current |
| ASCLD/LAB | 2/16/2002 - 2/15/2007 Extension | ☑ | ☑ | ☑ | ☐ | ☐ | ☐ | **Withdrawn** |

## COUNTY

**1 Brazoria County Crime Laboratory,**
3602 County Road 45, Angleton, Texas 77515

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB | 9/1/2010 - 8/31/2015 | ☑ | ☑ | ☐ | ☐ | ☐ | ☐ | Current |
| ASCLD/LAB | 9/1/2005 - 8/31/2010 | ☑ | ☑ | ☐ | ☐ | ☐ | ☐ | **Withdrawn** |

**2 Travis Co. M.E. Forensic Toxicology Laboratory, (512) 854-9599**
1213 Sabine St., Austin, Texas 78701

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ABFT | 8/1/2011 - 7/31/2013 | ☐ | ☑ | ☐ | ☐ | ☐ | ☐ | Current |
| ABFT | 8/1/2009 - 6/30/2011 | ☐ | ☑ | ☐ | ☐ | ☐ | ☐ | **Withdrawn** |
| ABFT | 8/1/2005 - 7/31/2009 | ☐ | ☑ | ☐ | ☐ | ☐ | ☐ | **Withdrawn** |

**3 Jefferson County Regional Crime Laboratory,**
5030 Highway 69 South, Suite 500, Beaumont, Texas 77705-9630

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB | 7/17/2009 - 7/16/2014 | ☑ | ☑ L | ☑ L | ☑ L | ☐ | ☐ | Current |
| ASCLD/LAB | 9/1/2005 - 8/31/2010 | ☑ | ☐ | ☑ | ☐ | ☐ | ☐ | **Withdrawn** |
| DPS | 1/21/2009 - 1/21/2010 | ☐ | ☑ | ☐ | ☐ | ☐ | ☐ | **Withdrawn** |

**4 Southwestern Institute of Forensic Sciences, (214) 920-5966**
5230 Medical Center Drive, Dallas, Texas 75235

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB | 3/11/2008 - 3/10/2013 | ☑ | ☑ | ☑ | ☑ | ☐ | ☑ | Current |
| ASCLD/LAB | 9/8/2003 - 3/11/2008 Extension | ☑ | ☑ | ☑ | ☑ | ☐ | ☑ | **Withdrawn** |
| ASCLD/LAB | 3/12/2003 - 3/11/2008 | ☑ | ☑ | ☑ | ☑ | ☐ | ☑ | **Withdrawn** |

**5 Fort Worth P.D. Crime Laboratory,**
350 W. Belknap, Fort Worth, Texas 76102

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 8/31/2011 - 8/30/2016 | ☑ | ☑ L | ☑ L | ☑ | ☐ | ☐ | Current |
| ASCLD/LAB | 6/10/2005 - 6/9/2010 Extension | ☑ | ☑ | ☑ | ☑ | ☐ | ☐ | **Withdrawn** |

**6 Tarrant Co Medical Examiner's Crime Laboratory, (817) 920-5700**
200 Feliks Gwozdz Place, Fort Worth, Texas 76104-4919

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB | 12/10/2009 - 6/24/2014 | ☐ | ☐ | ☑ | ☑ | ☐ | ☑ | Current |
| ASCLD/LAB | 11/6/2004 - 11/5/2009 Extension | ☐ | ☐ | ☑ | ☑ | ☐ | ☑ | **Withdrawn** |

**7 Tarrant Co. M.E. Toxicology Laboratory,**
200 Feliks Gwozdz Place, Ft. Worth, Texas 76104

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB | 6/10/2010 - 6/9/2015 | ☑ | ☑ | ☐ | ☐ | ☐ | ☐ | Current |
| ASCLD/LAB | 6/10/2005 - 6/9/2010 Extension | ☑ | ☑ | ☐ | ☐ | ☐ | ☑ | **Withdrawn** |

**8 Harris Co. S.O. Firearms Identification Laboratory, (713) 796-6750**
1185 Old Spanish Trail, Houston, Texas 77054

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 7/19/2011 - 7/18/2016 | ☐ | ☐ | ☐ | ☑ L | ☐ | ☐ | Current |
| ASCLD/LAB | 1/24/2006 - 1/23/2011 Extension | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | **Withdrawn** |

**9 Harris County Institute of Forensic Sciences, (713) 796-6812**
1885 Old Spanish Trail, Houston, Texas 77054

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 12/3/2008 - 12/2/2013 | ☑ | ☑ | ☑ | ☐ | ☐ | ☑ L | Current |
| ASCLD/LAB | 2/12/2004 - 2/11/2009 | ☑ | ☑ | ☑ | ☐ | ☐ | ☑ | **Withdrawn** |

**10 Bexar Co. Forensic Toxicology Laboratory,**
7337 Louis Pasteur, San Antonio, Texas 78729-4565

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ABFT | 11/1/2011 - 10/31/2013 | ☐ | ☑ | ☐ | ☐ | ☐ | ☐ | Current |
| ABFT | 11/1/2009 - 10/31/2011 | ☐ | ☑ | ☐ | ☐ | ☐ | ☐ | **Withdrawn** |
| ABFT | 11/1/2007 - 11/1/2009 | ☐ | ☑ | ☐ | ☐ | ☐ | ☐ | **Withdrawn** |

**11 Bexar County Criminal Investigation Laboratory, (210) 335-4102**
7337 Louis Pasteur, San Antonio, Texas 78229-4565

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 1/29/2009 - 1/28/2014 | ☑ | ☐ | ☑ | ☑ | ☐ | ☑ | Current |
| ASCLD/LAB | 9/11/2003 - 9/10/2008 Extension | ☑ | ☐ | ☑ | ☑ | ☐ | ☑ | **Withdrawn** |

CITY

**1 Arlington P.D. Crime Laboratory,**
620 W. Division St., Arlington, Texas 76013

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB | 10/12/2010 - 10/11/2015 | ☑ L | ☐ | ☐ | ☑ L | ☐ | ☐ | Current |
| ASCLD/LAB | 2/17/2006 - 2/16/2011 | ☑ | ☐ | ☐ | ☐ | ☐ | ☐ | **Withdrawn** |

**2 Austin P.D. Forensic Science Services Division, (512) 974-5131**
P.O. Box 689001, Austin, Texas 78768-9001

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB | 8/3/2010 - 8/2/2015 | ☑ | ☑ L | ☑ | ☑ | ☐ | ☐ | Current |
| ASCLD/LAB | 8/3/2005 - 8/2/2010 Extension | ☑ | ☑ | ☑ | ☑ | ☐ | ☐ | **Withdrawn** |

**3 Corpus Christi PD, Forensic Services Division,**
321 John Sartain, Corpus Christi, Texas 78401

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB | 12/3/2008 - 12/2/2013 | ☐ | ☐ | ☐ | A ☑ | ☐ | ☐ | Current |
| DPS | 8/19/2008 - 8/19/2009 | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | **Withdrawn** |

**4 Dallas PD Firearms Laboratory, (214) 671-0903**
1725 Baylor Street, Dallas, Texas 75226

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB | 7/27/2010 - 7/26/2015 | ☐ | ☐ | ☐ | ☑ L | ☐ | ☐ | Current |

**5 El Paso P.D. Crime Laboratory,**
911 Raynor St., El Paso, Texas 79903

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB | 3/3/2006 - 3/2/2011 12/26/11 | ☑ | ☐ | ☐ | ☐ | ☐ | ☐ | **Revised** |

**6 Houston Police Department Crime Laboratory, (713) 308-2641**
1200 Travis, Houston, Texas 77002-6000

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB | 2/1/2011 - 1/31/2016 | ☑ | ☑ L | ☑ | ☑ L | ☐ | ☑ | Current |
| ASCLD/LAB | 6/10/2007 - 6/9/2012 | ☑ | ☑ | ☑ | ☑ | ☑ | ☑ | **Withdrawn** |
| ASCLD/LAB | 5/10/2005 - 5/9/2010 | ☑ | ☑ | ☑ | ☑ | ☑ | ☐ | **Withdrawn** |

**7 Pasadena PD Regional Crime Laboratory,**
923 Shaw, Pasadena, Texas 77506

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB | 4/29/2010 - 4/28/2015 | ☑ | ☑ | ☑ L | ☑ L | ☐ | ☑ | Current |
| ASCLD/LAB | 4/29/2005 - 4/28/2010 | ☑ | ☑ | ☑ | ☑ | ☐ | ☑ | **Withdrawn** |

**8 Plano PD Crime Scene Investigative Unit, (972) 941-2529**
909 14th Street, Plano, Texas 75074

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB | 4/28/2007 - 4/27/2012 | ☐ | ☐ | ☐ | ☑ L | ☐ | ☐ | Current |

REGIONAL

**1 Sam Houston State University Regional Crime Laboratory, (936) 294-2504**
8301 New Trails Dr., Suite 125, The Woodlands, Texas 77381

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 9/17/2011 - 9/16/2016 | ☑ | ☑ | ☐ | ☐ | ☐ | ☐ | Current |
| DPS | 9/23/2010 - 9/23/2011 | ☑ | ☑ | ☐ | ☐ | ☐ | ☐ | **Withdrawn** |

## PRIVATE

**1 Armstrong Forensic Laboratory Inc., (817) 275-2691**
330 Loch'n Green Trail, Arlington, Texas 76012

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 6/11/2007 - 6/10/2012 | ☑ | ☐ | ☐ | ☐ | ☐ | A ☑ L | Current |
| DPS | 2/4/2010 - 2/4/2011 | ☐ | ☐ | ☐ | ☐ | ☐ | ☑ | **Withdrawn** |
| | 3/28/2007 - 3/28/2008 | ☑ | ☐ | ☐ | ☐ | ☐ | ☑ | **Withdrawn** |

**2 ExperTox, (281) 476-4600**
1803 Center St. Suite A, Deer Park, Texas 77356

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| CAP | 7/29/2010 - 7/29/2012 | ☐ | ☑ | ☐ | ☐ | ☐ | ☐ | Current |
| CAP | 11/8/2008 - 7/29/2010 Extension | ☐ | ☑ | ☐ | ☐ | ☐ | ☐ | **Withdrawn** |

**3 Integrated Forensic Laboratories, Inc., (817) 553-6565**
901 Clinic Dr., Suite C110, Euless, Texas 76039

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB | 12/1/2007 - 11/30/2012 | ☑ | A ☑ L | ☑ L | ☑ | ☐ | ☑ L | Current |
| DPS Provision | 3/24/2008 - 3/24/2009 | ☐ | ☑ | ☐ | ☐ | ☐ | ☐ | **Withdrawn** |
| DPS Provision | 12/19/2006 - 12/19/2007 | ☑ | ☐ | ☑ | ☑ | ☐ | ☑ | **Withdrawn** |

**4 Orchid Cellmark Dallas, (800) 752-2774**
13988 Diplomat Dr. Ste. 100, Farmers Branch, Texas 75234

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| FQS-I | 10/10/2008 - 7/24/2013 | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | Current |
| ASCLD/LAB-Int | 9/29/2007 - 9/28/2012 | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | Current |
| FQS-I | 7/24/2006 - 7/24/2008 Extension | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | **Withdrawn** |
| ASCLD/LAB | 3/7/2002 - 3/6/2007 Extension | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | **Withdrawn** |
| NFSTC | 2/1/2005 - 2/1/2006 | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | **Withdrawn** |

**5 Alliance Forensics Laboratory,**
6058 E. Lancaster Ave., Fort Worth, Texas 76112

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 10/4/2011 - 10/3/2016 | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | Current |
| ASCLD/LAB | 2/17/2006 - 2/16/2011 Extension | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | **Withdrawn** |
| Texas DPS | 8/22/2005 - 8/22/2006 | ☐ | ☐ | ☐ | ☑ | ☐ | ☐ | **Withdrawn** |

**6 Identigene, (713) 798-9510**

5615 Kirby Suite 800, Houston, Texas 77005

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 11/21/2006 - 11/20/2011 | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | Withdrawn |
| ASCLD/LAB | 2/26/2005 - 2/25/2010 | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | Withdrawn |
| NFSTC | 5/1/2003 - 8/1/2006 | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | Withdrawn |

**7 Quest Diagnostics Inc. Forensic Toxicology,**

4770 Regent Blvd., Irving, Texas 75063

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| SAMHSA | 12/7/1988 - 12/7/2007 | ☐ | ☑ | ☐ | ☐ | ☐ | ☐ | Withdrawn |
| CAP | 2/21/2004 - 2/21/2006 | ☐ | ☑ | ☐ | ☐ | ☐ | ☐ | Withdrawn |

**8 Integrated Forensic Laboratories - Lancaster PD, (817) 553-6565**

1650 N. Dallas Ave, Lancaster, Texas 75134

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB | 12/1/2007 - 11/30/2012 | ☐ | ☐ | ☑ L | ☐ | ☐ | ☐ | Current |

**9 Ameritox, Ltd.,**

9930 West Highway 80, Midland, Texas 79706

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ABFT | 3/1/2006 - 2/28/2008 | ☐ | ☑ | ☐ | ☐ | ☐ | ☐ | Withdrawn |

**10 One Source Toxicology, (713) 920-2559**

1213 Genoa Red Bluff, Pasadena, Texas 77504

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| SAMHSA | 10/1/1996 - 10/1/2012 | ☐ | ☑ | ☐ | ☐ | ☐ | ☐ | |

**11 Accu-Chem Laboratories, (972) 234-5577**

990 N. Bowser Road; Suite 800, Richardson, Texas 75081

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB | 11/21/2005 - 11/20/2010 | ☑ | ☑ | ☐ | ☐ | ☐ | ☐ | Withdrawn |
| CAP | 9/26/2004 - 9/26/2006 | ☐ | ☑ | ☐ | ☐ | ☐ | ☐ | Withdrawn |

**12 DNA Reference Lab, Inc, (210) 692-3800**

7434 Louis Pasteur Dr. #15, San Antonio, Texas 78229

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| NFSTC | 4/1/2003 - 4/1/2004 | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | Withdrawn |

**13 DNA Reference Lab, Inc.,**

7271 Wurzbach Rd., Suite 125, San Antonio, Texas 78240

| Accreditation Source | Dates of Recognized Accreditation | Controlled Substances | Toxicology | Biology DNA | Firearms Toolmarks | Questioned Documents | Trace Evidence | DPS Accreditation Status |
|---|---|---|---|---|---|---|---|---|
| ASCLD/LAB-Int | 10/15/2009 - 10/14/2010 | ☐ | ☐ | ☑ | ☐ | ☐ | ☐ | Withdrawn |

## *Recognized Accrediting Bodies*

***ASCLD/LAB=American Society of Crime Laboratory Directors-Laboratory Accreditation Board Legacy***

***ASCLD/LAB International=American Society of Crime Laboratory Directors-Laboratory Accreditation Board International***

***FQS International=Forensic Quality System International***

***ABFT=American Board Forensic Toxicology***

***CAP=College of American Pathologist***

***SAMHSA= Substance Abuse Mental Health Services Administration***

# EXHIBIT B

Vernon's Texas Statutes and Codes Annotated

Code of Criminal Procedure (Refs & Annos)

Title 1. Code of Criminal Procedure of 1965

Trial and Its Incidents

Chapter Thirty-Eight. Evidence in Criminal Actions (Refs & Annos)

Vernon's Ann.Texas C.C.P. Art. 38.01

# Art. 38.01. Texas Forensic Science Commission

Effective: September 1, 2005
Currentness

**Creation**
Sec. 1. The Texas Forensic Science Commission is created.

**Definition**
Sec. 2. In this article, "forensic analysis" has the meaning assigned by Article 38.35(a).

**Composition**

Sec. 3. (a) The commission is composed of the following nine members:

(1) four members appointed by the governor:

(A) two of whom must have expertise in the field of forensic science;

(B) one of whom must be a prosecuting attorney that the governor selects from a list of 10 names submitted by the Texas District and County Attorneys Association; and

(C) one of whom must be a defense attorney that the governor selects from a list of 10 names submitted by the Texas Criminal Defense Lawyers Association;

(2) three members appointed by the lieutenant governor:

(A) one of whom must be a faculty member or staff member of The University of Texas who specializes in clinical laboratory medicine selected from a list of 10 names submitted to the lieutenant governor by the chancellor of The University of Texas System;

(B) one of whom must be a faculty member or staff member of Texas A&M University who specializes in clinical laboratory medicine selected from a list of 10 names submitted to the lieutenant governor by the chancellor of The Texas A&M University System;

(C) one of whom must be a faculty member or staff member of Texas Southern University who has expertise in pharmaceutical laboratory research selected from a list of 10 names submitted to the lieutenant governor by the chancellor of Texas Southern University; and

(3) two members appointed by the attorney general:

(A) one of whom must be a director or division head of the University of North Texas Health Science Center at Fort Worth Missing Persons DNA Database; and

(B) one of whom must be a faculty or staff member of the Sam Houston State University College of Criminal Justice and have expertise in the field of forensic science or statistical analyses selected from a list of 10 names submitted to the lieutenant governor by the chancellor of Texas State University System.

(b) Each member of the commission serves a two-year term. The term of the members appointed under Subsections (a)(1) and (2) expires on September 1 of each odd-numbered year. The term of the members appointed under Subsection (a)(3) expires on September 1 of each even-numbered year.

(c) The governor shall designate a member of the commission to serve as the presiding officer.

**Duties**

Sec. 4. (a) The commission shall:

(1) develop and implement a reporting system through which accredited laboratories, facilities, or entities report professional negligence or misconduct;

(2) require all laboratories, facilities, or entities that conduct forensic analyses to report professional negligence or misconduct to the commission; and

(3) investigate, in a timely manner, any allegation of professional negligence or misconduct that would substantially affect the integrity of the results of a forensic analysis conducted by an accredited laboratory, facility, or entity.

(b) An investigation under Subsection (a)(3):

(1) must include the preparation of a written report that identifies and also describes the methods and procedures used to identify:

(A) the alleged negligence or misconduct;

(B) whether negligence or misconduct occurred; and

(C) any corrective action required of the laboratory, facility, or entity; and

(2) may include one or more:

(A) retrospective reexaminations of other forensic analyses conducted by the laboratory, facility, or entity that may involve the same kind of negligence or misconduct; and

(B) follow-up evaluations of the laboratory, facility, or entity to review:

(i) the implementation of any corrective action required under Subdivision (1)(C); or

(ii) the conclusion of any retrospective reexamination under Paragraph (A).

(c) The commission by contract may delegate the duties described by Subsections (a)(1) and (3) to any person the commission determines to be qualified to assume those duties.

(d) The commission may require that a laboratory, facility, or entity investigated under this section pay any costs incurred to ensure compliance with Subsection (b)(1).

(e) The commission shall make all investigation reports completed under Subsection (b)(1) available to the public. A report completed under Subsection (b)(1), in a subsequent civil or criminal proceeding, is not prima facie evidence of the information or findings contained in the report.

**Reimbursement**

Sec. 5. A member of the commission may not receive compensation but is entitled to reimbursement for the member's travel expenses as provided by Chapter 660, Government Code, and the General Appropriations Act.

**Assistance**

Sec. 6. The Texas Legislative Council, the Legislative Budget Board, and The University of Texas at Austin shall assist the commission in performing the commission's duties.

**Submission**

Sec. 7. The commission shall submit any report received under Section 4(a)(2) and any report prepared under Section 4(b)(1) to the governor, the lieutenant governor, and the speaker of the house of representatives not later than December 1 of each even-numbered year.

**Credits**

Added by Acts 2005, 79th Leg., ch. 1224, § 1, eff. Sept. 1, 2005.

Current through the end of the 2011 Regular Session and First Called Session of the 82nd Legislature

**End of Document**

Vernon's Texas Statutes and Codes Annotated

Code of Criminal Procedure (Refs & Annos)

Title 1. Code of Criminal Procedure of 1965

Trial and Its Incidents

Chapter Thirty-Eight. Evidence in Criminal Actions (Refs & Annos)

Vernon's Ann.Texas C.C.P. Art. 38.35

# Art. 38.35. Forensic Analysis of Evidence; Admissibility

Effective: September 1, 2005
Currentness

(a) In this article:

(1) “Crime laboratory”' includes a public or private laboratory or other entity that conducts a forensic analysis subject to this article.

(2) “Criminal action” includes an investigation, complaint, arrest, bail, bond, trial, appeal, punishment, or other matter related to conduct proscribed by a criminal offense.

(3) “Director” means the public safety director of the Department of Public Safety.

(4) “Forensic analysis” means a medical, chemical, toxicologic, ballistic, or other expert examination or test performed on physical evidence, including DNA evidence, for the purpose of determining the connection of the evidence to a criminal action. The term includes an examination or test requested by a law enforcement agency, prosecutor, criminal suspect or defendant, or court. The term does not include:

(A) latent print examination;

(B) a test of a specimen of breath under Chapter 724, Transportation Code;

(C) digital evidence;

(D) an examination or test excluded by rule under Section 411.0205(c), Government Code;

(E) a presumptive test performed for the purpose of determining compliance with a term or condition of community supervision or parole and conducted by or under contract with a community supervision and corrections department, the parole division of the Texas Department of Criminal Justice, or the Board of Pardons and Paroles; or

(F) an expert examination or test conducted principally for the purpose of scientific research, medical practice, civil or administrative litigation, or other purpose unrelated to determining the connection of physical evidence to a criminal action.

(5) “Physical evidence” means any tangible object, thing, or substance relating to a criminal action.

(b) A law enforcement agency, prosecutor, or court may request a forensic analysis by a crime laboratory of physical evidence if the evidence was obtained in connection with the requesting entity's investigation or disposition of a criminal action and the requesting entity:

(1) controls the evidence;

(2) submits the evidence to the laboratory; or

(3) consents to the analysis.

(c) A law enforcement agency, other governmental agency, or private entity performing a forensic analysis of physical evidence may require the requesting law enforcement agency to pay a fee for such analysis.

(d)(1) Except as provided by Subsection (e), a forensic analysis of physical evidence under this article and expert testimony relating to the evidence are not admissible in a criminal action if, at the time of the analysis, the crime laboratory conducting the analysis was not accredited by the director under Section 411.0205, Government Code.

(2) If before the date of the analysis the director issues a certificate of accreditation under Section 411.0205, Government Code, to a crime laboratory conducting the analysis, the certificate is prima facie evidence that the laboratory was accredited by the director at the time of the analysis.

(e) A forensic analysis of physical evidence under this article and expert testimony relating to the evidence are not inadmissible in a criminal action based solely on the accreditation status of the crime laboratory conducting the analysis if the laboratory:

(A) except for making proper application, was eligible for accreditation by the director at the time of the examination or test; and

(B) obtains accreditation from the director before the time of testimony about the examination or test.

(f) This article does not apply to the portion of an autopsy conducted by a medical examiner or other forensic pathologist who is a licensed physician.

**Credits**

Added by Acts 1991, 72nd Leg., ch. 298, § 1, eff. Sept. 1, 1991. Amended by Acts 2003, 78th Leg., ch. 698, § 1, eff. June 20, 2003; Acts 2003, 78th Leg., ch. 698, § 2, eff. June 20, 2003; Acts 2003, 78th Leg., ch. 698, § 3, eff. June 20, 2003; Acts 2005, 79th Leg., ch. 1224, § 2, eff. Sept. 1, 2005.

Current through the end of the 2011 Regular Session and First Called Session of the 82nd Legislature

# EXHIBIT C

**2012 MEMBER BIOS**

**Nizam Peerwani, M.D., Texas Forensic Science Commission Presiding Officer**
**Appointed By: Governor Perry**

Dr. Peerwani is the Chief Medical Examiner in Tarrant, Parker, Denton, and Johnson Counties, Texas and an Adjunct Professor at Texas Wesleyan University, in Fort Worth, Texas. He received his undergraduate and medical degrees from the American University in Beirut and completed his residency at Baylor University Medical Center. Dr. Peerwani is board-certified in Anatomic and Forensic Pathology. Dr. Peerwani was the Professor of the Year three times at the University of North Texas Health Science Center. He was retained by the FBI in 1993 to handle the Waco disaster. He also received the Humanitarian Award for Physicians for Human Rights in 2006. Dr. Peerwani serves on the Editorial Board of the American Journal of Forensic Medicine and Pathology, and is an advocate for human rights with missions to various parts of the world.

**Sarah Kerrigan, Ph.D.**
**Appointed By: Attorney General Abbott**

Dr. Kerrigan is a Professor of Criminal Justice at Sam Houston State University where she is the Director of the Forensic Science Program. She is also the Director of the SHSU Regional Crime Lab in The Woodlands, Texas. Before moving to Texas, Dr. Kerrigan served as the Bureau Chief for the New Mexico Department of Health. She also served on the Board of Directors of the California Association of Toxicologists. She has been a contributing author for several toxicology textbooks, including the Encyclopedia for Forensic Science. Dr. Kerrigan received the Outstanding DRE Program Innovation award from the International Association of Chiefs of Police in 2003 and was the recipient of the Irving Sunshine Toxicology Award from the American Academy of Forensic Sciences in 2002.

**Arthur J. Eisenberg, Ph.D.**
**Appointed By: Attorney General Abbott**

Dr. Eisenberg is Professor and Chairman of the Department of Forensic and Investigative Genetics and also the Co-Director of the University of North Texas Center for Human Identification. Dr. Eisenberg received his Ph.D. in Molecular Biology from the State University of New York at Albany in 1984. After graduating, he joined Actagen Corporation which later became LifeCodes, a laboratory that established the first DNA Paternity and Forensic labs in the world. Dr. Eisenberg's lab has been funded by the National Institute of Justice to perform DNA analysis on unidentified human remains and the family reference samples required for missing persons. Dr. Eisenberg has served on several national committees, including for the United States Department of Justice, Office of the Inspector General, the American Association of Blood Banks Parentage Testing Standards Committee, and the College of American Pathologists Histocompatability/Human Identity Testing Proficiency Committee. He has over 50 peer-reviewed publications, and has received awards for Healthcare Hero by the Fort Worth Business

Press, the Award for Significant Contributions to the Field of DNA Forensic Science and the Fitzco/Whatman BioScience Distinguished Lecture Series award, among many others.

**Jean Hampton, Ph.D.**
**Appointed By: Lieutenant Governor Dewhurst**

Dr. Hampton is Chairman and Associate Professor of the Department of Health Sciences at Texas Southern University in Houston, Texas. Dr. Hampton has 28 years of experience as an environmental toxicologist and a registered respiratory therapist. She has completed several post-graduate programs, including the two-year post-doctoral fellowship at NASA Johnson Space Center, the NIH-sponsored Ruth Kirschstein Training program at Baylor College of Medicine, and the AAAS/National Academies Senior Scholar program. Dr. Hampton has authored various publications on environmentally related human health risk assessments and asthma. Her research and scholarly interests involve environmental health risk with a focus on respiratory disease.

**Jeffrey J. Barnard, M.D.**
**Appointed By: Lieutenant Governor Dewhurst**

Dr. Barnard is the Chief Medical Examiner in Dallas County at the Southwestern Institute of Forensic Sciences. Dr. Barnard obtained his undergraduate and medical degree at Texas A&M University and completed his Forensic Pathology Fellowship at the Suffolk County Medical Examiner's Office in Hauppage, New York. Dr. Barnard is licensed by the American Board of Pathology in Anatomic and Clinical Pathology and Forensic Pathology. He also has served as a Professor of Pathology and Director of Autopsy Residency Training at the University of Texas Southwestern Medical Center in Dallas. Dr. Barnard is the author of many peer-reviewed publications.

**Richard Alpert**
**Appointed By: Governor Perry**

Richard Alpert is an Assistant Criminal District Attorney for the Tarrant County District Attorney's Office. He has held that position for the last 25 years. For the last 19 years, he has been Chief of the Misdemeanor Division. He received his undergraduate and Juris Doctor degrees from The University of Texas at Austin. He has published two books, *DWI Investigation and Prosecution* and *Intoxication Manslaughter Investigation and Prosecution*. In addition, he has taught at numerous schools and seminars on all aspects of trial advocacy, including the use of blood evidence in trial. Those efforts have brought him both state and national awards. For the last 13 years, he has been Course Director for the Texas District and County Attorney Association's Trial Skills Course and Intoxication Manslaughter School.

**Dr. Vincent J.M. Di Maio**
**Appointed By: Governor Perry**

Dr. Di Maio was the Chief Medical Examiner in Bexar County from 1981 to 2006. Dr. Di Maio obtained his medical degree from the State University of New York - Downstate

Medical Center in 1965. He is board-certified in Anatomical, Clinical and Forensic Pathology. Dr. Di Maio received the Jean R. Oliver, M.D. Master Teacher Award, presented by the Alumni Association of the State University of New York – Downstate Medical Center in Brooklyn, New York. He was also the recipient of the Milton Helpern Award, presented by the Pathology/Biology Section of the American Academy of Forensic Sciences and the Milton Helpern Laureate Award presented by the National Association of Medical Examiners. Dr. Di Maio is also the author of many scientific publications, articles, letters and medical school textbook chapters.

**Robert J. Lerma**
**Appointed By: Governor Perry**

Mr. Robert Lerma is a self-practicing criminal defense attorney in Brownsville, Texas with over 25 years of experience in criminal and family law. He completed his Juris Doctor degree at South Texas College of Law in Houston, Texas. Mr. Lerma is on the Board of Directors for the Texas Criminal Defense Lawyers' Association. He also serves as President of the Cameron County Criminal Defense Lawyers' Association. Before entering private practice, Mr. Lerma worked as an Assistant City Attorney for the City of Brownsville.

**Texas Forensic Science Commission Staff Bios**

**Lynn M. Robitaille, General Counsel**

Ms. Robitaille joined the FSC as General Counsel on December 14, 2010. In addition to assisting the Commission with all crime laboratory investigations, she provides legal advice, tracks developments in legislation relevant to the FSC's mission, ensures compliance with the Open Meetings Act and Public Information Act, and represents the Commission at various conferences and stakeholder meetings. Ms. Robitaille has over 11 years of experience conducting internal investigations in response to criminal and civil actions, developing legal compliance and training programs, and advising clients in litigation. Her work has included responding to allegations of professional misconduct by whistleblowers, law enforcement and regulatory agencies, and collaborating with forensic experts. Ms. Robitaille graduated from the University of Massachusetts Amherst with honors, and obtained her JD from Georgetown University Law Center. She serves as a board member of Breakthrough Austin and a mentor to high school debate students through the Jack Jenkins Debate Opportunity Fund.

**Leigh M. Tomlin, Commission Coordinator**

Ms. Tomlin was the first staff member of the Texas Forensic Science Commission. She oversees all of the Commission's administrative functions and assists the FSC's General Counsel in the Commission's investigative research duties. She received a BA in Business Administration from Texas State University in 2005, completed an MA in Legal Studies in 2006 and is currently in her first year of law school at St. Mary's University in San Antonio. Ms. Tomlin began her career as a commercial litigation paralegal. She has extensive training in legal writing, legal theory, and legal research. Ms. Tomlin also serves as a child advocate for the Court Appointed Special Advocate Association ("CASA").

# EXHIBIT D

State of Texas

Forensic Science Commission

Dr. Vincent Di Maio, Chair

Phone: 1-512-936-0770
Fax: 1-512-936-7986
E-mail: info@fsc.state.tx.us

# TEXAS FORENSIC SCIENCE COMMISSION

# POLICIES AND PROCEDURES

**ADOPTED APRIL 13, 2012**

## 1.0 Texas Forensic Science Commission (FSC)

The mission of the FSC is to strengthen the use of forensic science in criminal investigations and courts by developing a process for reporting professional negligence or misconduct, investigating allegations of professional negligence or misconduct, promoting the development of professional standards and training, and recommending legislative improvements.[1]

### 1.1 Responsibilities

**(a)** The FSC is charged by statute to:

(1) develop and implement a reporting system through which accredited laboratories, facilities, or entities report professional negligence or misconduct;

(2) require all laboratories, facilities, or entities that conduct forensic analyses to report professional negligence or misconduct to the commission; and

(3) investigate, in a timely manner, any allegation of professional negligence or misconduct that would substantially affect the integrity of the results of a forensic analysis conducted by an accredited laboratory, facility, or entity.[2]

**(b)** An investigation under Subsection (a)(3):

(1) must include the preparation of a written report that identifies and also describes the methods and procedures used to identify:

(A) the alleged negligence or misconduct;

(B) whether negligence or misconduct occurred; and

(C) any corrective action required of the laboratory, facility, or entity; and

(2) may include one or more:

(A) retrospective reexaminations of other forensic analyses conducted by the laboratory, facility, or entity that may involve the same kind of negligence or misconduct; and

(B) follow-up evaluations of the laboratory, facility, or entity to review:

(i) the implementation of any corrective action required under Subdivision (1)(C); or

(ii) the conclusion of any retrospective reexamination under Paragraph (A).[3]

---

[1] The FSC was created by Acts 2005, 79th Leg., Ch. 1224, sec. 1, eff. September 1, 2005. That express statutory authority is contained in article 38.01 of the Texas Code of Criminal Procedure. Definitions of related terms are contained in article 38.35 of that Code. Further guidance on the scope of the FSC's jurisdiction was provided by Texas Attorney General Greg Abbott in Opinion #GA-0866 issued on July 29, 2011. These written policies and procedures are intended to consolidate a description of that authority and provide a guide for the consistent exercise of the discretion and authority of the Forensic Science Commission.

[2] See Tex. Code Crim. Pro. art. 38.01, sec. 4(a).

## 1.2 Definitions

“Accredited" means a laboratory, facility or entity that conducts forensic analysis of physical evidence for use in a criminal proceeding and that has been recognized for accreditation by the Director of the Department of Public Safety under Section 411.0205(c), Government Code and 37 Texas Administrative Code §§28.131 et seq.[4]

"Criminal action" means an investigation, complaint, arrest, bail, bond, trial, appeal, punishment, or other matter related to conduct proscribed by a criminal offense.[5]

“Forensic analysis” means a medical, chemical, toxicological, ballistic, or other expert examination or test performed on physical evidence, including DNA evidence, for the purpose of determining the connection of the evidence to a criminal action. The term includes an examination or test requested by a law enforcement agency, prosecutor, criminal suspect or defendant, or court. The term does not include:

(A) latent print examination;

(B) a test of a specimen of breath under Chapter 724, Transportation Code;

(C) digital evidence;

(D) an examination or test excluded by rule under Section 411.0205(c), Government Code;

(E) a presumptive test performed for the purpose of determining compliance with a term or condition of community supervision or parole and conducted by or under contract with a community supervision and corrections department, the parole division of the Texas Department of Criminal Justice, or the Board of Pardons and Paroles;

(F) an expert examination or test conducted principally for the purpose of scientific research, medical practice, civil or administrative litigation, or other purpose unrelated to determining the connection of physical evidence to a criminal action;[6] or

(G) the portion of any autopsy conducted by a medical examiner or other forensic pathologist who is a licensed physician.[7]

"Physical evidence" means any tangible object, thing, or substance relating to a criminal action.[8]

“Professional Misconduct” means, after considering all of the circumstances from the actor’s standpoint, the actor, through a material act or omission, deliberately failed to follow the standard of practice generally accepted at the time of the forensic analysis that an ordinary forensic professional or entity would have exercised, and the deliberate

---

[3] See Tex. Code Crim. Pro. art. 38.01, sec. 4(b).

[4] See Tex. Code Crim. Pro. art. 38.35.

[5] See Tex. Code Crim. Pro. art. 38.35(a)(2).

[6] See Tex. Code Crim. Pro. art. 38.35(a)(4).

[7] Tex. Code Crim. Pro. art. 38.35(f).

[8] See Tex. Code Crim. Pro. art. 38.35(a)(5).

act or omission substantially affected the integrity of the results of a forensic analysis. An act or omission was deliberate if the actor was aware of and consciously disregarded an accepted standard of practice required for a forensic analysis.[9]

"Professional Negligence" means, after considering all of the circumstances from the actor's standpoint, the actor, through a material act or omission, negligently failed to follow the standard of practice generally accepted at the time of the forensic analysis that an ordinary forensic professional or entity would have exercised, and the negligent act or omission substantially affected the integrity of the results of a forensic analysis. An act or omission was negligent if the actor should have been but was not aware of an accepted standard of practice required for a forensic analysis.[10]

**2.0 Membership**

**(a)** The FSC is composed of nine members, appointed as follows:

(1) four members appointed by the governor:

(A) two of whom must have expertise in the field of forensic science;

(B) one of whom must be a prosecuting attorney that the governor selects from a list of 10 names submitted by the Texas District and County Attorneys Association; and

(C) one of whom must be a defense attorney that the governor selects from a list of 10 names submitted by the Texas Criminal Defense Lawyers Association;

(2) three members appointed by the lieutenant governor:

(A) one of whom must be a faculty member or staff member of The University of Texas who specializes in clinical laboratory medicine selected from a list of 10 names submitted to the lieutenant governor by the chancellor of The University of Texas System;

(B) one of whom must be a faculty member or staff member of Texas A&M University who specializes in clinical laboratory medicine selected from a list of 10 names submitted to the lieutenant governor by the chancellor of The Texas A&M University System;

(C) one of whom must be a faculty member or staff member of Texas Southern University who has expertise in pharmaceutical laboratory research selected from a list of 10 names submitted to the lieutenant governor by the chancellor of Texas Southern University; and

(3) two members appointed by the attorney general:

(A) one of whom must be a director or division head of the University of North Texas Health Science Center at Fort Worth Missing Persons DNA Database; and

[9] See 42 U.S.C. § 3797k(4) ; Tex. Code Crim. Pro. art. 38.01, sec 4(a)(1-3).

[10] See 42 U.S.C. § 3797k(4); Tex. Code Crim. Pro. art. 38.01, sec. 4(a)(1-3).

(B) one of whom must be a faculty or staff member of the Sam Houston State University College of Criminal Justice and have expertise in the field of forensic science or statistical analyses selected from a list of 10 names submitted to the lieutenant governor by the chancellor of Texas State University System.[11]

**(b)** Each member of the FSC serves a staggered two-year term subject to reappointment. Members are appointed to terms beginning on September 1st. The term of the members appointed under Subsections (a)(1) and (2) expires on September 1 of each odd-numbered year. The term of the members appointed under Subsection (a)(3) expires on September 1 of each even-numbered year.[12]

**(c)** The Governor designates a presiding officer ("Chair"). The Chair may nominate other officers including a vice-chair and committee chairs, subject to the approval of other commission members.[13]

**(d)** The names and terms of the members shall be listed on the FSC website at www.fsc.state.tx.us.

**(e)** A person who is appointed to and qualifies for office as a member of the FSC shall receive an orientation from the Chair and staff that provides the person with information regarding:

(1) the legislation that created the FSC and related laws;

(2) the policies and procedures of the FSC, as described in this document and any associated documents generated by the FSC or staff;

(3) the current budget for the FSC;

(4) the requirements of:

(A) the open meetings law, Government Code Chapter 551;

(B) the public information law, Government Code Chapter 552; and

(C) other laws relating to public officials, including conflict of interest laws; and

(5) the minutes of the meetings of the FSC; and

(6) any pending complaints, disclosures or ongoing investigations.

## 2.1 Meetings

**(a)** The FSC shall hold at least quarterly meetings and additional meetings at the call of the Chair. The Chair of the FSC shall conduct FSC meetings and may designate the dates, times and places of meetings following consultation with commission members. The Vice Chair shall conduct FSC meetings in the Chair's absence.

**(b)** Notice of the Meeting and the Meeting Agenda shall be made available to the FSC members, advisory members, and other interested parties in advance of each FSC

[11] See Tex. Code Crim. Pro. art. 38.01, sec. 3(a).

[12] See Tex. Code Crim. Pro. art. 38.01, sec. 3(b).

[13] See Tex. Code Crim. Pro. art. 38.01, sec. 3(c).

meeting and shall be posted with the Office of Secretary of the State and on the FSC meeting webpage.

**(c)** A quorum of the FSC is five members. A quorum is required for formal action by the FSC. Formal action may be approved by a majority vote of the members present and voting.

**(d)** The Chair shall establish the agenda for each meeting after consultation with the full FSC.

### 2.2 Committees

**(a)** The FSC shall have three standing committees: Complaint and Disclosure Screening, Forensic Development, and Legislative. The FSC Chair shall nominate three members of the FSC for each standing committee, subject to the approval of the full FSC. Each committee shall elect a member to serve as chair of the committee. The FSC Chair also may form additional committees or workgroups as needed.

**(b)** A quorum of a committee is two members, and a quorum is required for a committee to meet and take action. The actions of any committee are not final and serve only as recommendations to the full FSC.

## 3.0 Processing of Complaints and Laboratory Self-Disclosures

**(a)** The FSC shall approve forms for complaints and laboratory self-disclosures and make them available on the FSC website. Any complainant or disclosing laboratory must be identified by name and provide all contact information specified in the appropriate form. As further described in this section and Section 4, complaints and disclosures are initially reviewed by the Complaint and Disclosure Screening Committee, approved for investigation by the full FSC, investigated through an Investigation Panel, which may include outsourced investigative resources, and completed in the form of a report adopted by the full FSC.

**(b)** Complaints and disclosures shall be considered initially through the Screening Committee. The chair of the Committee shall present the complaints and disclosures before the FSC with a recommendation for disposition. The Committee may recommend the following dispositions:

(1) dismiss the complaint or disclosure;

(2) accept the complaint or disclosure and submit for action by an Investigation Panel; or

(3) take such other action as appropriate.

**(c)** The Screening Committee may assign staff to collect preliminary information related to a complaint or disclosure, including research into the status of any underlying criminal or civil case and whether the complaint or disclosure addresses a forensic analysis subject to investigation by the FSC. In addition, an actor named in a complaint or disclosure and the involved accredited laboratory, facility or entity may be given an opportunity to provide a brief, written reply, offering any reasons for or against accepting the complaint or disclosure for investigation. The following factors may be

considered when a complaint or disclosure is screened by the Committee and considered by the FSC:

(1) whether the FSC has jurisdiction pursuant to the opinion of the Texas Attorney General issued on July 29, 2011;

(2) the availability of the person who was the defendant in the criminal action associated with the forensic evidence;

(4) the availability of any actor who conducted any part of the forensic analysis;

(5) the length of time between the forensic analysis and the complaint or disclosure;

(6) the availability of records in connection with the forensic analysis and any associated litigation;

(7) the status of any criminal case or civil litigation associated with the forensic analysis;

(8) the potential for additional relevant forensic analysis;

(9) any other factor that would enhance or detract from a complete and accurate investigation of the forensic analysis and any alleged negligence or misconduct;

(10) the availability of funds to complete an investigation; and

(11) the opportunity for the investigation and report to educate the forensic science community, advance the standards and training associated with such a forensic analysis or identify legislative recommendations for strengthening a field of forensic science.

**(d)** Upon reaching a recommended initial disposition for a complaint or disclosure, the Committee shall provide a summary of the recommendation to the FSC Chair for presentation to the full FSC.

**(e)** Following action by the full FSC regarding the disposition of a complaint or disclosure, the FSC shall notify the complainant, actor involved in the forensic analysis and the laboratory, facility or entity of the disposition.

(f) To ensure thorough consideration of all complaints and self-disclosures, complainants and laboratories submitting disclosures should make such submissions at least ten (10) business days before a particular quarterly Commission meeting to have the complaint or disclosure considered at that meeting. The Commission reserves the right to consider any complaint or disclosure that does not meet the 10-day deadline at the next quarterly meeting.

**(g)** A member of the Commission may, by formal motion, request that the full Commission reconsider a dismissed complaint or disclosure if the member identifies new evidence of negligence or professional misconduct that was not previously considered by the Commission. The new evidence may be derived from either*:*

1. Information in the existing record that the movant believes was not considered by the Commission previously; or

2. New information brought to the Commission's attention that was not previously considered by the Commission.

**(h)** A motion described in this section may be made only if the Commissioner believes in good faith that the information will have a material impact on the Commission's analysis of the complaint or disclosure pursuant to the screening criteria set forth in 3.0(c).

**(i)** After considering the member's motion, the Commission shall vote to:

1. Affirm the original decision to dismiss the complaint or disclosure; or

2. Re-open the complaint or disclosure.

**(j)** The Commission shall notify the complainant and the appropriate laboratory, facility or entity in writing of the results of the Commission's vote under Subsection (h).

**(k)** The Commission shall conduct an appropriate investigation of a complaint or disclosure reopened under Subsection (h)(2).

**(l)** Each dismissed complaint or disclosure is limited to one motion for reconsideration under this section.

## 4.0 Investigation Panels

**(a)** The Chair, after the full FSC votes to accept a complaint or disclosure for investigation, shall nominate three members of the FSC to an Investigation Panel subject to the approval of the full FSC, and the investigation panel shall elect one of the members as chair of the panel.

**(b)** An Investigation Panel shall coordinate an investigation into a complaint or disclosure accepted by the FSC for investigation. The Panel initially shall specify the focus of the investigation, request a full explanation regarding the complaint or disclosure from the entity or actor that is the subject of the complaint or disclosure, and collect any appropriate records related to the complaint or disclosure. The Panel also may initiate contact with any governmental agency, individual or entity to inquire about assistance in a full investigation. Upon completion of the initial investigation, the Panel may recommend that the FSC dismiss the complaint or disclosure or approve a full investigation, including a proposed budget, to be completed by:

(1) conducting a paper review of the forensic analysis;

(2) referring the case to or collaborating with a governmental agency or accrediting body, pursuant to a memorandum of understanding or other appropriate agreement between the agencies;

(3) contracting with an individual or entity;[14] or

(4) taking such other action as appropriate.

**(c)** If the full FSC approves dismissal of the complaint or disclosure, the FSC shall notify the complainant, the actor and the laboratory, facility or entity involved in the forensic analysis. If FSC approves a full investigation, the Investigation Panel previously appointed to the case shall coordinate the completion of the investigation and draft a written report pursuant to Section 1.1(b) and include a recommendation for final disposition to the full FSC. An investigative report or recommendation is not final and does not represent the conclusions of the FSC until a final report is adopted and issued by the full FSC. Following consideration of the recommendation for final disposition from the Investigation Panel, the FSC may:

(1) find there is insufficient credible information to conclude that professional negligence or misconduct occurred in the forensic analysis;

(2) find the forensic analysis met the standard of practice that an ordinary forensic analyst would have exercised at the time the analysis originally took place;

(3) find clear and convincing evidence that professional negligence or misconduct occurred in the forensic analysis; or

(4) take such other action as appropriate.

**(d)** A finding is not a comment upon the guilt or innocence of any individual and is not necessarily a basis for relief in litigation or in any other forum. The final report itself is not prima facie evidence of the information or findings contained in the report.[15]

**(e)** The FSC shall make the final report available to the public[16] on the FSC website and provide a copy, as applicable, to the:

(1) prosecutor, judge, defendant and defense attorney involved in the underlying criminal case, if any;

(2) Board of Pardons and Paroles;

(3) Director of the Department of Public Safety;

(4) Governor;

(5) Lieutenant Governor;

(6) Speaker of the House of Representatives;

(7) Complainant; and

(8) Actor(s) and accredited laboratory, facility or entity involved in any part of the forensic analysis.[17]

## 5.0 Forensic Development Committee

[14] Tex. Code Crim. Pro. art. 38.01, sec. 4(c).

[15] Tex. Code Crim. Pro. art. 38.01, sec. 4(e).

[16] Tex. Code Crim. Pro. art. 38.01, sec. 4(e).

[17] Tex. Code Crim. Pro. art. 38.01, sec. 7.

The Forensic Development Committee shall develop, subject to the approval of the full FSC, plans to strengthen the use of forensic science in criminal courts in Texas. Such plans must include implementing a reporting system through which accredited laboratories, facilities, or entities are required to report professional negligence or misconduct. Such plans may include collection and dissemination of funding opportunities for forensic science, support for training and the development of professional standards and the collection of information that supports programs for strengthening forensic science.

## 6.0 Legislative Committee

The Legislative Committee shall study the ongoing work of the FSC and be prepared to monitor legislation and testify on the application of statutes within the purview of the FSC. The committee shall also review and recommend a legislative appropriations request to the full FSC and monitor the appropriations process as it affects the FSC.

## 7.0 Records

**(a)** Complaints and disclosures received shall be assigned a unique number to be used for subsequent documentation in that matter. Mere receipt of a complaint or disclosure does not imply any opinion by the FSC as to the merits of the allegations in the complaint or issues raised in the disclosure.

**(b)** FSC records shall be centralized and organized by staff for simplicity of access and ease of response to open records requests. To the extent feasible, records should be digitized and stored electronically.

**(c)** Staff shall coordinate responses to requests for records with the Chair of the FSC.

## 8.0 Budget

The FSC shall adopt an operating budget each fiscal year. The Chair shall approve expenditures not specified within the budget.

## 9.0 Authority of Sam Houston State University

**(a)** Commission staff are employees of Sam Houston State University, but operate under the supervision of the Chair of the FSC. Staff includes a Commission Coordinator and General Counsel and any other such staff necessary to complete the duties of the FSC. The duties of staff shall be summarized in separate job descriptions.

**(b)** Sam Houston State University may contract for goods and services on behalf of FSC. The Commission Coordinator and the FSC Chair jointly monitor contract activities that are engaged for FSC.

## 10.0 Additional Assistance

**(a)** As needed, the FSC shall seek the assistance of the Texas Legislative Council, the Legislative Budget Board, and the University of Texas at Austin.[18]

[18] Tex. Code Crim. Pro. art. 38.01, sec. 6.

**(b)** As needed, the FSC may delegate the duties related to developing and implementing the reporting system described in 1 .1(a)(1) to any person the FSC determines to be qualified to assume those duties.[19]

**(c)** The FSC shall develop a memorandum of understanding or other appropriate agreement with each assisting entity or person.

**11.0 Public Comment**

**(a)** The FSC shall include "public comment" as a topic on the agenda for each regularly scheduled meeting of the full FSC. The FSC reserves the right to eliminate, reduce or postpone the public comment period if deemed necessary due to time constraints or other exigent circumstances.

**(b)** During the public comment period, any member of the public, subject to the restrictions of this policy, may address the Commission regarding any matter related to the business of the Commission. Persons who attend or participate in the Commission meeting are expected to act in a manner that is respectful of the conduct of public business and conducive to orderly and polite public discourse. Public comment will typically occur at the end of the FSC meeting.

**(c)** Members of the public shall complete a public participation form before the FSC meeting and deliver the form to the FSC coordinator.

**(d)** Each speaker generally shall be provided three minutes to present public comment. The Commission reserves the right to expand or reduce the time allotted to each speaker and/or to set an overall time limit for the public comment period, dependent upon the particular circumstances and requirements of each meeting.

**(e)** Pursuant to Chapter 551 of the Texas Government Code, relating to open meetings, the Commission may respond to an inquiry regarding a subject not listed on the agenda only with:

(1) a statement of specific factual information in response to the inquiry; or

(2) a recitation of existing policy in response to the inquiry.

Any deliberation or of decision about a subject not listed on the agenda must be limited to a proposal to place the subject on the agenda for a subsequent meeting.

**(f)** Members of the public are encouraged to submit written comments to the FSC at any time.

**12.0 Communications Policy**

**(a)** Legislative Hearings

[19] Tex. Code Crim. Pro. art. 38.01, sec. 3(c).

(1) An employee who attends or testifies at any public hearing shall obtain advance authorization from the FSC Chair.

(2) Employees who elect to voluntarily (without permission from the Chair) attend or testify at a hearing shall take personal leave to attend the hearing,

(i) notify the Chair no later than three business days prior to the hearing and
(ii) must use their own personal travel funds to attend.

(3) Commission members shall notify the FSC Coordinator no later than three business days prior to any hearing at which they intend to testify in their capacity as a board member of the FSC

(4) Commission members who elect to voluntarily attend or testify at a hearing outside of their capacity as a FSC board member shall use their own personal travel funds and

(i) notify the FSC Coordinator no later than three business days prior to the hearing.

**(b)** Media

(1) Employees shall direct all inquiries from the media to the FSC Chair or other board members, as appropriate.

(2) To the extent feasible, Commission members and employees shall inform the FSC Coordinator of all FSC-related media inquiries for interviews, so that the inquiries may be properly organized, recorded and assigned for reply. Commission members may inform the media of this policy and direct media inquiries to the FSC Coordinator.

(3) Commission members and employees shall avoid discussing the details of pending matters with the media, except upon final disposition of those matters.

**13.0 Conflicts Policy**

(1) Any member of the FSC who has a personal or private interest in a matter pending before the FSC shall publicly disclose the fact to the FSC during an open meeting. The Commissioner may not vote or otherwise participate in the matter in which he or she has an interest. The disclosure shall be entered in the minutes of the meeting.

(2) In this section, "personal or private interest" has the same meaning as is given to it under Article III, Section 22, of the Texas Constitution governing the conduct of members of the legislature.

(3) The scope of the term “public or private interest” has not been clearly defined under either the constitutional provision or the Government Code section. Therefore, the question of whether a member has a personal or private interest in a matter pending before

the FSC is a fact question to be analyzed on a case-by-case basis. Any questions should be brought to the attention of the FSC general counsel, who may in turn consult the Texas Ethics Commission and/or the Texas Attorney General as appropriate.

(4) For purposes of this section, an individual does not have a "personal or private interest" in a measure, proposal, or decision if the individual is engaged in a profession, trade, or occupation and the individual's interest is the same as all others similarly engaged in the profession, trade, or occupation.

## 14.0 Staff Contact Information

Leigh M. Tomlin, Commission Coordinator
Texas Forensic Science Commission
1700 North Congress Avenue
Suite 445
Austin, TX 78701
Phone: 1-512-936-0770
Fax: 1-512-936-7986
E-mail: info@fsc.state.tx.us

Lynn M. Robitaille, General Counsel
Texas Forensic Science Commission
1700 North Congress Avenue
Suite 445
Austin, TX 78701
Phone: 1-512-936-0770
Fax: 1-512-936-7986
E-mail: info@fsc.state.tx.us

# EXHIBIT E

## 2011 Texas Forensic Science Commission Meeting Dates and Locations

1. January 7, 2011 – Willingham/Willis Expert Panel (Austin, Texas)
2. January 21, 2011 – FSC Quarterly Meeting (Austin, Texas)
3. April 14, 2011 – FSC Complaint Screening Committee Meeting (Austin, Texas)
4. April 14-15, 2011 – FSC Quarterly Meeting (Austin, Texas)
5. June 20, 2011 – APD Investigative Panel teleconference (Austin, Texas)
6. July 7, 2011 – Moon Investigative Panel Meeting (Austin, Texas)
7. September 8-9, 2011 – FSC Complaint Screening Committee Meeting and Quarterly Meeting (Austin, Texas)
8. October 28, 2011 – FSC Quarterly Meeting (Austin, Texas)

# EXHIBIT F

**FY 2012 BUDGET STATUS REPORT 03.07.12**

| | | | | |
|---|---|---|---|---|
| **Current Balance** | | | **$** | **60,520.72** |
| *Anticipated Expenditures through 8/31/12* | | | | |
| **Travel - Full FSC Meetings** | | | | |
| | Apr-12 | | *$* | *(3,500.00)* |
| | Jul-12 | | *$* | *(3,500.00)* |
| **Full FSC Meetings** | | | | |
| | Apr-12 | | *$* | *(1,700.00)* |
| | Jul-12 | | *$* | *(1,700.00)* |
| **Committee/Panel Meetings** | Jul-12 | 1 | *$* | *(2,000.00)* |
| | Jul-12 | 2 | *$* | *(2,000.00)* |
| | Jul-12 | 3 | *$* | *(2,000.00)* |
| | Aug-12 | 4 | *$* | *(2,000.00)* |
| | Aug-12 | 5 | *$* | *(2,000.00)* |
| | Aug-12 | 6 | *$* | *(2,000.00)* |
| **Essential Office Expenses** | | | | |
| | Copier, Telephone, Internet, etc. | | *$* | *(4,000.00)* |
| **Supplies** | | | *$* | *(5,000.00)* |
| **Forensic Development** | Conference & Stakeholder | | *$* | *(15,000.00)* |
| **General Investigative Activities** | | | | |
| | Subject Matter Experts | | *$* | *(9,000.00)* |
| | Document Fees | | *$* | *(2,000.00)* |
| **Projected Balance/Unexpended FY12 Funds** | | | **$** | **3,120.72** |

# EXHIBIT G

# Texas Forensic Science Commission

*Justice Through Science*

January 28, 2011

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

The Honorable Greg Abbott
Attorney General
P. O. Box 12548
Austin, TX 78711-2548

Re: Texas Forensic Science Commission Request for Attorney General Opinion

Dear Attorney General Abbott:

Pursuant to Section 402.042 of the Texas Government Code, I submit this request for an opinion regarding the jurisdictional scope of the Texas Forensic Science Commission ("FSC"). The FSC voted unanimously to approve this request. There is no litigation pending regarding the matters for which this opinion is requested.

In May 2005, the Texas Legislature passed House Bill 1068 (the "Act") which created the FSC by amending the Code of Criminal Procedure to add Article 38.01. *See* Act of May 30, 2005, 79th Leg., R.S., ch. 1224, § 1, 2005. In three pages, Article 38.01 sets forth the composition and authority of the FSC. The Act took effect on September 1, 2005. *Id.* at § 23. No changes have been made to Article 38.01 since that date.

The following statutory language is critical to the opinion request set forth below:

1. Effective Date Provision

The Act contains an effective date clause, which provides that changes made by the Act apply to:

(1) **evidence tested or offered in evidence on or after the effective date of this Act; and**

(2) **an individual who, on or after the effective date of this Act:**

A. is confined in a penal institution operated by or under contract with the Texas Department of Criminal Justice….;

**John M. Bradley**
*Presiding Officer*

**Commission Office**

**Leigh Tomlin**
*Commission Coordinator*

*Texas Forensic Science Commission*
*Sam Houston State University*
*College of Criminal Justice*
*Box 2296*
*816 17th Street*
*Huntsville, TX 77341-2296*

*Phone: 1 (888) 296-4232*
*Fax: 1 (888) 305-2432*

B. is confined in a facility operated by or under contract with the Texas Youth Commission….;

C. voluntarily submits or causes to be submitted a DNA sample as described in....; or

D. is ordered by a magistrate or court to provide a DNA sample under subsection G, Chapter 411, Government Code.

*Id. at* §22 (emphasis added).

2. Accredited Laboratory

Under Article 38.01(4)(a)(3) of the Act, the Commission shall:

> investigate, in a timely manner, any allegation of professional negligence or misconduct that would substantially affect the integrity of the results of a forensic analysis **conducted by an accredited laboratory, facility or entity** (emphasis added).

3. Forensic Analysis

Article 38.01(2) refers to Article 38.35(a) for the meaning of the term "forensic analysis." Article 38.35(a) defines the term as follows:

> "Forensic analysis" means a **medical, chemical, toxicologic, ballistic, or other expert examination or test performed on physical evidence**, including DNA evidence, for the purpose of determining the connection of the evidence to a criminal action. The term includes an examination or test requested by a law enforcement agency, prosecutor, criminal suspect or defendant, or court (emphasis added).

Article 38.35 also expressly excludes certain types of analysis from the "forensic analysis" definition. For purposes of this opinion request, the most relevant exclusion is found in Article 38.35(a)(4)(D):

> an examination or test **excluded by rule** under Section 411.0205(c), Government Code (emphasis added).

Under Section 411.0205(b) of the Government Code, the Texas Department of Public Safety ("DPS") is responsible for accrediting crime laboratories and other entities that conduct forensic analysis in Texas. DPS is also authorized to designate certain forensic disciplines that are exempt from accreditation. *Id.* at §411.0205(c). Pursuant to its rulemaking authority, DPS maintains two lists of forensic disciplines, one including those that are subject to accreditation, and the other including disciplines that are exempt from accreditation. *See* 37 TEX. ADMIN. CODE §§ 28.145-28.147 (2010). There are, however, numerous categories of forensic analysis that do not appear on either list.

The questions for which the FSC requests an opinion are as follows:

1. Impact of Effective Date Provision: Does the Act's effective date provision restrict the FSC's investigative authority to cases in which the requirements set forth in that provision are met?

2. Meaning of "Accredited Laboratory": Does the Act limit the investigative scope of the FSC to allegations of negligence and misconduct involving forensic analyses conducted only by laboratories, facilities or entities that were accredited by the Department of Public Safety ("DPS") when the analyses took place?

3. Scope of the Term "Forensic Analysis": Does the Act prohibit the FSC from investigating fields of forensic analysis that have been expressly excluded by DPS pursuant to its rulemaking authority under Section 411.0205(c) of the Texas Government Code? When the FSC receives a complaint involving forensic analysis that is *neither* expressly included *nor* expressly excluded by the Act or DPS rule, does the FSC have authority to investigate such a complaint?

Since its creation in September 2005, the FSC has received numerous investigative requests from the public (referred to herein as "complaints"). Some complaints involve cases in which the evidence underlying the forensic analysis was tested or offered into evidence years (and sometimes decades) before the Act's effective date. In other complaints, the laboratory in question was not accredited at the time the analysis in question was performed. The FSC has also received complaints in which the forensic analysis is not expressly excluded from accreditation by statute or DPS rule, but also does not expressly appear on the inclusion list promulgated by DPS under its rulemaking authority.

In many of these cases, the FSC has struggled to determine the scope of its jurisdiction, while remaining responsive to concerns of the public and the laboratories and agencies under investigation. There is no established administrative construction for the questions set forth in this request. An Attorney General opinion regarding the FSC's jurisdictional and investigative scope would provide clarity to the public and other state agencies, while protecting the FSC and its members from potential liability for exceeding

statutory authority. The opinion would also assist the Legislature in deciding whether to amend the FSC's investigative authority.

The FSC respectfully requests a response to the questions set forth above as soon as possible. Please feel free to contact me if we may provide additional information.

Sincerely,

John Bradley
Presiding Officer
Texas Forensic Science Commission

# EXHIBIT H

ATTORNEY GENERAL OF TEXAS

GREG ABBOTT

July 29, 2011

The Honorable Nizam Peerwani
Presiding Officer
Texas Forensic Science Commission
Post Office Box 2296
Huntsville, Texas 77341-2296

Opinion No. GA-0866

Re: Investigative Authority of the Texas Forensic Science Commission (RQ-0943-GA)

Dear Mr. Peerwani:

Your predecessor asked three questions about the investigative authority of the Texas Forensic Science Commission (the "FSC").[1]

Before addressing the specific questions, we note that the FSC was created in 2005 with the addition of article 38.01 to the Code of Criminal Procedure. *See* Act of May 30, 2005, 79th Leg., R.S., ch. 1224, § 1, 2005 Tex. Gen. Laws 3952, 3952–53 (the "2005 Act"). Under article 38.01(4), the FSC has three purposes. *See* TEX. CODE CRIM. PROC. ANN. art. 38.01(4) (West Supp. 2010). For the present inquiry, the most relevant of the FSC's purposes is found in article 38.01(4)(a)(3), which authorizes the FSC to:

> investigate, in a timely manner, any allegation of professional negligence or misconduct that would substantially affect the integrity of the results of a forensic analysis conducted by an accredited laboratory, facility, or entity.

*Id.* art. 38.01, § 4(a)(3).

We now address the first question:

> Does the Act's effective date provision restrict the FSC's investigative authority to cases in which the requirements set forth in that provision are met?

---

[1]Letter from Honorable John M. Bradley, Presiding Officer, Texas Forensic Science Commission, to Honorable Greg Abbott, Attorney General of Texas at 1 (Jan. 28, 2011), https://www.oag.state.tx.us/opin/index_rq.shtml ("Request Letter").

Request Letter at 3. As noted above, section 4(a)(3) grants general investigative authority to the FSC. However, the 2005 Act also contains specific provisions restricting that general authority. One such provision is section 22 of the Act, the "effective date provision" to which the request letter refers. *See* 2005 Act, § 22, at 3964–65. Section 22 is not codified in article 38.01, but it is nonetheless governing law. *Baldridge v. Howard*, 708 S.W.2d 62, 63–64 (Tex. App.—Dallas 1986, writ ref'd n.r.e.) (discussing legislative intent and validity of uncodified session law). Under section 22, "[t]he change in law made by this Act applies to . . . evidence tested or offered into evidence on or after the effective date of this Act." 2005 Act, § 22(a)(1), at 3964–65. The effective date of the 2005 Act is September 1, 2005. *Id.* § 23, at 3965. Thus, section 22 provides that "[t]he change in law made by this Act applies to . . . evidence tested or offered into evidence" *after* September 1, 2005. 2005 Act, §§ 22–23, at 3964–65. By its plain terms, the Act does not apply to evidence tested or offered into evidence *before* September 1, 2005. The FSC therefore lacks authority to take any action with respect to such evidence.

Some of the briefs submitted to this office contend that the law's effective date limitations will foreclose FSC review of important matters that may merit further investigation.[2] As the Texas Supreme Court has observed, "[T]he truest manifestation of what legislators intended is what lawmakers enacted, the literal text they voted on. [The] enacted language is what constitutes the law, and when a statute's words are unambiguous and yield a single inescapable interpretation, the judge's inquiry is at an end." *Alex Sheshunoff Mgmt. Servs. v. Johnson*, 209 S.W.3d 644, 651–52 (Tex. 2006). Some briefers have also argued that pre- and post-enactment statements by certain legislators support an outcome that diverges from this opinion's application of the statute's plain language.[3] Again, the Texas Supreme Court has warned against such arguments: "[The court is] mindful that over-reliance on secondary materials should be avoided, particularly where a statute's language is clear. If the text is unambiguous, we must take the Legislature at its word and not rummage around in legislative minutiae." *Id.* at 652 n.4. Finally, the court has noted that "the statement of a single legislator, even the author and sponsor of the legislation, does not determine legislative intent." *AT & T Commc'ns of Tex. v. Sw. Bell Tel. Co.*, 186 S.W.3d 517, 528–29 (Tex. 2006). Thus, as directed by the Texas Supreme Court, our analysis of the first question is limited to the clear language of the statutory text and is not influenced by public policy considerations or legislative history.

While section 22's time limitation prohibits the FSC from taking any action with respect to evidence that was tested or offered into evidence before September 1, 2005, the Act contains no time limitation on the FSC's general authority under section 4(a)(3) to "investigate in a timely manner, any allegation of professional negligence or misconduct." 2005 Act, §§ 22–23, at 3964–65. Thus, although the FSC may investigate allegations arising from incidents that occurred prior to September

---

[2]*See* Brief from Ms. Lisa Graybill, American Civil Liberties Union of Tex. at 10–13 (Mar. 14, 2011) (Graybill Brief); Brief from Mr. Stephen Saloom, Innocence Project of New York at 7–10 (Mar. 7, 2011) (Saloom Brief); Brief from Mr. Gary Udashen, Innocence Project of Texas at 2–14 (Mar. 3, 2011) (Udashen Brief).

[3]*See* Graybill Brief, *supra* note 2, at 7–11; Saloom Brief, *supra* note 2, at 3–6; Udashen Brief, *supra* note 2, at 7 nn.2–3, 10–12.

1, 2005, it is prohibited, in the course of any such investigation, from considering or evaluating specific items of evidence that were tested or offered into evidence prior to that date.

The second question is as follows:

> Does the Act limit the investigative scope of the FSC to allegations of negligence and misconduct involving forensic analyses conducted only by laboratories, facilities or entities that were *accredited* by the Department of Public Safety ("DPS") when the analyses took place?

Request Letter at 3 (emphasis added). Section 4(a)(3) of article 38.01 restricts the FSC's investigative authority to acts "that would substantially affect the integrity of the results of a forensic analysis conducted by an accredited laboratory, facility, or entity." TEX. CODE CRIM. PROC. ANN. art. 38.01, § 4(a)(3) (West Supp. 2010). While article 38.01 itself does not define the term "accredited," other provisions in the Act clarify its meaning. The 2005 Act creates an accreditation process applicable to a "crime laboratory" or other entity that conducts "forensic analyses of physical evidence for use in criminal proceedings." *See* 2005 Act, § 3, at 3954–55; TEX. GOV'T CODE ANN. § 411.0205(b)(1) (West Supp. 2010). Under this provision, the DPS director is instructed to establish the accreditation process. Considered in context, the term "accredited" in section 4(a)(3) refers to the statutory accreditation process established by the DPS director.

Read in isolation, section 4(a)(3) does not provide precise clarity about the question regarding the timing of a laboratory, facility, or entity's accreditation relative to when the analysis took place. The most natural reading of section 4(a)(3) limits the FSC's investigative authority to laboratories, facilities, or entities that were accredited by the DPS at the time the forensic analysis took place. However, section 4(a)(3) could also potentially be read to limit the FSC's investigative authority to laboratories, facilities, or entities that were accredited when the FSC investigation took place.

While our conclusion regarding the second question is based primarily on a natural reading of the text of section 4(a)(3), we are aided in resolving any potential ambiguity by the canon of statutory construction known as *in pari materia*, under which statutes on the same subject matter must be read consistently, especially those statutes enacted as part of the same bill.[4] Guided by the principle of *in pari materia*, we turn to section 38.35(d)(1) of the Code of Criminal Procedure, which, like section 4(a)(3), was added to the Code by the 2005 Act. Section 38.35(d)(1) provides that a forensic analysis of physical evidence is not admissible if, "*at the time of the analysis*, the

---

[4]"It is a settled rule of statutory interpretation that statutes that deal with the same general subject, have the same general purpose, or relate to the same person or thing or class of persons or things, are considered as being *in pari materia* . . . ." *State v. Vasilas*, 253 S.W.3d 268, 271 (Tex. Crim. App. 2008); *In re J.M. R.*, 149 S.W.3d 289, 292 (Tex. App.—Austin 2004, no pet.) (observing that when determining whether *in pari materia* analysis is appropriate, an important factor is whether the two provisions in question are contained in the same legislative act). *See also* Tex. Att'y Gen. Op. No. GA-0119 (2003) at 3–4 (discussing rule of *in pari materia* as means of statutory construction).

crime laboratory conducting the analysis was not accredited by the [DPS] director." TEX. CODE CRIM. PROC. ANN. art. 38.35(d)(1) (West Supp. 2010) (emphasis added). Thus, under section 38.35(d)(1), the relevant inquiry is whether the crime laboratory was accredited when the forensic analysis took place. Likewise, under section 4(a)(3), when determining whether a laboratory, facility, or entity is subject to FSC investigation, the relevant test is whether the laboratory, facility, or entity was accredited when the forensic analysis took place. In sum, the most natural reading of the statutory text is also supported by the principle of *in pari materia*. Accordingly, we conclude that section 4(a)(3) limits the FSC's investigative authority to those laboratories, facilities, or entities accredited by the DPS at the time the forensic analysis took place.

The final question follows:

> Does the Act prohibit the FSC from investigating fields of forensic analysis that have been expressly excluded by DPS pursuant to its rulemaking authority under Section 411.0205(c) of the Texas Government Code? When the FSC receives a complaint involving forensic analysis that is *neither* expressly included *nor* expressly excluded by the Act or DPS rule, does the FSC have authority to investigate such a complaint?

Request Letter at 3. Article 38.01 expressly incorporates the definition of "forensic analysis" from article 38.35(a) of the Code of Criminal Procedure:

> (4) "Forensic analysis" means a medical, chemical, toxicologic, ballistic, or other expert examination or test performed on physical evidence, including DNA evidence, for the purpose of determining the connection of the evidence to a criminal action. The term includes an examination or test requested by a law enforcement agency, prosecutor, criminal suspect or defendant, or court.

TEX. CODE CRIM. PROC. ANN. art. 38.35(a)(4), *id.* art. 38.01, § 2 (West Supp. 2010). This statutory definition is not limited to specifically enumerated types of forensic analysis but encompasses any "medical, chemical, toxicologic, ballistic, or other expert examination or test performed on physical evidence . . . for the purpose of determining the connection of the evidence to a criminal action." Notwithstanding that broad definition, the Act specifically excludes the following items from its generic definition of "forensic analysis:"

> (A) latent print examination;
>
> (B) a test of a specimen of breath under Chapter 724, Transportation Code;
>
> (C) digital evidence;

> (D) an examination or test excluded by rule under Section 411.0205(c), Government Code;
>
> (E) a presumptive test performed for the purpose of determining compliance with a term or condition of community supervision or parole and conducted by or under contract with a community supervision and corrections department, the parole division of the Texas Department of Criminal Justice, or the Board of Pardons and Paroles; or
>
> (F) an expert examination or test conducted principally for the purpose of scientific research, medical practice, civil or administrative litigation, or other purpose unrelated to determining the connection of physical evidence to a criminal action.

*Id.* § 38.35(a)(4)(A–F). In answer to the first part of this question, the Act, by its plain terms, prohibits the FSC from investigating fields of forensic analysis expressly excluded from the statutory definition of "forensic analysis." *Id.* art. 38.01, § 4(a)(3). As for the second part of this question, forensic analysis that is neither expressly included nor expressly excluded by the Act or DPS rule, but falls under the generic definition of "forensic analysis" found in section 38.35(a)(4), is generally subject to the FSC's investigative authority, assuming all other statutory requirements are satisfied.

## SUMMARY

Although the Forensic Science Commission may conduct investigations of incidents that occurred before September 1, 2005, the law that created the Commission prohibits the FSC from considering evidence that was tested or offered into evidence prior to that date. The Forensic Science Commission's investigative authority is limited to those laboratories, facilities, or entities that were accredited by the Department of Public Safety at the time the forensic analyses took place. The FSC may not investigate fields of forensic analysis expressly excluded from the statutory definition of "forensic analysis." Forensic analysis that is neither expressly included nor excluded by the Act or DPS rule, but that falls under the generic definition of "forensic analysis" found in section 38.35(a)(4), is generally subject to FSC investigation, assuming all other statutory requirements are satisfied.

Very truly yours,

GREG ABBOTT
Attorney General of Texas

DANIEL T. HODGE
First Assistant Attorney General

DAVID J. SCHENCK
Deputy Attorney General for Legal Counsel

JASON BOATRIGHT
Chair, Opinion Committee

Rick Gilpin
Assistant Attorney General, Opinion Committee

# EXHIBIT I

# TFSC Complaint Assignment Table

| Date | Complaint Name, Agency | Forensic Analysis | Laboratory or Other Entity | Case # | Status (A-Accepted, R=Rejected, P=Pending) | Investigative Panel Participants (*=Chair) | Final Report Released to public and all interested parties (Y/N), DATE, Notes |
|---|---|---|---|---|---|---|---|
| 8/13/2008 | Willingham, IP | Arson | State Fire Marshal's Office, City of Corsicana | 09-01 | A | Kerrigan, Bradley, Peerwani, Evans | Y: 4/15/11, 10/28/11 |
| 8/13/2008 | Moon, IP | Serology | DPS (El Paso) | 09-02 | A | Eisenberg, Evans, Farley | Y: 9/9/11 |
| 10/6/2008 | Seitz | Serology, Ballistics, Autopsy | SWIFS | 09-03 | R Juris (D) | | |
| 10/13/2008 | Padilla | DNA | SWIFS | 09-04 | R Juris (D) | | |
| 9/13/2009 | Garrett | Serology | Fort Worth PD | 09-06 | R Juris (D) | | |
| 9/27/2008 | Winland | Trace evidence, Firearms | Houston PD Crime Lab | 09-08 | R Juris (D) | | |
| 12/12/2008 | Wilson | Autopsy | Ellis County | 09-10 | R Juris (SM) | | |
| 2/17/2007 | Hartless | Autopsy | Lufkin ME | 09-11 | R Juris (SM)(D) | | |
| 12/9/2008 | Resendez | Serology, Autopsy | Hidalgo County | 09-12 | R Juris (D) | | |
| 12/18/2008 | Kingerly | DNA | Houston PD Crime Lab | 09-13 | R Juris (SM) | | |
| 1/27/2009 | Hughes | Serology | Houston PD Crime Lab | 09-14 | R Juris (D) | | |
| 6/10/2009 | SWIFS Anon | General allegations re: quality assurance issues | SWIFS | 09-15 | R Merit/Info | | |
| 11/6/2009 | Propes | Ballistics, Trace evidence | Plano PD | 09-18 | R Juris (D) | | |
| 9/16/2009 | Pherwani | Toxicology | LabCorp | 09-19 | R Juris (D) | | |
| 10/5/2009 | Robinson | Autopsy | SWIFS | 09-20 | R Juris (D)(SM) | | |
| 1/20/2010 | Hurst | Trace Evidence, DNA | DPS (unidentified location) | N/C | R Info | | |
| 10/11/2010 | Holleman | Police reporting error | Dallas County DA | N/C | R Juris (D)(SM) | | |
| 1/26/2010 | Cruthird | Autopsy | Unidentified | N/C | No form | | |
| 10/29/2009 | Easley-Moore | Fingerprint, Digital evidence, Autopsy | Austin PD Crime Lab, Travis County ME | N/C | No form | | |
| 6/9/2009 | Yoakum | Controlled substance | Unidentified | N/C | No form | | |
| 3/5/2010 | Young (PA) | Arson | Pennsylvania | N/C | R Juris | | |
| 5/5/2010 | Cupp | Autopsy | Harris County Medical ME | 10-21 | R Juris (SM) | | |
| 1/13/2011 | Sherrill | Police misconduct | Unidentified | N/C | No form | | |
| 6/27/2010 | Wilcox | DNA | Unidentified | N/C | No form | | |
| 7/8/2010 | APD DNA | General allegations re: quality assurance issues | Austin PD Crime Lab | 10-25 | A | Kerrigan, Eisenberg, Evans | Y: 4/14/11 |
| 6/30/2010 | Todd | DNA | SWIFS | 10-22 | R Juris (D) | | |
| 7/30/2010 | Frederick | Ballistics | Orange County Sheriff's Department | 10-23 | R Juris (D) | | |
| 6/28/2010 | Johnson | Serology | DPS (Lubbock) | N/C | R Juris (D) | | |
| 8/26/2010 | SWIFS - SAO | General allegations re: quality assurance issues | SWIFS | 10-24 | R Merit/Info | | |
| 9/19/2010 | Holmes | Toxicology, Autopsy | Harris County ME | 10-26 | R Juris (D)(SM) | | |
| 9/28/2010 | Cacy | GC/MS testing for accelerant | Bexar County ME | 10-27 | R Juris (D) | | |
| 10/8/2010 | Moreno, Jason | Police misconduct | Unidentified | N/C | R Juris (SM) | | |
| 10/8/2010 | Moreno, Valentin | Ballistics, DNA, Fingerprinting | Unidentified | N/C | No form | | |
| 9/9/2008 | Martinez | Police misconduct | Pasadena PD | N/C | No form | | |
| 11/3/2010 | Luera | DNA | Fort Worth PD Crime Lab | 10-28 | Testing request | | |
| 12/23/2010 | Weeks | DNA | DPS (Austin) | 11-03 | Testing request | | |
| 3/7/2011 | Whitlock | Trace evidence | SWIFS | 11-01 | R Juris (D) | | |
| 1/10/2011 | Helm | Trace evidence, Firearms | SWIFS | 11-02 | R Juris (D) | | |
| 3/29/2011 | Gibson | Arson | Waco Fire Department | 11-04 | Referred: IPOT | | |
| 3/23/2011 | Mole | Toxicology | Unidentified | N/C | Request for info | | |

# TFSC Complaint Assignment Table

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4/19/2011 | Cockerham | Dog Scent Line-up | Dpty Sheriff Pikett | 11-05 | R Juris (SM) | | |
| 4/13/2011 | Caraway | Toxicology, Autopsy | Tarrant County ME | 11-10 | R Juris (D)(SM) | | |
| 4/18/2011 | Stephens - APD | General allegations re: quality assurance/human resources | Austin PD Crime Lab | 11-07 | R Juris (SM) | | |
| 6/27/2011 | Devening | Toxicology | Forensic DNA & Drug Testing Services, Inc. | 11-08 | Referred | | |
| 4/11/2011 | Cooksey | Controlled substance | DPS (Waco) | 11-09 | R Merit | | |
| 9/2/2011 | El Paso Crime Lab | Controlled substance | EPPDCL | 11-11 | A | Kerrigan, Eisenberg, Alpert | |
| 10/3/2011 | McDade | Digital Evidence, Handwriting Analysis, Forensic Photography | FBI | 11-12 | Referred: IPOT | | |
| 11/30/2011 | Garrett (TN) | Arson | TN | N/C | No form | | |
| 11/14/2011 | Arrellano | Arson | Unidentified | N/C | Referred: IPOT | | |
| 11/10/2011 | Castillo | Arson | Unidentified | N/C | Referred: IPOT | | |
| 12/7/2011 | Florence | DNA | UNT Health Science Center | 11-13 | P | | |

# EXHIBIT J

**SUMMARY OF FORENSIC SCIENCE COMMISSION**
**RECOMMENDATIONS IN WILLINGHAM/WILLIS REPORT**

***RECOMMENDATION 1: ADOPTION OF NATIONAL STANDARDS***

Summary: The FSC recommends that the State Fire Marshal's Office (SFMO) work with the Texas Commission on Fire Protection (TCFP) and other relevant agencies to develop its own strategic plan setting forth best practices in fire investigation. The plan should meet the recommended national standards that exist at the time it is completed.

Examples of guiding documents for current standards include but are not limited to: the current edition of NFPA 921, NFPA 1033, the National Institute of Justice's June 2000 report entitled *Fire and Arson Scene Evidence: A Guide for Public Safety Personnel*; and the National Center for Forensic Science (Carl Chasteen), and Technical/Scientific Working Group's January 2008 report entitled *Fire and Explosion Investigations and Forensic Analyses: Near-and Long-Term Needs Assessment for State and Local Law Enforcement.*

***RECOMMENDATION 2: RETROACTIVE REVIEW***

If new scientific knowledge develops over time that would materially change the opinions or results in a criminal investigation, the individual or agency has a responsibility to inform the parties involved or develop procedures for doing so.

Accredited disciplines of forensic science have standards that promote the re-examination of cases when science has evolved to create a material difference in the original analysis or result. Those standards include: (1) duty to correct; (2) duty to inform; (3) duty to be transparent; and (4) implementation of corrective action. The SFMO should develop similar standards.

***RECOMMENDATION 3: ENHANCED CERTIFICATION***

The primary mechanism for training and educating fire investigators in Texas is individual certification. The certification process is administered by the TCFP. Texas has two separate certification titles for fire protection personnel: fire investigator and arson investigator. The main difference between the two is that an arson investigator must be certified both as a fire investigator and as a peace officer. The Texas Commission on Law Enforcement Officer Standards and Education ("TCLEOSE") administers peace officer certification.

In 2009, the NFPA released enhanced guidelines for education and training of fire investigators nationwide, and clarified that the guidelines should apply to *all fire investigators*. Under NFPA 1033's guidelines, fire investigators should have, at a minimum, a high school degree plus successful coursework in the following topics at a "post-secondary education" level:

- fire science;
- fire chemistry;
- thermodynamics;
- thermometry;
- fire dynamics;
- explosion dynamics;
- computer fire modeling;
- fire investigation;
- fire analysis;
- fire investigation methodology;
- fire investigation technology;
- hazardous materials; and
- failure analysis and analytical tools. (NFPA 1033 at 1.3.8.)

Fire investigators must also maintain their knowledge in these subject areas and "remain current" with investigation methodology, fire protection technology, and code requirements by attending workshops and seminars and/or through professional publications and journals. (*Id.* at 1.3.7.)

The Commission recommends that the TCFP phase in a timeline for requiring all investigators to comply with NFPA 1033. The first phase should require that any fire investigator who testifies in court come into compliance with NFPA 1033 standards as soon as practicable. Subsequent phases should require compliance based on the levels of responsibility assumed by investigators. The timeline should be aggressive but flexible to encourage a smooth transition toward compliance. Continuing education requirements promulgated by the TCFP should incorporate NFPA 1033's guidelines.

The FSC also recommends that the SFMO expand its mock trial program to include more participants. One alternative would be to allow for online participation, or to work with the TCFP to make the program a component of continuing education for arson investigators.

### *RECOMMENDATION 4: COLLABORATIVE TRAINING ON INCENDIARY INDICATORS*

The FSC is encouraged by recent efforts among fire scientists,[1] investigators and officials at the SFMO to develop a training course that includes hands-on analysis of incendiary indicators through live burn exercises. The SFMO and TCFP should work with local fire departments to encourage maximum participation, possibly by offering sessions in multiple regional locations. A special effort should be made to ensure participation by smaller rural communities. The SFMO and TCFP should also take into consideration any other pertinent curriculum recommended by the NIJ and other national agencies and

[1] The FSC is especially grateful to Dr. John DeHaan for working with Commission staff to develop a suggested training curriculum.

working groups. The FSC recommends that the following subjects be reviewed at a minimum:

- fire science basics;
- fuels;
- ignition;
- fire growth;
- incendiary indicators;
- myths and misconceptions;
- elimination of accidental causes;
- proper documentation and photos;
- eyewitness interviews;
- diagrams and use of the Ignition Matrix.

Training should be limited to active fire investigators currently serving in Texas to encourage an open and honest exchange (similar to the "post-mortem" sessions conducted by medical doctors and scientists). It should include opportunities for investigators to participate in live burn exercises. All attendees should be given current copies of NFPA 921 and *Kirk's Fire Investigation* at a minimum. Participants should receive continuing education credit for their attendance. Finally, an examination should be given at the end of the course to determine whether attendees absorbed key principles.

***RECOMMENDATION 5: TOOLS FOR ANALYZING IGNITION SOURCES***

New tools exist to help investigators identify and analyze various sources of ignition during a fire investigation. For example, the Ignition Matrix was introduced in the latest edition of *Kirk's Fire Investigation* and NFPA 921 as a straightforward method for ensuring compliance with the various requirements of NFPA 921.[2] The matrix prompts investigators to ask a series of questions regarding potential ignition sources. Investigators then label the information they have gathered based on pre-established color and notation categories. The approach constitutes a "best practice" method for evaluating sources of data at the scene of a fire and documenting the facts relied upon when reaching conclusions about various ignition possibilities. When carried out with a comprehensive map of the suspected area of origin, the Ignition Matrix provides investigators with a concrete way to conduct a methodical review of data and facts before forming an opinion, in compliance with NFPA 921. The SFMO should consider methods for integrating the Ignition Matrix into its training and investigative work.

***RECOMMENDATION 6: PERIODIC CURRICULUM REVIEW***

The FSC recommends that stakeholders (including representatives from the TCFP, SFMO, fire investigators and scientists) form a regular working group to review training curricula and ensure that it meets the ongoing needs of fire investigators in Texas. The

[2] Information regarding the Ignition Matrix, developed by Lou Bilancia, was provided to the FSC by Dr. John DeHaan in February 2011.

group could also identify ways to take advantage of Internet-based training such as CFITrainer and virtual reality fire investigation programs. Because CFITrainer provides a variety of online options for achieving compliance with NFPA 1033, use of the website may be particularly helpful in rolling out the enhanced certification requirements discussed above.

### *RECOMMENDATION 7: INVOLVEMENT OF SFMO IN LOCAL INVESTIGATIONS*

Local fire departments call the SFMO for assistance when they believe a case is significant enough to warrant such assistance. If the SFMO has personnel available, it sends them to assist. Based on discussions with SFMO leadership, it appears that the SFMO is always available to assist when called upon; the agency rarely (if ever) denies assistance. Some Commissioners have questioned whether there should be clear legal requirements governing cases in which the SFMO appears for assistance. The Commission strongly recommends that the SFMO have an Advanced or Master Arson Investigator participate in all fire investigations involving the loss of life.

### *RECOMMENDATION 8: ESTABLISHMENT OF PEER REVIEW GROUP/MULTIDISCIPLINARY TEAM*

The Commission strongly recommends that the SFMO establish a peer review team (perhaps to include someone from the SFMO, a local investigator, a fire scientist and a medical examiner) to review pending and completed arson cases on a quarterly basis (similar to the cold case DNA task force group, or CPS' review of child abuse cases, multidisciplinary team (MDT) models, etc.) This would be a good-faith effort to assure the public that there is a review mechanism in place, especially for structure arson cases involving fatalities. It would also be a way to encourage ongoing professional development across the field. The most efficient approach may be to establish regional MDTs.

### *RECOMMENDATION 9: STANDARDS FOR TESTIMONY IN ARSON CASES*

The FSC recommends that the SFMO and local fire investigators begin implementing the standards set forth in NFPA 1033 and related guidelines to improve the overall quality of testimony offered in arson investigations.

### *RECOMMENDATION 10: ENHANCED ADMISSIBILITY HEARINGS IN ARSON CASES*

The FSC recommends that admissibility hearings (also referred to as *Daubert/Kelly* hearings) be conducted in all arson cases, due to the inherently complex nature of fire science and the continuously evolving nature of fire investigation standards. The FSC encourages both prosecutors and defense counsel to aggressively pursue admissibility hearings in arson cases. In addition, judges should affirmatively exercise their discretion

to hold such hearings in all arson cases as a method of ensuring that fire science testimony is reliable and relevant.

***RECOMMENDATION 11: EVALUATING COURTROOM TESTIMONY***

The Commission recommends that the SFMO and local fire departments develop policies and procedures for the evaluation of courtroom testimony.

***RECOMMENDATION 12: MINIMUM REPORT STANDARDS***

SFMO leadership reviews each fire investigation report submitted by its investigators, and instructs investigators to revise their reports if there is any indication of an incomplete analysis. This process is designed to help ensure that the scientific method is followed by SFMO investigators. However, it is limited to fire reports submitted by investigators employed by the SFMO; there is no standardized reporting method that applies to fire investigators statewide.

The Commission recommends that the SFMO develop and release minimum standards for fire investigation reporting statewide. As the NAS Report notes, "there is a critical need in most fields of forensic science to raise the standards for reporting and testifying about the results of investigations." (NAS Report at 185.) Minimum standards should verify that key elements have been reviewed, documented, collected, photographed (to the extent applicable) and analyzed. They should also have a method for red-flagging scenarios in which additional consultation might be necessary (such as when an electrical engineer should be called in to help with arc mapping, etc.). They should track key elements of NFPA 921, and evolve as new editions are released. Tools such as the Ignition Matrix and voice-recognition software should be integrated into the report-writing process. The SFMO has obtained a grant for the use of voice-recognition software; the FSC encourages the agency to seek additional ways to expand opportunities for using the software.

***RECOMMENDATION 13: PRESERVATION OF DOCUMENTATION***

The Commission notes that review of documentation in the Willingham case presented difficulties because the documents, photographs of fire debris and related records were no longer available. Local fire departments and the SFMO should preserve originals and forward only copies of documentation.

***RECOMMENDATION 14: DISSEMINATION OF INFORMATION REGARDING SCIENTIFIC ADVANCEMENTS***

The SFMO should identify additional ways to help the fire investigation community in Texas stay current with national developments in fire science. For example, there should be a consistent and effective method for disseminating new information regarding the results of fire science experiments and controlled burn studies. Formats could include quarterly electronic newsletters, regular online forums, periodic webcast updates, NIST

and NCJRS library resources, journal abstracting services, etc. The SFMO may also consider retaining a fire scientist to consult on an as-needed basis. Such a relationship would encourage the free flow of information between the two communities and provide a continuous source of outside expertise for particularly challenging interpretive questions.

The FSC recommends that the SFMO perform an internal audit to evaluate fire investigation training, certification, policies and procedures to ensure compliance with all relevant national standards. The FSC recommends that the SFMO develop a plan for implementing new standards as they evolve as well as ongoing quality assurance measures.

***RECOMMENDATION 15: CODE OF CONDUCT/ETHICS***

State agencies and professional organizations often have a Code of Conduct or Ethics to guide expectations. The FSC understands that the SFMO does not currently have such a Code; the FSC recommends that the SFMO establish a Code of Conduct/Ethics for fire investigators in Texas.

***RECOMMENDATION 16: TRAINING FOR LAWYERS/JUDGES***

The FSC recommends that the Texas Legislature and/or any other body overseeing continuing education in Texas consider requiring judges and lawyers practicing in criminal courts to have some form of ongoing forensic science training as a component of their Continuing Legal Education obligations.

***RECOMMENDATION 17: FUNDING***

The Commission urges that the Texas Legislature and municipalities take steps to ensure that sufficient funding is available to provide training to fire and arson investigators so that they may meet the standards set out in NFPA 921 and NFPA 1033, and stay current with national advances in fire science.

The FSC further recommends that the Texas Department of Insurance make it a priority to ensure that the SFMO receives sufficient funding so that its fire and arson investigators are properly trained to meet the standards set out in NFPA 921 and NFPA 1033, and so that they are able to stay current with advances in fire science.

Finally, the FSC recommends that the SFMO aggressively seek out alternative sources of funding for education of its investigators, including but not limited to federal and private grants.

# EXHIBIT K

By: Hinojosa S.B. No. 1658

A BILL TO BE ENTITLED

AN ACT

relating to the duties of and investigations conducted by the Texas Forensic Science Commission, the administrative attachment of the Texas Forensic Science Commission to Sam Houston State University, and the accreditation of criminal laboratories by the Department of Public Safety of the State of Texas.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Section 2, Article 38.01, Code of Criminal Procedure, is amended to read as follows:

Sec. 2. DEFINITIONS [~~DEFINITION~~]. In this article:

(1) "Accredited field of forensic science" means a specific forensic method or methodology validated or approved by the public safety director of the Department of Public Safety under Section 411.0205(b-1)(2), Government Code, as part of the accreditation process for crime laboratories established by rule under Section 411.0205(b) of that code.

(2) "Commission" means the Texas Forensic Science Commission.

(3) "Crime laboratory" has the meaning assigned by Article 38.35.

(4) "Forensic analysis" means a medical, chemical, toxicologic, ballistic, or other expert examination or test performed on physical evidence, including DNA evidence, for the purpose of determining the connection of the evidence to a criminal

action[~~, "forensic analysis" has the meaning assigned by Article 38.35(a)~~].

SECTION 2. Subsections (a) and (b), Section 3, Article 38.01, Code of Criminal Procedure, are amended to read as follows:

(a) The commission is composed of the following seven [~~nine~~] members[~~:~~

[~~(1) four members~~] appointed by the governor:

(1) five who [~~(A) two of whom~~] must have expertise in the field of forensic science;

(2) [~~(B)~~] one who [~~of whom~~] must be a prosecuting attorney that the governor selects from a list of 10 names submitted by the Texas District and County Attorneys Association; and

(3) [~~(C)~~] one who [~~of whom~~] must be a defense attorney that the governor selects from a list of 10 names submitted by the Texas Criminal Defense Lawyers Association[~~:~~

[~~(2) three members appointed by the lieutenant governor:~~

[~~(A) one of whom must be a faculty member or staff member of The University of Texas who specializes in clinical laboratory medicine selected from a list of 10 names submitted to the lieutenant governor by the chancellor of The University of Texas System;~~

[~~(B) one of whom must be a faculty member or staff member of Texas A&M University who specializes in clinical laboratory medicine selected from a list of 10 names submitted to the lieutenant governor by the chancellor of The Texas A&M University System;~~

[~~(C) one of whom must be a faculty member or staff member of Texas Southern University who has expertise in pharmaceutical laboratory research selected from a list of 10 names submitted to the lieutenant governor by the chancellor of Texas Southern University; and~~

[~~(3) two members appointed by the attorney general:~~

[~~(A) one of whom must be a director or division head of the University of North Texas Health Science Center at Fort Worth Missing Persons DNA Database; and~~

[~~(B) one of whom must be a faculty or staff member of the Sam Houston State University College of Criminal Justice and have expertise in the field of forensic science or statistical analyses selected from a list of 10 names submitted to the lieutenant governor by the chancellor of Texas State University System~~].

(b) Each member of the commission serves a two-year term. The terms [~~term~~] of the members appointed under Subsection [~~Subsections~~] (a)(1) expire [~~and (2) expires~~] on September 1 of each even-numbered [~~odd-numbered~~] year. The terms [~~term~~] of the members appointed under Subsections (a)(2) and [~~Subsection~~] (a)(3) expire [~~expires~~] on September 1 of each odd-numbered [~~even-numbered~~] year.

SECTION 3. Section 4, Article 38.01, Code of Criminal Procedure, is amended by amending Subsections (a), (b), (d), and (e) and adding Subsections (a-1), (b-1), (b-2), (f), and (g) to read as follows:

(a) The commission shall:

(1) develop and implement a reporting system through which a crime laboratory may [~~accredited laboratories, facilities, or entities~~] report professional negligence or misconduct;

(2) require a crime laboratory [~~all laboratories, facilities, or entities~~] that conducts [~~conduct~~] forensic analyses to report professional negligence or misconduct to the commission; and

(3) investigate, in a timely manner, any allegation of professional negligence or professional misconduct that would substantially affect the integrity of the results of a forensic analysis conducted by a crime laboratory [~~an accredited laboratory, facility, or entity~~].

(a-1) The commission may initiate for educational purposes an investigation of a forensic analysis without a ~~report~~ complaint containing an allegation of professional negligence or professional misconduct involving the forensic analysis conducted if the commission determines by a majority vote of the members of the commission that an investigation of the forensic analysis would advance the integrity and reliability of forensic science in this state.

(b) If the commission conducts an [~~An~~] investigation under Subsection (a)(3) of a crime laboratory that is accredited by the Department of Public Safety under Section 411.0205, Government Code, pursuant to an allegation of professional negligence or professional misconduct involving an accredited field of forensic science, the investigation:

(1) must include the preparation of a written report

that identifies and also describes the methods and procedures used to identify:

(A) the alleged negligence or misconduct;

(B) whether negligence or misconduct occurred; [~~and~~]

(C) any corrective action required of the laboratory, facility, or entity;

(D) observations of the commission regarding the integrity and reliability of the forensic analysis conducted;

(E) best practices identified by the commission during the course of the investigation; and

(F) other recommendations that are relevant, as determined by the commission; and

(2) may include one or more:

(A) retrospective reexaminations of other forensic analyses conducted by the laboratory, facility, or entity that may involve the same kind of negligence or misconduct; and

(B) follow-up evaluations of the laboratory, facility, or entity to review:

(i) the implementation of any corrective action required under Subdivision (1)(C); or

(ii) the conclusion of any retrospective reexamination under Paragraph (A).

(b-1) If the commission conducts an investigation under Subsection (a)(3) of a crime laboratory that is not accredited by the Department of Public Safety under Section 411.0205, Government Code, or the investigation is conducted pursuant to an allegation

involving a forensic method or methodology that is not an accredited field of forensic science, the investigation may include the preparation of a written report that contains:

(1) observations of the commission regarding the integrity and reliability of the forensic analysis conducted;

(2) best practices identified by the commission during the course of the investigation; and

(3) other recommendations that are relevant, as determined by the commission.

(b-2) If the commission conducts an investigation of a forensic analysis under Subsection (a-1), the investigation must include the preparation of a written report that contains:

(1) observations of the commission regarding the integrity and reliability of the forensic analysis conducted;

(2) best practices identified by the commission during the course of the investigation; and

(3) other recommendations that are relevant, as determined by the commission.

(d) The commission may require that a crime laboratory[~~, facility, or entity~~] investigated under this section pay any costs incurred to ensure compliance with Subsection (b), (b-1), or (b-2) [~~Subsection (b)(1)~~].

(e) The commission shall make all investigation reports completed under Subsection (b), (b-1), or (b-2) [~~(b)(1)~~] available to the public. A report completed under Subsection (b), (b-1), or (b-2) [~~(b)(1)~~], in a subsequent civil or criminal proceeding, is not prima facie evidence of the information or findings contained

in the report.

(f) The commission may not make a determination of whether professional negligence or professional misconduct occurred or issue a finding on that question in an investigation initiated under Subsection (a-1) or for which an investigation report may be prepared under Subsection (b-1).

(g) The commission may not issue a finding related to the guilt or innocence of a party in an underlying civil or criminal trial involving conduct investigated by the commission under this article.

SECTION 4. Article 38.01, Code of Criminal Procedure, is amended by adding Sections 8, 9, 10, and 11 to read as follows:

Sec. 8. ANNUAL REPORT. Not later than December 1 of each year, the commission shall prepare and publish a report that includes:

(1) a description of each complaint filed with the commission during the preceding 12-month period, the disposition of each complaint, and the status of any complaint still pending on December 31;

(2) a description of any specific forensic method or methodology the commission recommends to the public safety director of the Department of Public Safety for validation or approval under Section 411.0205(b-1)(2), Government Code, as part of the accreditation process for crime laboratories established by rule under Section 411.0205(b) of that code;

(3) recommendations for best practices concerning the definition of "forensic analysis" provided by statute or by rule of

the Department of Public Safety;

(4) developments in forensic science made or used in other state or federal investigations and the activities of the commission, if any, with respect to those developments; and

(5) other information that is relevant to investigations involving forensic science, as determined by the presiding officer of the commission.

Sec. 9. ADMINISTRATIVE ATTACHMENT TO SAM HOUSTON STATE UNIVERSITY. (a) The commission is administratively attached to Sam Houston State University.

(b) The Board of Regents, Texas State University System, shall provide administrative support to the commission as necessary to carry out the purposes of this article.

(c) Only the commission may exercise the duties of the commission under this article. Except as provided by Subsection (b), neither the Board of Regents, Texas State University System, nor Sam Houston State University has any authority or responsibility with respect to the duties of the commission under this article.

Sec. 10. OPEN RECORDS LIMITATION. Information that is filed as part of an allegation of professional misconduct or professional negligence or that is obtained during an investigation of an allegation of professional misconduct or professional negligence is not subject to release under Chapter 552, Government Code, until the conclusion of an investigation by the commission under Section 4.

Sec. 11. REPORT INADMISSIBLE AS EVIDENCE. A written report

prepared by the commission under this article is not admissible in a civil or criminal action.

SECTION 5. Section 411.0205, Government Code, is amended by adding Subsection (b-3) to read as follows:

(b-3) The director shall require that a laboratory, facility, or entity that must be accredited under this section, as part of the accreditation process, agree to consent to any request for cooperation by the Texas Forensic Science Commission that is made as part of the exercise of the commission's duties under Article 38.01, Code of Criminal Procedure.

SECTION 6. (a) Notwithstanding any other law, the terms of the members of the Texas Forensic Science Commission appointed under Subsections (a)(1)(A), (a)(2), and (a)(3), Section 3, Article 38.01, Code of Criminal Procedure, and serving on the effective date of this Act expire on the date the last appointment to the commission is made under Subsection (b) of this section.

(b) Not later than January 1, 2012, the governor shall appoint five members of the Texas Forensic Science Commission, as required by Subsection (a)(1), Section 3, Article 38.01, Code of Criminal Procedure, as amended by this Act.

SECTION 7. Not later than December 1, 2012, the Texas Forensic Science Commission shall submit the first annual report required by Section 8, Article 38.01, Code of Criminal Procedure, as added by this Act.

SECTION 8. This Act takes effect immediately if it receives a vote of two-thirds of all the members elected to each house, as provided by Section 39, Article III, Texas Constitution. If this

Act does not receive the vote necessary for immediate effect, this Act takes effect September 1, 2011.

FLOOR AMENDMENT NO._____ BY: Driver

Amend S.B. No. 1658 (House Committee Printing) as follows:

(1) Strike SECTION 2 of the bill (page 2, line 3 through page 3, line 22), and substitute the following:

SECTION 2. Section 3(a), Article 38.01, Code of Criminal Procedure, is amended to read as follows:

(a) The commission is composed of the following nine members[~~:~~

[~~(1) four members~~] appointed by the governor:

(1) two members who [~~(A) two of whom~~] must have expertise in the field of forensic science;

(2) [~~(B)~~] one member who [~~of whom~~] must be a prosecuting attorney that the governor selects from a list of 10 names submitted by the Texas District and County Attorneys Association; [and]

(3) [~~(C)~~] one member who [~~of whom~~] must be a defense attorney that the governor selects from a list of 10 names submitted by the Texas Criminal Defense Lawyers Association;

[~~(2) three members appointed by the lieutenant governor:~~]

(4) one member who [~~(A) one of whom~~] must be a faculty member or staff member of The University of Texas who specializes in forensic science [~~clinical laboratory medicine~~] selected from a list of 10 names submitted to the [~~lieutenant~~] governor by the chancellor of The University of Texas System;

(5) one member who [~~(B) one of whom~~] must be a faculty member or staff member of Texas A&M University who specializes in forensic science [~~clinical laboratory medicine~~] selected from a list of 10 names submitted to the [~~lieutenant~~] governor by the chancellor of The Texas A&M University System;

(6) one member who [~~(C) one of whom~~] must be a faculty member or staff member of Texas Southern University who has expertise in forensic science [~~pharmaceutical laboratory research~~] selected from a list of 10 names submitted to the [~~lieutenant~~] governor by the chancellor of Texas Southern University; and

[~~(3) two members appointed by the attorney general:~~]

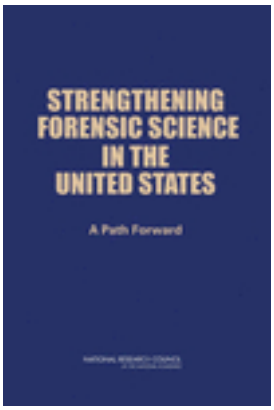
(7) one member who [~~(A) one of whom~~] must be a director or division head of the University of North Texas Health Science Center at Fort Worth Missing Persons DNA Database; and

(8) one member who [~~(B) one of whom~~] must be a faculty or staff member of the Sam Houston State University College of Criminal Justice and have expertise in the field of forensic science or statistical analyses selected from a list of 10 names submitted to the lieutenant governor by the chancellor of Texas State University System.

(2) In the recital to SECTION 4 of the bill (page 7, line 12), strike "8, 9, 10, and 11" and substitute "8, 9, and 10".

(3) In SECTION 4 of the bill, strike proposed Section 10, Article 38.01, Code of Criminal Procedure, (page 8, lines 20-26) and renumber subsequent proposed sections of the article accordingly.

# EXHIBIT L




**Strengthening Forensic Science in the United States: A Path Forward**

Committee on Identifying the Needs of the Forensic Sciences Community; Committee on Applied and Theoretical Statistics, National Research Council

ISBN: 0-309-13131-6, 254 pages, 6 x 9, (2009)

# SUMMARY

## INTRODUCTION

On November 22, 2005, the Science, State, Justice, Commerce, and Related Agencies Appropriations Act of 2006 became law.[1] Under the terms of the statute, Congress authorized "the National Academy of Sciences to conduct a study on forensic science, as described in the Senate report."[2] The Senate Report to which the Conference Report refers states:

> While a great deal of analysis exists of the requirements in the discipline of DNA, there exists little to no analysis of the remaining needs of the community outside of the area of DNA. Therefore . . . the Committee directs the Attorney General to provide [funds] to the National Academy of Sciences to create an independent Forensic Science Committee. This Committee shall include members of the forensics community representing operational crime laboratories, medical examiners, and coroners; legal experts; and other scientists as determined appropriate.[3]

The Senate Report also sets forth the charge to the Forensic Science Committee, instructing it to:

(1) assess the present and future resource needs of the forensic science community, to include State and local crime labs, medical examiners, and coroners;
(2) make recommendations for maximizing the use of forensic technologies and techniques to solve crimes, investigate deaths, and protect the public;
(3) identify potential scientific advances that may assist law enforcement in using forensic technologies and techniques to protect the public;
(4) make recommendations for programs that will increase the number of qualified forensic scientists and medical examiners available to work in public crime laboratories;
(5) disseminate best practices and guidelines concerning the collection and analysis of forensic evidence to help ensure quality and consistency in the use of forensic technologies and techniques to solve crimes, investigate deaths, and protect the public;
(6) examine the role of the forensic community in the homeland security mission;
(7) [examine] interoperability of Automated Fingerprint Information Systems [AFIS]; and
(8) examine additional issues pertaining to forensic science as determined by the Committee.[4]

In the fall of 2006, a committee was established by the National Academy of Sciences to implement this congressional charge. As recommended in the Senate Report, the persons selected to serve included members of the forensic science community, members of the legal community, and a

[1] P.L. No. 109-108, 119 Stat. 2290 (2005).
[2] H.R. REP. NO. 109-272, at 121 (2005) (Conf. Rep.).
[3] S. REP. NO. 109-88, at 46 (2005).
[4] Ibid.

diverse group of scientists. Operating under the project title "Identifying the Needs of the Forensic Science Community," the committee met on eight occasions: January 25-26, April 23-24, June 5-6, September 20-21, and December 6-7, 2007, and March 24-25, June 23-24, and November 14-15, 2008. During these meetings, the committee heard expert testimony and deliberated over the information it heard and received. Between meetings, committee members reviewed numerous published materials, studies, and reports related to the forensic science disciplines, engaged in independent research on the subject, and worked on drafts of the final report.

Experts who provided testimony included federal agency officials; academics and research scholars; private consultants; federal, state, and local law enforcement officials; scientists; medical examiners; a coroner; crime laboratory officials from the public and private sectors; independent investigators; defense attorneys; forensic science practitioners; and leadership of professional and standard setting organizations (see the Acknowledgments and Appendix B for a complete listing of presenters).

The issues covered during the committee's hearings and deliberations included:

(a) the fundamentals of the scientific method as applied to forensic practice—hypothesis generation and testing, falsifiability and replication, and peer review of scientific publications;
(b) the assessment of forensic methods and technologies—the collection and analysis of forensic data; accuracy and error rates of forensic analyses; sources of potential bias and human error in interpretation by forensic experts; and proficiency testing of forensic experts;
(c) infrastructure and needs for basic research and technology assessment in forensic science;
(d) current training and education in forensic science;
(e) the structure and operation of forensic science laboratories;
(f) the structure and operation of the coroner and medical examiner systems;
(g) budget, future needs, and priorities of the forensic science community and the coroner and medical examiner systems;
(h) the accreditation, certification, and licensing of forensic science operations, medical death investigation systems, and scientists;
(i) Scientific Working Groups (SWGs) and their practices;
(j) forensic science practices—

pattern/experience evidence
- fingerprints (including the interoperability of AFIS)
- firearms examination
- toolmarks
- bite marks
- impressions (tires, footwear)
- bloodstain pattern analysis
- handwriting
- hair

analytical evidence
- DNA
- coatings (e.g., paint)

  - chemicals (including drugs)
  - materials (including fibers)
  - fluids
  - serology
  - fire and explosive analysis

  digital evidence;

(k) the effectiveness of coroner systems as compared with medical examiner systems;

(l ) the use of forensic evidence in criminal and civil litigation—
  - the collection and flow of evidence from crime scenes to courtrooms
  - the manner in which forensic practitioners testify in court
  - cases involving the misinterpretation of forensic evidence
  - the adversarial system in criminal and civil litigation
  - lawyers' use and misuse of forensic evidence
  - judges' handling of forensic evidence;

(m) forensic practice and projects at various federal agencies, including NIST, the FBI, DHS, U.S. Secret Service, NIJ, DEA, and DOD;

(n) forensic practice in state and local agencies;

(o) nontraditional forensic service providers; and

(p) the forensic science community in the United Kingdom.

The testimonial and documentary evidence considered by the committee was detailed, complex, and sometimes controversial. Given this reality, the committee could not possibly answer every question that it confronted, nor could it devise specific solutions for every problem that it identified. Rather, it reached a consensus on the most important issues now facing the forensic science community and medical examiner system and agreed on 13 specific recommendations to address these issues.

**Challenges Facing the Forensic Science Community**

For decades, the forensic science disciplines have produced valuable evidence that has contributed to the successful prosecution and conviction of criminals as well as to the exoneration of innocent people. Over the last two decades, advances in some forensic science disciplines, especially the use of DNA technology, have demonstrated that some areas of forensic science have great additional potential to help law enforcement identify criminals. Many crimes that may have gone unsolved are now being solved because forensic science is helping to identify the perpetrators.

Those advances, however, also have revealed that, in some cases, substantive information and testimony based on faulty forensic science analyses may have contributed to wrongful convictions of innocent people. This fact has demonstrated the potential danger of giving undue weight to evidence and testimony derived from imperfect testing and analysis. Moreover, imprecise or exaggerated expert testimony has sometimes contributed to the admission of erroneous or misleading evidence.

Further advances in the forensic science disciplines will serve three important purposes. First, further improvements will assist law enforcement officials in the course of their investigations to identify perpetrators with higher reliability. Second, further improvements in forensic science practices should reduce the occurrence of wrongful convictions, which reduces the risk that true offenders continue to commit crimes while innocent persons inappropriately serve time. Third, any improvements in the forensic science disciplines will undoubtedly enhance the Nation's ability to address the needs of homeland security.

Numerous professionals in the forensic science community and the medical examiner system have worked for years to achieve excellence in their fields, aiming to follow high ethical norms, develop sound professional standards, ensure accurate results in their practices, and improve the processes by which accuracy is determined. Although the work of these dedicated professionals has resulted in significant progress in the forensic science disciplines in recent decades, major challenges still face the forensic science community. It is therefore unsurprising that Congress instructed this committee to, among other things, "assess the present and future resource needs of the forensic science community," "make recommendations for maximizing the use of forensic technologies and techniques," "make recommendations for programs that will increase the number of qualified forensic scientists and medical examiners," and "disseminate best practices and guidelines concerning the collection and analysis of forensic evidence to help ensure quality and consistency in the use of forensic technologies and techniques." These are among the pressing issues facing the forensic science community. The best professionals in the forensic science disciplines invariably are hindered in their work because these and other problems persist.

The length of the congressional charge and the complexity of the material under review made the committee's assignment challenging. In undertaking it, the committee first had to gain an understanding of the various disciplines within the forensic science community, as well as the community's history, its strengths and weaknesses, and the roles of the people and agencies that constitute the community and make use of its services. In so doing, the committee was able to better comprehend some of the major problems facing the forensic science community and the medical examiner system. A brief review of some of these problems is illuminating.[5]

**Disparities in the Forensic Science Community**

There are great disparities among existing forensic science operations in federal, state, and local law enforcement jurisdictions and agencies. This is true with respect to funding, access to analytical instrumentation, the availability of skilled and well-trained personnel, certification, accreditation, and oversight. As a result, it is not easy to generalize about current practices within the forensic science community. It is clear, however, that any approach to overhauling the existing system needs to address and help minimize the community's current fragmentation and inconsistent practices.

Although the vast majority of criminal law enforcement is handled by state and local jurisdictions, these entities often are sorely lacking in the resources (money, staff, training, and equipment) necessary to promote and maintain strong forensic science laboratory systems. By comparison, federal programs are often much better funded and staffed. It is also noteworthy that the resources, the extent of services, and the amount of expertise that medical examiners and forensic pathologists can provide vary widely in different jurisdictions. As a result, the depth, reliability, and overall quality of substantive information arising from the forensic examination of evidence available to the legal system vary substantially across the country.

**Lack of Mandatory Standardization, Certification, and Accreditation**

The fragmentation problem is compounded because operational principles and procedures for many forensic science disciplines are not standardized or embraced, either between or within jurisdictions. There is no uniformity in the certification of forensic practitioners, or in the

[5] In this report, the "forensic science community," broadly speaking, is meant to include forensic pathology and medicolegal death investigation, which is sometimes referred to as "the medical examiner system" or "the medicolegal death investigation system."

accreditation of crime laboratories. Indeed, most jurisdictions do not require forensic practitioners to be certified, and most forensic science disciplines have no mandatory certification programs. Moreover, accreditation of crime laboratories is not required in most jurisdictions. Often there are no standard protocols governing forensic practice in a given discipline. And, even when protocols are in place (e.g., SWG standards), they often are vague and not enforced in any meaningful way. In short, the quality of forensic practice in most disciplines varies greatly because of the absence of adequate training and continuing education, rigorous mandatory certification and accreditation programs, adherence to robust performance standards, and effective oversight.[6] These shortcomings obviously pose a continuing and serious threat to the quality and credibility of forensic science practice.

**The Broad Range of Forensic Science Disciplines**

The term "forensic science" encompasses a broad range of forensic disciplines, each with its own set of technologies and practices. In other words, there is wide variability across forensic science disciplines with regard to techniques, methodologies, reliability, types and numbers of potential errors, research, general acceptability, and published material. Some of the forensic science disciplines are laboratory based (e.g., nuclear and mitochondrial DNA analysis, toxicology and drug analysis); others are based on expert interpretation of observed patterns (e.g., fingerprints, writing samples, toolmarks, bite marks, and specimens such as hair). The "forensic science community," in turn, consists of a host of practitioners, including scientists (some with advanced degrees) in the fields of chemistry, biochemistry, biology, and medicine; laboratory technicians; crime scene investigators; and law enforcement officers. There are very important differences, however, between forensic laboratory work and crime scene investigations. There are also sharp distinctions between forensic practitioners who have been trained in chemistry, biochemistry, biology, and medicine (and who bring these disciplines to bear in their work) and technicians who lend support to forensic science enterprises. Many of these differences are discussed in the body of this report.

The committee decided early in its work that it would not be feasible to develop a detailed evaluation of each discipline in terms of its scientific underpinning, level of development, and ability to provide evidence to address the major types of questions raised in criminal prosecutions and civil litigation. However, the committee solicited testimony on a broad range of forensic science disciplines and sought to identify issues relevant across definable classes of disciplines. As a result of listening to this testimony and reviewing related written materials, the committee found substantial evidence indicating that the level of scientific development and evaluation varies substantially among the forensic science disciplines.

**Problems Relating to the Interpretation of Forensic Evidence**

Often in criminal prosecutions and civil litigation, forensic evidence is offered to support conclusions about "individualization" (sometimes referred to as "matching" a specimen to a particular individual or other source) or about classification of the source of the specimen into one of several categories. With the exception of nuclear DNA analysis, however, no forensic method has been rigorously shown to have the capacity to consistently, and with a high degree of certainty, demonstrate a connection between evidence and a specific individual or source. In terms of scientific basis, the analytically based disciplines generally hold a notable edge over disciplines based on expert interpretation. But there are important variations among the disciplines relying on expert

[6] See, e.g., P.C. Giannelli. 2007. Wrongful convictions and forensic science: The need to regulate crime labs. 86 N.C. L. REV. 163 (2007); B. Schmitt and J. Swickard. 2008. "Detroit Police Lab Shut Down After Probe Finds Errors." *Detroit Free Press.* September 25.

interpretation. For example, there are more established protocols and available research for fingerprint analysis than for the analysis of bite marks. There also are significant variations within each discipline. For example, not all fingerprint evidence is equally good, because the true value of the evidence is determined by the quality of the latent fingerprint image. These disparities between and within the forensic science disciplines highlight a major problem in the forensic science community: The simple reality is that the interpretation of forensic evidence is not always based on scientific studies to determine its validity. This is a serious problem. Although research has been done in some disciplines, there is a notable dearth of peer-reviewed, published studies establishing the scientific bases and validity of many forensic methods.[7]

**The Need for Research to Establish Limits and Measures of Performance**

In evaluating the accuracy of a forensic analysis, it is crucial to clarify the type of question the analysis is called on to address. Thus, although some techniques may be too imprecise to permit accurate identification of a specific individual, they may still provide useful and accurate information about questions of classification. For example, microscopic hair analysis may provide reliable evidence on some characteristics of the individual from which the specimen was taken, but it may not be able to reliably match the specimen with a specific individual. However, the definition of the appropriate question is only a first step in the evaluation of the performance of a forensic technique. A body of research is required to establish the limits and measures of performance and to address the impact of sources of variability and potential bias. Such research is sorely needed, but it seems to be lacking in most of the forensic disciplines that rely on subjective assessments of matching characteristics. These disciplines need to develop rigorous protocols to guide these subjective interpretations and pursue equally rigorous research and evaluation programs. The development of such research programs can benefit significantly from other areas, notably from the large body of research on the evaluation of observer performance in diagnostic medicine and from the findings of cognitive psychology on the potential for bias and error in human observers.[8]

**The Admission of Forensic Science Evidence in Litigation**

Forensic science experts and evidence are used routinely in the service of the criminal justice system. DNA testing may be used to determine whether sperm found on a rape victim came from an accused party; a latent fingerprint found on a gun may be used to determine whether a defendant handled the weapon; drug analysis may be used to determine whether pills found in a person's possession were illicit; and an autopsy may be used to determine the cause and manner of death of a murder victim. In order for qualified forensic science experts to testify competently about forensic evidence, they must first find the evidence in a usable state and properly preserve it. A latent fingerprint that is badly smudged when found cannot be usefully saved, analyzed, or explained. An

[7] Several articles, for example, have noted the lack of scientific validation of fingerprint identification methods. See, e.g., J. J. Koehler. Fingerprint error rates and proficiency tests: What they are and why they matter. 59 HASTINGS L.J. 1077 (2008); L. Haber and R.N. Haber. 2008. Scientific validation of fingerprint evidence under *Daubert. Law, Probability and Risk* 7(2):87; J.L. Mnookin. 2008. The validity of latent fingerprint identification: Confessions of a fingerprinting moderate. *Law, Probability and Risk* 7(2):127.

[8] The findings of forensic science experts are vulnerable to cognitive and contextual bias. See, e.g., I.E. Dror, D. Charlton, and A.E. Péron. 2006. Contextual information renders experts vulnerable to making erroneous identifications. *Forensic Science International* 156:74, 77. ("Our study shows that it is possible to alter identification decisions on the same fingerprint, solely by presenting it in a different context."); I.E. Dror and D. Charlton. 2006. Why experts make errors. *Journal of Forensic Identification* 56(4):600; Giannelli, *supra* note 6, pp. 220-222. Unfortunately, at least to date, there is no good evidence to indicate that the forensic science community has made a sufficient effort to address the bias issue; thus, it is impossible for the committee to fully assess the magnitude of the problem.

inadequate drug sample may be insufficient to allow for proper analysis. And, DNA tests performed on a contaminated or otherwise compromised sample cannot be used reliably to identify or eliminate an individual as the perpetrator of a crime. These are important matters involving the proper processing of forensic evidence. The law's greatest dilemma in its heavy reliance on forensic evidence, however, concerns the question of whether—and to what extent—there is *science* in any given forensic science discipline.

Two very important questions should underlie the law's admission of and reliance upon forensic evidence in criminal trials: (1) the extent to which a particular forensic discipline is founded on a reliable scientific methodology that gives it the capacity to accurately analyze evidence and report findings and (2) the extent to which practitioners in a particular forensic discipline rely on human interpretation that could be tainted by error, the threat of bias, or the absence of sound operational procedures and robust performance standards. These questions are significant. Thus, it matters a great deal whether an expert is qualified to testify about forensic evidence and whether the evidence is sufficiently reliable to merit a fact finder's reliance on the truth that it purports to support. Unfortunately, these important questions do not always produce satisfactory answers in judicial decisions pertaining to the admissibility of forensic science evidence proffered in criminal trials.

In 1993, in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*,[9] the Supreme Court ruled that, under Rule 702 of the Federal Rules of Evidence (which covers both civil trials and criminal prosecutions in the federal courts), a "trial judge must ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable."[10] The Court indicated that the subject of an expert's testimony should be scientific knowledge, so that "evidentiary reliability will be based upon scientific validity."[11] The Court also emphasized that, in considering the admissibility of evidence, a trial judge should focus "solely" on the expert's "principles and methodology," and "not on the conclusions that they generate."[12] In sum, *Daubert*'s requirement that an expert's testimony pertain to "scientific knowledge" established a standard of "evidentiary reliability."[13]

In explaining this evidentiary standard, the *Daubert* Court pointed to several factors that might be considered by a trial judge: (1) whether a theory or technique can be (and has been) tested; (2) whether the theory or technique has been subjected to peer review and publication; (3) the known or potential rate of error of a particular scientific technique; (4) the existence and maintenance of standards controlling the technique's operation; and (5) a scientific technique's degree of acceptance within a relevant scientific community.[14] In the end, however, the Court emphasized that the inquiry under Rule 702 is "a flexible one."[15] The Court expressed confidence in the adversarial system, noting that "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction

[9] 509 U.S. 579 (1993).
[10] Ibid., p. 589.
[11] Ibid., pp. 590 and 591 n.9 (emphasis omitted).
[12] Ibid., p. 595. In *General Electric Co. v. Joiner*, 522 U.S. 136, 146 (1997), the Court added: "[C]onclusions and methodology are not entirely distinct from one another. Trained experts commonly extrapolate from existing data. But nothing in *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert."
[13] *Daubert*, 509 U.S. at 589, 590 n.9, 595.
[14] Ibid., pp. 593-94.
[15] Ibid., p. 594. *In Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137 (1999), the Court confirmed that the *Daubert* factors do not constitute a definitive checklist or test. *Kumho Tire* importantly held that Rule 702 applies to both scientific and nonscientific expert testimony; the Court also indicated that the *Daubert* factors might be applicable in a trial judge's assessment of the reliability of nonscientific expert testimony, depending upon "the particular circumstances of the particular case at issue." Ibid., at 150.

on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence."[16] The Supreme Court has made it clear that trial judges have great discretion in deciding on the admissibility of evidence under Rule 702, and that appeals from *Daubert* rulings are subject to a very narrow abuse-of-discretion standard of review.[17] Most importantly, in *Kumho Tire Co., Ltd. v. Carmichael*, the Court stated that "whether *Daubert*'s specific factors are, or are not, reasonable measures of reliability in a particular case is a matter that the law grants the trial judge broad latitude to determine."[18]

*Daubert* and its progeny have engendered confusion and controversy. In particular, judicial dispositions of *Daubert*-type questions in criminal cases have been criticized by some lawyers and scholars who thought that the Supreme Court's decision would be applied more rigorously.[19] If one focuses solely on reported federal appellate decisions, the picture is not appealing to those who have preferred a more rigorous application of *Daubert*. Federal appellate courts have not with any consistency or clarity imposed standards ensuring the application of scientifically valid reasoning and reliable methodology in criminal cases involving *Daubert* questions. This is not really surprising, however. The Supreme Court itself described the *Daubert* standard as "flexible." This means that, beyond questions of relevance, *Daubert* offers appellate courts no clear substantive standard by which to review decisions by trial courts. As a result, trial judges exercise great discretion in deciding whether to admit or exclude expert testimony, and their judgments are subject only to a highly deferential "abuse of discretion" standard of review. Although it is difficult to get a clear picture of how trial courts handle *Daubert* challenges, because many evidentiary rulings are issued without a published opinion and without an appeal, the vast majority of the *reported* opinions in criminal cases indicate that trial judges rarely exclude or restrict expert testimony offered by prosecutors; most *reported* opinions also indicate that appellate courts routinely deny appeals contesting trial court decisions admitting forensic evidence against criminal defendants.[20] But the reported opinions do not offer in any way a complete sample of federal trial court dispositions of *Daubert*-type questions in criminal cases.

The situation appears to be very different in civil cases. Plaintiffs and defendants, equally, are more likely to have access to expert witnesses in civil cases, while prosecutors usually have an advantage over most defendants in offering expert testimony in criminal cases. And, ironically, the appellate courts appear to be more willing to second-guess trial court judgments on the admissibility of purported scientific evidence in civil cases than in criminal cases.[21]

Prophetically, the *Daubert* decision observed that "there are important differences between the quest for truth in the courtroom and the quest for truth in the laboratory. Scientific conclusions are subject to perpetual revision. Law, on the other hand, must resolve disputes finally and

[16] *Daubert*, 509 U.S. at 596.
[17] See *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 142-143 (1997).
[18] *Kumho Tire*, 526 U.S. at 153.
[19] See, e.g., P.J. Neufeld. 2005. The (near) irrelevance of *Daubert* to criminal justice: And some suggestions for reform. *American Journal of Public Health* 95(Supp.1):S107.
[20] Ibid., p. S109.
[21] See, e.g., *McClain v. Metabolife Int'l, Inc.*, 401 F.3d 1233 (11th Cir. 2005); *Chapman v. Maytag Corp.*, 297 F.3d 682 (7th Cir. 2002); *Goebel v. Denver & Rio Grande W. R.R. Co.*, 215 F.3d 1083 (10th Cir. 2000); *Smith v. Ford Motor Co.*, 215 F.3d 713 (7th Cir. 2000); *Walker v. Soo Line R.R. Co.*, 208 F.3d 581 (7th Cir. 2000); 1 D.L. Faigman, M.J. Saks, J. Sanders, and E.K. Cheng. 2007-2008. *Modern Scientific Evidence: The Law and Science of Expert Testimony.* Eagan, MN: Thomson/West, § 1.35, p. 105 (discussing studies suggesting that courts "employ *Daubert* more lackadaisically in criminal trials–especially in regard to prosecution evidence—than in civil cases—especially in regard to plaintiff evidence").

quickly."[22] But because accused parties in criminal cases are convicted on the basis of testimony from forensic science experts, much depends upon whether the evidence offered is reliable. Furthermore, in addition to protecting innocent persons from being convicted of crimes that they did not commit, we are also seeking to protect society from persons who have committed criminal acts. Law enforcement officials and the members of society they serve need to be assured that forensic techniques are *reliable*. Therefore, we must limit the risk of having the reliability of certain forensic science methodologies judicially certified before the techniques have been properly studied and their accuracy verified by the forensic science community. "[T]here is no evident reason why ['rigorous, systematic'] research would be infeasible."[23] However, some courts appear to be loath to insist on such research as a condition of admitting forensic science evidence in criminal cases, perhaps because to do so would likely "demand more by way of validation than the disciplines can presently offer."[24]

The adversarial process relating to the admission and exclusion of scientific evidence is not suited to the task of finding "scientific truth." The judicial system is encumbered by, among other things, judges and lawyers who generally lack the scientific expertise necessary to comprehend and evaluate forensic evidence in an informed manner, trial judges (sitting alone) who must decide evidentiary issues without the benefit of judicial colleagues and often with little time for extensive research and reflection, and the highly deferential nature of the appellate review afforded trial courts' *Daubert* rulings. Given these realities, there is a tremendous need for the forensic science community to improve. Judicial review, by itself, will not cure the infirmities of the forensic science community.[25] The development of scientific research, training, technology, and databases associated with DNA analysis have resulted from substantial and steady federal support for both academic research and programs employing techniques for DNA analysis. Similar support must be given to all credible forensic science disciplines if they are to achieve the degrees of reliability needed to serve the goals of justice. With more and better educational programs, accredited laboratories, certified forensic practitioners, sound operational principles and procedures, and serious research to establish the limits and measures of performance in each discipline, forensic science experts will be better able to analyze evidence and coherently report their findings in the courts. The current situation, however, is seriously wanting, both because of the limitations of the judicial system and because of the many problems faced by the forensic science community.

**Political Realities**

Most forensic science methods, programs, and evidence are within the regulatory province of state and local law enforcement entities or are covered by statutes and rules governing state judicial proceedings. Thus, in assessing the strengths, weaknesses, and future needs of forensic disciplines,

[22] *Daubert*, 509 U.S. at 596-97.

[23] J. Griffin and D.J. LaMagna. 2002. *Daubert* challenges to forensic evidence: Ballistics next on the firing line. *The Champion*, September-October:20, 21 (quoting P. Giannelli and E. Imwinkelried. 2000. Scientific evidence: The fallout from Supreme Court's decision in *Kumho Tire*. *Criminal Justice Magazine* 14(4):12, 40).

[24] Ibid. See, e.g., *United States v. Crisp*, 324 F.3d 261, 270 (4th Cir. 2003) (noting "that while further research into fingerprint analysis would be welcome, to postpone present in-court utilization of this bedrock forensic identifier pending such research would be to make the best the enemy of the good." (internal quotation marks omitted)).

[25] See J.L. Mnookin. Expert evidence, partisanship, and epistemic competence. 73 BROOK. L. REV. 1009, 1033 (2008) ("[S]o long as we have our adversarial system in much its present form, we are inevitably going to be stuck with approaches to expert evidence that are imperfect, conceptually unsatisfying, and awkward. It may well be that the real lesson is this: those who believe that we might ever fully resolve—rather than imperfectly manage—the deep structural tensions surrounding both partisanship and epistemic competence that permeate the use of scientific evidence within our legal system are almost certainly destined for disappointment.").

and in making recommendations for improving the use of forensic technologies and techniques, the committee remained mindful of the fact that Congress cannot directly fix all of the deficiencies in the forensic science community. Under our federal system of government, Congress does not have free reign to amend state criminal codes, rules of evidence, and statutes governing civil actions; nor may it easily and directly regulate local law enforcement practices, state and local medical examiner units, or state policies covering the accreditation of crime laboratories and the certification of forensic practitioners.

Congress' authority to act is significant, however. Forensic science programs in federal government entities—whether within DOJ, DHS, DOD, or the Department of Commerce (DOC)—are funded by congressional appropriations. If these programs are required to operate pursuant to the highest standards, they will provide an example for the states. More importantly, Congress can promote "best practices" and strong educational, certification, accreditation, ethics, and oversight programs in the states by offering funds that are contingent on meeting appropriate standards of practice. There is every reason to believe that offers of federal funds with "strings attached" can effect significant change in the forensic science community, because so many state and local programs currently are suffering for want of adequate resources. In the end, however, the committee recognized that state and local authorities must be willing to enforce change if it is to happen.

In light of the foregoing issues, the committee exercised caution before drawing conclusions and avoided being too prescriptive in its recommendations. It also recognized that, given the complexity of the issues and the political realities that may pose obstacles to change, some recommendations will have to be implemented creatively and over time in order to be effective.

## FINDINGS AND RECOMMENDATIONS

### The Fragmented System: Symptoms and Cures

The forensic science disciplines currently are an assortment of methods and practices used in both the public and private arenas. Forensic science facilities exhibit wide variability in capacity, oversight, staffing, certification, and accreditation across federal and state jurisdictions. Too often they have inadequate educational programs, and they typically lack mandatory and enforceable standards, founded on rigorous research and testing, certification requirements, and accreditation programs. Additionally, forensic science and forensic pathology research, education, and training lack strong ties to our research universities and national science assets. In addition to the problems emanating from the fragmentation of the forensic science community, the most recently published *Census of Crime Laboratories* conducted by BJS describes unacceptable case backlogs in state and local crime laboratories and estimates the level of additional resources needed to handle these backlogs and prevent their recurrence. Unfortunately, the backlogs, even in DNA case processing, have grown dramatically in recent years and are now staggering in some jurisdictions. The most recently published BJS *Special Report of Medical Examiners and Coroners' Offices* also depicts a system with disparate and often inadequate educational and training requirements, resources, and capacities—in short, a system in need of significant improvement.

Existing data suggest that forensic laboratories are under resourced and understaffed, which contributes to case backlogs and likely makes it difficult for laboratories to do as much as they could to (1) inform investigations, (2) provide strong evidence for prosecutions, and (3) avoid errors that could lead to imperfect justice. Being under resourced also means that the tools of forensic science—and the knowledge base that underpins the analysis and interpretation of evidence—are not

as strong as they could be, thus hindering the ability of the forensic science disciplines to excel at informing investigations, providing strong evidence, and avoiding errors in important ways. NIJ is the only federal agency that provides direct support to crime laboratories to alleviate the backlog, and those funds are minimal. The forensic science system is under resourced also in the sense that it has only thin ties to an academic research base that could support the forensic science disciplines and fill knowledge gaps. There are many hard-working and conscientious people in the forensic science community, but this under resourcing inherently limits their ability to do their best work. Additional resources surely will be necessary to create high-quality, self-correcting systems.

However, increasing the staff within existing crime laboratories and medical examiners' offices is only part of the solution. What also is needed is an upgrading of systems and organizational structures, better training, the widespread adoption of uniform and enforceable best practices, and mandatory certification and accreditation programs. The forensic science community and the medical examiner/coroner system must be upgraded if forensic practitioners are to be expected to serve the goals of justice.

Of the various facets of under resourcing, the committee is most concerned about the knowledge base. Adding more dollars and people to the enterprise might reduce case backlogs, but it will not address fundamental limitations in the capabilities of forensic science disciplines to discern valid information from crime scene evidence. For the most part, it is impossible to discern the magnitude of those limitations, and reasonable people will differ on their significance.

Forensic science research is not well supported, and there is no unified strategy for developing a forensic science research plan across federal agencies. Relative to other areas of science, the forensic disciplines have extremely limited opportunities for research funding. Although the FBI and NIJ have supported some research in forensic science, the level of support has been well short of what is necessary for the forensic science community to establish strong links with a broad base of research universities. Moreover, funding for academic research is limited and requires law enforcement collaboration, which can inhibit the pursuit of more fundamental scientific questions essential to establishing the foundation of forensic science. The broader research community generally is not engaged in conducting research relevant to advancing the forensic science disciplines.

The forensic science enterprise also is hindered by its extreme disaggregation—marked by multiple types of practitioners with different levels of education and training and different professional cultures and standards for performance and a reliance on apprentice-type training and a guild-like structure of disciplines, which work against the goal of a single forensic science profession. Many forensic scientists are given scant opportunity for professional activities, such as attending conferences or publishing their research, which could help strengthen the professional community and offset some of the disaggregation. The fragmented nature of the enterprise raises the worrisome prospect that the quality of evidence presented in court, and its interpretation, can vary unpredictably according to jurisdiction.

Numerous professional associations are organized around the forensic science disciplines, and many of them are involved in training and education (see Chapter 8) and are developing standards and accreditation and certification programs (see Chapter 7). The efforts of these groups are laudable. However, except for the largest organizations, it is not clear how these associations interact or the extent to which they share requirements, standards, or policies. Thus, there is a need for more consistent and harmonized requirements.

In the course of its deliberations and review of the forensic science enterprise, it became obvious to the committee that, although congressional action will not remedy all of the deficiencies in forensic science methods and practices, truly meaningful advances will not come without

significant concomitant leadership from the federal government. The forensic science enterprise lacks the necessary governance structure to pull itself up from its current weaknesses. Of the many professional societies that serve the enterprise, none is dominant, and none has clearly articulated the need for change or presented a vision for accomplishing it. And clearly no municipal or state forensic office has the mandate to lead the entire enterprise. The major federal resources—NIJ and the FBI Laboratory—have provided modest leadership, for which they should be commended: NIJ has contributed a helpful research program and the FBI Laboratory has spearheaded the SWGs. But again, neither entity has recognized, let alone articulated, a need for change or a vision for achieving it. Neither has the full confidence of the larger forensic science community. And because both are part of a prosecutorial department of the government, they could be subject to subtle contextual biases that should not be allowed to undercut the power of forensic science.

The forensic science enterprise needs strong governance to adopt and promote an aggressive, long-term agenda to help strengthen the forensic science disciplines. Governance must be strong enough—and independent enough—to identify the limitations of forensic science methodologies, and must be well connected with the Nation's scientific research base to effect meaningful advances in forensic science practices. The governance structure must be able to create appropriate incentives for jurisdictions to adopt and adhere to best practices and promulgate the necessary sanctions to discourage bad practices. It must have influence with educators in order to effect improvements to forensic science education. It must be able to identify standards and enforce them. A governance entity must be geared toward (and be credible within) the law enforcement community, but it must have strengths that extend beyond that area. Oversight of the forensic science community and medical examiner system will sweep broadly into areas of criminal investigation and prosecution, civil litigation, legal reform, investigation of insurance claims, national disaster planning and preparedness, homeland security, certification of federal, state, and local forensic practitioners, public health, accreditation of public and private laboratories, research to improve forensic methodologies, education programs in colleges and universities, and advancing technology.

The committee considered whether such a governing entity could be established within an existing federal agency. The National Science Foundation (NSF) was considered because of its strengths in leading research and its connections to the research and education communities. NSF is surely capable of building and sustaining a research base, but it has very thin ties to the forensic science community. It would be necessary for NSF to take many untested steps if it were to assume responsibility for the governance of applied fields of science. The committee also considered NIST. In the end analysis, however, NIST did not appear to be a viable option. It has a good program of research targeted at forensic science and law enforcement, but the program is modest. NIST also has strong ties to industry and academia, and it has an eminent history in standard setting and method development. But its ties to the forensic science community are still limited, and it would not be seen as a natural leader by the scholars, scientists, and practitioners in the field. In sum, the committee concluded that neither NSF nor NIST has the breadth of experience or institutional capacity to establish an effective governance structure for the forensic science enterprise.

There was also a strong consensus in the committee that no existing or new division or unit within DOJ would be an appropriate location for a new entity governing the forensic science community. DOJ's principal mission is to enforce the law and defend the interests of the United States according to the law. Agencies within DOJ operate pursuant to this mission. The FBI, for example, is the investigative arm of DOJ and its principal missions are to produce and use intelligence to protect the Nation from threats and to bring to justice those who violate the law. The work of these law enforcement units is critically important to the Nation, but the scope of the work

done by DOJ units is much narrower than the promise of a strong forensic science community. Forensic science serves more than just law enforcement; and when it does serve law enforcement, it must be equally available to law enforcement officers, prosecutors, *and* defendants in the criminal justice system. The entity that is established to govern the forensic science community cannot be principally beholden to law enforcement. The potential for conflicts of interest between the needs of law enforcement and the broader needs of forensic science are too great. In addition, the committee determined that the research funding strategies of DOJ have not adequately served the broad needs of the forensic science community. This is understandable, but not acceptable when the issue is whether an agency is best suited to support and oversee the Nation's forensic science community. In sum, the committee concluded that advancing *science* in the forensic science enterprise is not likely to be achieved within the confines of DOJ.

Furthermore, there is little doubt that some existing federal entities are too wedded to the current "fragmented" forensic science community, which is deficient in too many respects. Most notably, these existing agencies have failed to pursue a rigorous research agenda to confirm the evidentiary reliability of methodologies used in a number of forensic science disciplines. These agencies are not good candidates to oversee the overhaul of the forensic science community in the United States.

Finally, some existing federal agencies with other missions occasionally have undertaken projects affecting the forensic science community. These entities are better left to continue the good work that defines their principal missions. More responsibility is not better for these existing entities, nor would it be better for the forensic science community or the Nation.

The committee thus concluded that the problems at issue are too serious and important to be subsumed by an existing federal agency. It also concluded that no existing federal agency has the capacity or appropriate mission to take on the roles and responsibilities needed to govern and improve the forensic science enterprise.

The committee believes that what is needed to support and oversee the forensic science community is a new, strong, and independent entity that could take on the tasks that would be assigned to it in a manner that is as objective and free of bias as possible—one with no ties to the past and with the authority and resources to implement a fresh agenda designed to address the problems found by the committee and discussed in this report. A new organization should not be encumbered by the assumptions, expectations, and deficiencies of the existing fragmented infrastructure, which has failed to address the needs and challenges of the forensic science disciplines.

This new entity must be an independent federal agency established to address the needs of the forensic science community, and it must meet the following minimum criteria:

- It must have a culture that is strongly rooted in science, with strong ties to the national research and teaching communities, including federal laboratories.
- It must have strong ties to state and local forensic entities as well as to the professional organizations within the forensic science community.
- It must not be in any way committed to the existing system, but should be informed by its experiences.
- It must not be part of a law enforcement agency.
- It must have the funding, independence, and sufficient prominence to raise the profile of the forensic science disciplines and push effectively for improvements.

- It must be led by persons who are skilled and experienced in developing and executing national strategies and plans for standard setting; managing accreditation and testing processes; and developing and implementing rulemaking, oversight, and sanctioning processes.

No federal agency currently exists that meets all of these criteria.

**Recommendation 1:**

**To promote the development of forensic science into a mature field of multidisciplinary research and practice, founded on the systematic collection and analysis of relevant data, Congress should establish and appropriate funds for an independent federal entity, the National Institute of Forensic Science (NIFS). NIFS should have a full-time administrator and an advisory board with expertise in research and education, the forensic science disciplines, physical and life sciences, forensic pathology, engineering, information technology, measurements and standards, testing and evaluation, law, national security, and public policy. NIFS should focus on:**

**(a) establishing and enforcing best practices for forensic science professionals and laboratories;**
**(b) establishing standards for the mandatory accreditation of forensic science laboratories and the mandatory certification of forensic scientists and medical examiners/forensic pathologists—and identifying the entity/entities that will develop and implement accreditation and certification;**
**(c) promoting scholarly, competitive peer-reviewed research and technical development in the forensic science disciplines and forensic medicine;**
**(d) developing a strategy to improve forensic science research and educational programs, including forensic pathology;**
**(e) establishing a strategy, based on accurate data on the forensic science community, for the efficient allocation of available funds to give strong support to forensic methodologies and practices in addition to DNA analysis;**
**(f) funding state and local forensic science agencies, independent research projects, and educational programs as recommended in this report, with conditions that aim to advance the credibility and reliability of the forensic science disciplines;**
**(g) overseeing education standards and the accreditation of forensic science programs in colleges and universities;**
**(h) developing programs to improve understanding of the forensic science disciplines and their limitations within legal systems; and**
**(i) assessing the development and introduction of new technologies in forensic investigations, including a comparison of new technologies with former ones.**

The benefits that will flow from a strong, independent, strategic, coherent, and well-funded federal program to support and oversee the forensic science disciplines in this country are clear: The Nation will (1) bolster its ability to more accurately identify true perpetrators and exclude those who are falsely accused; (2) improve its ability to effectively respond to, attribute, and prosecute threats to homeland security; and (3) reduce the likelihood of convictions resting on inaccurate data. Moreover, establishing the scientific foundation of the forensic science disciplines, providing better education and training, and requiring certification and accreditation will position the forensic science community to take advantage of current and future scientific advances.

The creation of a new federal entity undoubtedly will pose challenges, not the least of which will be budgetary constraints. The committee is not in a position to estimate how much it will cost to implement the recommendations in this report; this is a matter best left to the expertise of the Congressional Budget Office. What is clear, however, is that Congress must take aggressive action if the worst ills of the forensic science community are to be cured. Political and budgetary concerns should not deter bold, creative, and forward-looking action, because the country cannot afford to suffer the consequences of inaction. It will also take time and patience to implement the recommendations in this report. But this is true with any large, complex, important, and challenging enterprise.

The committee strongly believes that the greatest hope for success in this enterprise will come with the creation of the National Institute of Forensic Science (NIFS) to oversee and direct the forensic science community. The remaining recommendations in this report are crucially tied to the creation of NIFS. However, each recommendation is a separate, essential piece of the plan to improve the forensic science community in the United States. Therefore, even if the creation of NIFS is forestalled, the committee vigorously supports the adoption of the core ideas and principles embedded in each of the following recommendations.

*Standardized Terminology and Reporting*

The terminology used in reporting and testifying about the results of forensic science investigations must be standardized. Many terms are used by forensic scientists in scientific reports and in court testimony that describe findings, conclusions, and degrees of association between evidentiary material (e.g., hairs, fingerprints, fibers) and particular people or objects. Such terms include, but are not limited to "match," "consistent with," "identical," "similar in all respects tested," and "cannot be excluded as the source of." The use of such terms can and does have a profound effect on how the trier of fact in a criminal or civil matter perceives and evaluates scientific evidence. Although some forensic science disciplines have proposed reporting vocabulary and scales, the use of the recommended language is not standard practice among forensic science practitioners.

As a general matter, laboratory reports generated as the result of a scientific analysis should be complete and thorough. They should contain, at minimum, "methods and materials," "procedures," "results," "conclusions," and, as appropriate, sources and magnitudes of uncertainty in the procedures and conclusions (e.g., levels of confidence). Some forensic science laboratory reports meet this standard of reporting, but many do not. Some reports contain only identifying and agency information, a brief description of the evidence being submitted, a brief description of the types of analysis requested, and a short statement of the results (e.g., "the greenish, brown plant material in item #1 was identified as marijuana"), and they include no mention of methods or any discussion of measurement uncertainties.

Many clinical and testing disciplines outside the forensic science disciplines have standards, templates, and protocols for data reporting. A good example is the ISO/IEC 17025 standard

(commonly called "ISO 17025"). ISO 17025 is an international standard published by the International Organization for Standardization (ISO) that specifies the general requirements for the competence to carry out tests and/or calibrations. These requirements have been used by accrediting agencies to determine what a laboratory must do to secure accreditation. In addition, some SWGs in the forensic disciplines have scoring systems for reporting findings, but these systems are neither uniformly nor consistently used. In other words, although appropriate standards exist, they are not always followed. Forensic reports, and any courtroom testimony stemming from them, must include clear characterizations of the limitations of the analyses, including measures of uncertainty in reported results and associated estimated probabilities where possible.

**Recommendation 2:**

> **The National Institute of Forensic Science (NIFS), after reviewing established standards such as ISO 17025, and in consultation with its advisory board, should establish standard terminology to be used in reporting on and testifying about the results of forensic science investigations. Similarly, it should establish model laboratory reports for different forensic science disciplines and specify the minimum information that should be included. As part of the accreditation and certification processes, laboratories and forensic scientists should be required to utilize model laboratory reports when summarizing the results of their analyses.**

*More and Better Research*

As noted above, some forensic science disciplines are supported by little rigorous systematic research to validate the discipline's basic premises and techniques. There is no evident reason why such research cannot be conducted. Much more federal funding is needed to support research in the forensic science disciplines and forensic pathology in universities and private laboratories committed to such work.

The forensic science and medical examiner communities will be improved by opportunities to collaborate with the broader science and engineering communities. In particular, there is an urgent need for collaborative efforts to (1) develop new technical methods or provide in-depth grounding for advances developed in the forensic science disciplines; (2) provide an interface between the forensic science and medical examiner communities and basic sciences; and (3) create fertile ground for discourse among the communities. NIFS should recommend, implement, and guide strategies for supporting such initiatives.

**Recommendation 3:**

> **Research is needed to address issues of accuracy, reliability, and validity in the forensic science disciplines. The National Institute of Forensic Science (NIFS) should competitively fund peer-reviewed research in the following areas:**
>
> **(a) Studies establishing the scientific bases demonstrating the validity of forensic methods.**
> **(b) The development and establishment of quantifiable measures of the reliability and accuracy of forensic analyses. Studies of the reliability and accuracy of forensic techniques should reflect actual practice on realistic**

**case scenarios, averaged across a representative sample of forensic scientists and laboratories. Studies also should establish the limits of reliability and accuracy that analytic methods can be expected to achieve as the conditions of forensic evidence vary. The research by which measures of reliability and accuracy are determined should be peer reviewed and published in respected scientific journals.**

**(c) The development of quantifiable measures of uncertainty in the conclusions of forensic analyses.**

**(d) Automated techniques capable of enhancing forensic technologies.**

To answer questions regarding the reliability and accuracy of a forensic analysis, the research needs to distinguish between average performance (achieved across individual practitioners and laboratories) and individual performance (achieved by the specific practitioner and laboratory). Whether a forensic procedure is sufficient under the rules of evidence governing criminal and civil litigation raises difficult legal issues that are outside the realm of scientific inquiry. (Some of the legal issues are addressed in Chapter 3.)

*Best Practices and Standards*

Although there have been notable efforts to achieve standardization and develop best practices in some forensic science disciplines and the medical examiner system, most disciplines still lack best practices or any coherent structure for the enforcement of operating standards, certification, and accreditation. Standards and codes of ethics exist in some fields, and there are some functioning certification and accreditation programs, but none are mandatory. In short, oversight and enforcement of operating standards, certification, accreditation, and ethics are lacking in most local and state jurisdictions.

Scientific and medical assessment conducted in forensic investigations should be independent of law enforcement efforts either to prosecute criminal suspects or even to determine whether a criminal act has indeed been committed. Administratively, this means that forensic scientists should function independently of law enforcement administrators. The best science is conducted in a scientific setting as opposed to a law enforcement setting. Because forensic scientists often are driven in their work by a need to answer a particular question related to the issues of a particular case, they sometimes face pressure to sacrifice appropriate methodology for the sake of expediency.

**Recommendation 4:**

**To improve the scientific bases of forensic science examinations and to maximize independence from or autonomy within the law enforcement community, Congress should authorize and appropriate incentive funds to the National Institute of Forensic Science (NIFS) for allocation to state and local jurisdictions for the purpose of removing all public forensic laboratories and facilities from the administrative control of law enforcement agencies or prosecutors' offices.**

**Recommendation 5:**

**The National Institute of Forensic Science (NIFS) should encourage research programs on human observer bias and sources of human error in forensic examinations. Such programs might include studies to determine the effects of contextual bias in forensic practice (e.g., studies to determine whether and to what extent the results of forensic analyses are influenced by knowledge regarding the background of the suspect and the investigator's theory of the case). In addition, research on sources of human error should be closely linked with research conducted to quantify and characterize the amount of error. Based on the results of these studies, and in consultation with its advisory board, NIFS should develop standard operating procedures (that will lay the foundation for model protocols) to minimize, to the greatest extent reasonably possible, potential bias and sources of human error in forensic practice. These standard operating procedures should apply to all forensic analyses that may be used in litigation.**

**Recommendation 6:**

**To facilitate the work of the National Institute of Forensic Science (NIFS), Congress should authorize and appropriate funds to NIFS to work with the National Institute of Standards and Technology (NIST), in conjunction with government laboratories, universities, and private laboratories, and in consultation with Scientific Working Groups, to develop tools for advancing measurement, validation, reliability, information sharing, and proficiency testing in forensic science and to establish protocols for forensic examinations, methods, and practices. Standards should reflect best practices and serve as accreditation tools for laboratories and as guides for the education, training, and certification of professionals. Upon completion of its work, NIST and its partners should report findings and recommendations to NIFS for further dissemination and implementation.**

*Quality Control, Assurance, and Improvement*

In a field such as medical diagnostics, a health care provider typically can track a patient's progress to see whether the original diagnosis was accurate and helpful. For example, widely accepted programs of quality control ensure timely feedback involving the diagnoses that result from mammography. Other examples of quality assurance and improvement—including the development of standardized vocabularies, ontologies, and scales for interpreting diagnostic tests and developing standards for accreditation of services—pervade diagnostic medicine. This type of systematic and routine feedback is an essential element of any field striving for continuous improvement. The forensic science disciplines likewise must become a self-correcting enterprise, developing and implementing feedback loops that allow the profession to discover past mistakes. A particular need exists for routine, mandatory proficiency testing that emulates a realistic, representative cross-section of casework, for example, DNA proficiency testing.

**Recommendation 7**:

> **Laboratory accreditation and individual certification of forensic science professionals should be mandatory, and all forensic science professionals should have access to a certification process. In determining appropriate standards for accreditation and certification, the National Institute of Forensic Science (NIFS) should take into account established and recognized international standards, such as those published by the International Organization for Standardization (ISO). No person (public or private) should be allowed to practice in a forensic science discipline or testify as a forensic science professional without certification. Certification requirements should include, at a minimum, written examinations, supervised practice, proficiency testing, continuing education, recertification procedures, adherence to a code of ethics, and effective disciplinary procedures. All laboratories and facilities (public or private) should be accredited, and all forensic science professionals should be certified, when eligible, within a time period established by NIFS.**

**Recommendation 8:**

> **Forensic laboratories should establish routine quality assurance and quality control procedures to ensure the accuracy of forensic analyses and the work of forensic practitioners. Quality control procedures should be designed to identify mistakes, fraud, and bias; confirm the continued validity and reliability of standard operating procedures and protocols; ensure that best practices are being followed; and correct procedures and protocols that are found to need improvement.**

*Codes of Ethics*

A number of forensic science organizations—such as AAFS, the Midwestern Association of Forensic Scientists, ASCLD, and NAME—have adopted codes of ethics. The codes that exist are sometimes comprehensive, but they vary in content. While there is no reason to doubt that many forensic scientists understand their ethical obligations and practice in an ethical way, there are no consistent mechanisms for enforcing any of the existing codes of ethics. Many jurisdictions do not require certification in the same way that, for example, states require lawyers to be licensed. Therefore, few forensic science practitioners face the threat of official sanctions or loss of certification for serious ethical violations. And it is unclear whether and to what extent forensic science practitioners are required to adhere to ethics standards as a condition of employment.

**Recommendation 9:**

> **The National Institute of Forensic Science (NIFS), in consultation with its advisory board, should establish a national code of ethics for all forensic science disciplines and encourage individual societies to incorporate this national code as part of their professional code of ethics. Additionally, NIFS should explore mechanisms of enforcement for those forensic scientists who commit serious ethical violations. Such a code could be enforced through a certification process for forensic scientists.**

*Insufficient Education and Training*

Forensic science examiners need to understand the principles, practices, and contexts of scientific methodology, as well as the distinctive features of their specialty. Ideally, training should move beyond apprentice-like transmittal of practices to education based on scientifically valid principles. In addition to the practical experience and learning acquired during an internship, a trainee should acquire rigorous interdisciplinary education and training in the scientific areas that constitute the basis for the particular forensic discipline and instruction on how to document and report the analysis. A trainee also should have working knowledge of basic quantitative calculations, including statistics and probability, as needed for the applicable discipline.

To correct some of the existing deficiencies, it is crucially important to improve undergraduate and graduate forensic science programs. Legitimization of practices in forensic disciplines must be based on established scientific knowledge, principles, and practices, which are best learned through formal education. Apprenticeship has a secondary role, and under no circumstances can it supplant the need for the scientific basis of education in and the practice of forensic science.

In addition, lawyers and judges often have insufficient training and background in scientific methodology, and they often fail to fully comprehend the approaches employed by different forensic science disciplines and the reliability of forensic science evidence that is offered in trial. Such training is essential, because any checklist for the admissibility of scientific or technical testimony is imperfect. Conformance with items on a checklist can suggest that testimony is reliable, but it does not guarantee it. Better connections must be established and promoted between experts in the forensic science disciplines and law schools, legal scholars, and practitioners. The fruits of any advances in the forensic science disciplines should be transferred directly to legal scholars and practitioners (including civil litigators, prosecutors, and criminal defense counsel), federal, state, and local legislators, members of the judiciary, and law enforcement officials, so that appropriate adjustments can be made in criminal and civil laws and procedures, model jury instructions, law enforcement practices, litigation strategies, and judicial decisionmaking. Law schools should enhance this connection by offering courses in the forensic science disciplines, by offering credit for forensic science courses taken in other colleges, and by developing joint degree programs. And judges need to be better educated in forensic science methodologies and practices.

**Recommendation 10:**

**To attract students in the physical and life sciences to pursue graduate studies in multidisciplinary fields critical to forensic science practice, Congress should authorize and appropriate funds to the National Institute of Forensic Science (NIFS) to work with appropriate organizations and educational institutions to improve and develop graduate education programs designed to cut across organizational, programmatic, and disciplinary boundaries. To make these programs appealing to potential students, they must include attractive scholarship and fellowship offerings. Emphasis should be placed on developing and improving research methods and methodologies applicable to forensic science practice and on funding research programs to attract research universities and students in fields relevant to forensic science. NIFS should also support law school administrators and judicial education organizations in establishing continuing legal education programs for law students, practitioners, and judges.**

*The Medicolegal Death Investigation System*

Although steps have been taken to transform the medicolegal death investigation system, the shortage of resources and lack of consistent educational and training requirements (particularly in the coroner system)[26] prevent the system from taking full advantage of tools—such as CT scans and digital X-rays—that the medical system and other scientific disciplines have to offer. In addition, more rigorous efforts are needed in the areas of accreditation and adherence to standards. Currently, requirements for practitioners vary from nothing more than age and residency requirements to certification by the American Board of Pathology in forensic pathology.

Funds are needed to assess the medicolegal death investigation system to determine its status and needs, using as a benchmark the current requirements of NAME relating to professional credentials, standards, and accreditation. And funds are needed to modernize and improve the medicolegal death investigation system. As it now stands, medical examiners and coroners (ME/Cs) are essentially ineligible for direct federal funding and grants from DOJ, DHS, or the Department of Health and Human Services (through the National Institutes of Health). The Paul Coverdell National Forensic Science Improvement Act is the only federal grant program that names medical examiners and coroners as eligible for grants. However, ME/Cs must compete with public safety agencies for Coverdell grants; as a result, the funds available to ME/Cs are inadequate. The simple reality is that the program has not been sufficiently funded to provide significant improvements in ME/C systems.

In addition to direct funding, there are other initiatives that should be pursued to improve the medicolegal death investigation system. The Association of American Medical Colleges and other appropriate professional organizations should organize collaborative activities in education, training, and research to strengthen the relationship between the medical examiner community and its counterparts in the larger academic medical community. Medical examiner offices with training programs affiliated with medical schools should be eligible to compete for funds. Funding should be available to support pathologists seeking forensic fellowships. In addition, forensic pathology fellows could be allowed to apply for medical school loan forgiveness if they stay full time at a medical examiner's office for a reasonable period of time.

Additionally, NIFS should seek funding from Congress to support the joint development of programs to include medical examiners and medical examiner offices in national disaster planning, preparedness, and consequence management, involving the Centers for Disease Control and Prevention (CDC) and DHS. Uniform statewide and interstate standards of operation would be needed to assist in the management of cross-jurisdictional and interstate events. NIFS should support a federal program underwriting the development of software for use by ME/C systems for the management of multisite, multiple fatality events.

NIFS should work with groups such as the National Conference of Commissioners on Uniform State Laws, the American Law Institute, and NAME, in collaboration with other appropriate professional groups, to update the 1954 Model Post-Mortem Examinations Act and draft legislation for a modern model death investigation code. An improved code might, for example, include the elements of a competent medical death investigation system and clarify the jurisdiction of the medical examiner with respect to organ donation.

The foregoing ideas must be developed further before any concrete plans can be pursued. There are, however, a number of specific recommendations, which, if adopted, will help to modernize and improve the medicolegal death investigation system. These recommendations deserve the immediate attention of Congress and NIFS.

[26] Institute of Medicine. 2003. *Workshop on the Medicolegal Death Investigation System*. Washington, DC: National Academies Press.

**Recommendation 11:**

**To improve medicolegal death investigation:**

**(a) Congress should authorize and appropriate incentive funds to the National Institute of Forensic Science (NIFS) for allocation to states and jurisdictions to establish medical examiner systems, with the goal of replacing and eventually eliminating existing coroner systems. Funds are needed to build regional medical examiner offices, secure necessary equipment, improve administration, and ensure the education, training, and staffing of medical examiner offices. Funding could also be used to help current medical examiner systems modernize their facilities to meet current Centers for Disease Control and Prevention-recommended autopsy safety requirements.**

**(b) Congress should appropriate resources to the National Institutes of Health (NIH) and NIFS, jointly, to support research, education, and training in forensic pathology. NIH, with NIFS participation, or NIFS in collaboration with content experts, should establish a study section to establish goals, to review and evaluate proposals in these areas, and to allocate funding for collaborative research to be conducted by medical examiner offices and medical universities. In addition, funding, in the form of medical student loan forgiveness and/or fellowship support, should be made available to pathology residents who choose forensic pathology as their specialty.**

**(c) NIFS, in collaboration with NIH, the National Association of Medical Examiners, the American Board of Medicolegal Death Investigators, and other appropriate professional organizations, should establish a Scientific Working Group (SWG) for forensic pathology and medicolegal death investigation. The SWG should develop and promote standards for best practices, administration, staffing, education, training, and continuing education for competent death scene investigation and postmortem examinations. Best practices should include the utilization of new technologies such as laboratory testing for the molecular basis of diseases and the implementation of specialized imaging techniques.**

**(d) All medical examiner offices should be accredited pursuant to NIFS-endorsed standards within a timeframe to be established by NIFS.**

**(e) All federal funding should be restricted to accredited offices that meet NIFS-endorsed standards or that demonstrate significant and measurable progress in achieving accreditation within prescribed deadlines.**

**(f) All medicolegal autopsies should be performed or supervised by a board certified forensic pathologist. This requirement should take effect within a timeframe to be established by NIFS, following consultation with governing state institutions.**

*AFIS and Database Interoperability*

Great improvement is necessary in AFIS interoperability. Crimes may go unsolved today simply because it is not possible for investigating agencies to search across all the databases that might hold a suspect's fingerprints or that may contain a match for an unidentified latent print from a

crime scene. It is also possible that some individuals have been wrongly convicted because of the limitations of fingerprint searches.

At present, serious practical problems pose obstacles to the achievement of nationwide AFIS interoperability. These problems include convincing AFIS equipment vendors to cooperate and collaborate with the law enforcement community and researchers to create and use baseline standards for sharing fingerprint data and create a common interface. Second, law enforcement agencies lack the resources needed to transition to interoperable AFIS implementations. Third, coordinated jurisdictional agreements and public policies are needed to allow law enforcement agencies to share fingerprint data more broadly.

Given the disparity in resources and information technology expertise available to local, state, and federal law enforcement agencies, the relatively slow pace of interoperability efforts to date, and the potential gains from increased AFIS interoperability, the committee believes that a broad-based emphasis on achieving nationwide fingerprint data interoperability is needed.

**Recommendation 12:**

**Congress should authorize and appropriate funds for the National Institute of Forensic Science (NIFS) to launch a new broad-based effort to achieve nationwide fingerprint data interoperability. To that end, NIFS should convene a task force comprising relevant experts from the National Institute of Standards and Technology and the major law enforcement agencies (including representatives from the local, state, federal, and, perhaps, international levels) and industry, as appropriate, to develop:**

**(a) standards for representing and communicating image and minutiae data among Automated Fingerprint Identification Systems. Common data standards would facilitate the sharing of fingerprint data among law enforcement agencies at the local, state, federal, and even international levels, which could result in more solved crimes, fewer wrongful identifications, and greater efficiency with respect to fingerprint searches; and**

**(b) baseline standards—to be used with computer algorithms—to map, record, and recognize features in fingerprint images, and a research agenda for the continued improvement, refinement, and characterization of the accuracy of these algorithms (including quantification of error rates).**

These steps toward AFIS interoperability must be accompanied by federal, state, and local funds to support jurisdictions in upgrading, operating, and ensuring the integrity and security of their systems; retraining current staff; and training new fingerprint examiners to gain the desired benefits of true interoperability. Additionally, greater scientific benefits can be realized through the availability of fingerprint data or databases for research purposes (using, of course, all the modern security and privacy protections available to scientists when working with such data). Once created, NIFS might also be tasked with the maintenance and periodic review of the new standards and procedures.

*Forensic Science Disciplines and Homeland Security*

Good forensic science and medical examiner practices are of clear value from a homeland security perspective, because of their roles in bringing criminals to justice and in dealing with the effects of natural and human-made mass disasters. Forensic science techniques (e.g., the evaluation of DNA fragments) enable more thorough investigations of crime scenes that have been damaged physically. Routine and trustworthy collection of digital evidence, and improved techniques and timeliness for its analysis, can be of great potential value in identifying terrorist activity. Therefore, the forensic science community has a role to play in homeland security. However, to capitalize on this potential, the forensic science and medical examiner communities must be well interfaced with homeland security efforts, so that they can contribute when needed. To be successful, this interface will require the establishment of good working relationships between federal, state, and local jurisdictions, the creation of strong security programs to protect data transmittals between jurisdictions, the development of additional training for forensic scientists and crime scene investigators, and the promulgation of contingency plans that will promote efficient team efforts on demand. Policy issues relating to the enforcement of homeland security are not within the scope of the committee's charge and, thus, are beyond the scope of the report. It can hardly be doubted, however, that improvements in the forensic science community and medical examiner system could greatly enhance the capabilities of homeland security.

**Recommendation 13:**

**Congress should provide funding to the National Institute of Forensic Science (NIFS) to prepare, in conjunction with the Centers for Disease Control and Prevention and the Federal Bureau of Investigation, forensic scientists and crime scene investigators for their potential roles in managing and analyzing evidence from events that affect homeland security, so that maximum evidentiary value is preserved from these unusual circumstances and the safety of these personnel is guarded. This preparation also should include planning and preparedness (to include exercises) for the interoperability of local forensic personnel with federal counterterrorism organizations.**

# EXHIBIT M

U.S. Department of Justice
Office of Justice Programs
*National Institute of Justice*

JUNE 2011

**NIJ**

Special **REPORT**

# The National Institute of Justice Response to the Report of the National Research Council: *Strengthening the National Institute of Justice*

www.nij.gov

**Office of Justice Programs**
Innovation • Partnerships • Safer Neighborhoods
*www.ojp.usdoj.gov*

**U.S. Department of Justice**
**Office of Justice Programs**
810 Seventh Street N.W.
Washington, DC 20531

**Eric H. Holder, Jr.**
*Attorney General*

**Laurie O. Robinson**
*Assistant Attorney General*

**John H. Laub**
*Director, National Institute of Justice*

This and other publications and products of the National Institute of Justice can be found at:

**National Institute of Justice**
*www.nij.gov*

**Office of Justice Programs**
Innovation • Partnerships • Safer Neighborhoods
*www.ojp.usdoj.gov*

NIJ

JUNE 2011

# The National Institute of Justice Response to the Report of the National Research Council: *Strengthening the National Institute of Justice*

NCJ 234630

NIJ

**John H. Laub, Ph.D.**

*Director, National Institute of Justice*

The National Institute of Justice is a component of the Office of Justice Programs, which also includes the Bureau of Assistance; the Bureau of Justice Statistics; the Community Capacity Development Office; the Office for Victims of Crime; the Office of Juvenile Justice and Delinquency Prevention; and the Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking (SMART).

# Contents

**The National Institute of Justice Response**
**to the Report of the National Research Council:**
***Strengthening the National Institute of Justice***

by John H. Laub, Ph.D.
Director, National Institute of Justice

## Introduction

The National Institute of Justice (NIJ) has welcomed the report by the National Research Council (NRC) of the National Academy of Sciences entitled, *Strengthening the National Institute of Justice*, released on July 2, 2010. The report offers a significant blueprint for NIJ to move forward as the premier federal science agency focusing on the research, development and evaluation of crime and justice topics. On July 22, 2010, I was sworn in as the Director of the National Institute of Justice. Never before in the history of the Institute has the position of Director been filled by someone with a Ph.D. in criminology and criminal justice and with extensive research experience. Some have called this a turning point for the field and it is a clear indication that science is and will be an important part of the mission of NIJ, the Office of Justice Programs (OJP) and the Department of Justice as a whole.

The NRC report offers five broad recommendations that focus on the need for independence and self-governance at NIJ, the critical elements essential for a science agency that NIJ purports to be, the need for NIJ to bolster the research infrastructure internally and externally, the need for NIJ to embrace scientific integrity and transparency in all of its activities, and the need for NIJ to embrace a culture of self-assessment (see the Appendix for the complete text of the five recommendations).

What is clear from the NRC report and is fully recognized by NIJ is the fact that the status quo is no longer acceptable. According to the NRC report, NIJ has lacked the essential tools commensurate with a science agency: a) a strong management structure, b) a scientific staff,

c) a budget to support both short- and long-term goals, and d) protections from political shifts. Moreover, over the last few years because of budget constraints and directives from Congress, NIJ has shifted attention and resources away from both basic and applied social science research toward capacity building and training, especially in the area of forensic sciences.

The publication of the report provides NIJ with the rare opportunity to step back and examine its core mission — where it has been, where it is now, and where it wants to be in the future. Moreover, the timing of the release could not have been better. The report gave me as a new Director the opportunity to leverage communication of my 10-point vision for NIJ with the agency's response to the NRC report. I told NIJ staff that the report imbued in me "the urgency of now," and I asked that it do the same for them. In fact, I regard many aspects of the NRC report as a blueprint for moving the agency forward in the fulfillment of many of my 10 goals.

This NIJ response to the NRC report is organized as follows: First, I present my 10-point vision for NIJ. Second, I discuss the accomplishments at NIJ over the last nine months that have strengthened the science mission. Some of these activities are in direct response to the NRC report, while others go well beyond the recommendations of the report. Third, I discuss the three issues in the NRC report that have generated the most discussion and disagreement within NIJ: what an independent science agency looks like as part of the Office of Justice Programs; the role and structure of a NIJ advisory board; and the place of capacity building for crime labs, training and technology assistance in a science agency.

**My Vision for NIJ**

As soon as I arrived at NIJ, I began articulating my vision for the Institute. In my view, this vision provides a narrative regarding what NIJ stands for and how NIJ contributes to making the world a better place. I want to give members of the NIJ community something to believe in when they come to work each day. Indeed, I want to reinforce on a daily basis the notion that NIJ provides a vital function to the field and the nation at large.

My vision includes:

1. Respond to the National Research Council report, *Strengthening the National Institute of Justice.*
2. Establish NIJ as the leader in scientifically based research on crime and justice.
3. Create an organizational culture grounded in science and research.
4. Obtain more funding for social science research and more fully integrate NIJ's physical, forensic and social science research portfolios.
5. Develop an innovative, cutting-edge research agenda.
6. Reach out to all stakeholders.
7. Improve the diffusion of scientific knowledge.
8. Ensure transparent decision-making.
9. Improve staff morale.
10. Use everyone's talents and gifts.

Three key points deserve highlighting here. First, it is crucial that NIJ establish itself as the nation's leader in scientific research on crime and justice. For me, this means not only should our research be rigorous and scientifically sound, but it also must be of value to criminal justice practitioners — police, prosecutors, judges, correctional officials and policymakers. In my view, NIJ has a unique mission as a science agency focused on policy and practice. Given this position, NIJ faces a twofold strategic challenge — generating knowledge that is scientifically rigorous and disseminating knowledge that is useful to policymakers and practitioners.

Second, with respect to the diffusion of scientific knowledge, one of the ideas that I am emphasizing at NIJ as we move forward is "Translational Criminology." The idea of translational criminology is simple, yet powerful. If we want to prevent, reduce and manage crime, scientific discoveries must be translated into policy and practice. At the annual NIJ Conference scheduled for June 20-22, 2011, the theme is "Translational Criminology: Shaping Policy and Practice With Research." Translational criminology aims to break down barriers between basic and applied research by creating a dynamic interface between research and practice. This process is a two-way

street — scientists discover new tools and ideas for use in the field and evaluate their impact. In turn, practitioners offer novel observations from the field setting that stimulate basic investigation. This is the *knowledge creation* process.

Another goal of translational criminology is to address the gaps between scientific discovery and program delivery in order to achieve effective crime policy. This is the *knowledge application* process. Translational criminology goes beyond the conventional "research to practice" idea by calling for systematic study of the process of knowledge dissemination and recognizing that successful dissemination of research findings may well require multiple strategies. Along with knowledge dissemination, we must also determine if the evidence is being implemented correctly. It is not just about finding the evidence that something works; it is figuring out *how* to implement the evidence in real-world practice settings and understanding *why* something works. Moreover, this facet of translational criminology places a priority on applicability — that is, on research with the potential for real-world implementation, something that is especially attractive in an era of limited resources.

Third, NIJ must develop an innovative, integrated, cutting-edge research agenda. By "integrated," I mean bringing together the three seemingly disparate sciences that form the foundation of NIJ — the social, forensic and physical sciences — to serve our various constituencies. I am committed to tying NIJ's programs together in a way that will give the agency's work more coherence — and ultimately improve science, policy and practice. To achieve this outcome will demand a more "visionary" understanding of the research topics that are going to be most important and useful to practitioners in the future. NIJ cannot fund research on every research question. Rather, our agenda must focus on building a cumulative knowledge base that is of the greatest value to the field. To facilitate this, NIJ needs to reinvigorate its connections with our constituency groups. One of my primary goals is to re-establish relationships with — and make NIJ's presence better known to and valued by — our key stakeholders in the research and practitioner communities, our federal partners and Congress.

**Key Accomplishments to Date**

In my second week as director, I began engaging all levels of staff in intense and frank discussions about the NRC report. I held weekly 90-minute meetings with NIJ's executive staff (the managers and supervisors of the agency) to talk about the five NRC recommendations. Parallel to this, I met every week with the nonsupervisory NIJ staff. Although I had asked each of NIJ's subunits to send a representative to these meetings, they were open to all staff, except the executive staff. I was impressed and heartened by the response. At the first meeting, for example, there were 23 people, about 40 percent of NIJ's nonexecutive staff. These parallel meetings took place over a three-month period. To have transformative change at NIJ, I believe that everyone, at all levels, must be fully engaged in the process of responding to the NRC recommendations. Both executive and nonexecutive staff prepared summaries of our discussions, which were disseminated throughout the agency. Then, I held an open meeting to discuss the two reports and to further identify points of agreement and disagreement within NIJ. It is clear to me that NIJ enthusiastically supports many of the recommendations in the NRC report. However, specific aspects of some recommendations undoubtedly warrant further discussion and these are discussed in the next section.

The larger context in which NIJ responds to this report has changed considerably since 2007 when the National Academies began its study. Beginning at his inauguration, President Barack Obama has expressed strong support for science and for the integrity and independence of federal science agencies and processes. Attorney General Eric Holder has echoed this support and has encouraged and actively supported initiatives by Assistant Attorney General Laurie Robinson to secure greater funding for NIJ and greater visibility for science in the Department of Justice. In the President's budget for 2012, this support has taken the very tangible form of a 3-percent set-aside for research and statistics — an amount that could equal NIJ's base appropriation in recent years. Moreover, within the Office of Justice Programs, Laurie Robinson has launched an agencywide evidence integration initiative to enhance our understanding about what works in reducing and preventing crime. Included in this initiative is a new Evaluation Clearinghouse/What Works Repository called the Crime Solutions Resource Center that will offer the field an online source for information about what works, what does not work and what is promising in criminal and juvenile justice programming.

In this section, I present our key accomplishments to date to strengthen the science mission at NIJ. These accomplishments are organized by the five recommendations from the NRC report.

- Recommendation #1: Ensure Independence and Improve Governance

NIJ is already drafting proposed language for changes in statute to 1) establish clearer necessary qualifications for the NIJ Director in terms of experience with science and research, 2) modify the appointment of the NIJ Director to be a term of six years, and 3) clarify the independence of NIJ in all key aspects of its work — particularly in commissioning research and in publishing and disseminating research findings.

As mentioned below, the peer review process at NIJ is being re-examined. NIJ has exercised its independence to implement peer review processes that reflect the best interests of science, including where appropriate exercising its independence to depart from OJP's policies on normalizing peer review scores. The importance of safeguarding the independence of NIJ on matters pertaining to peer review has been reaffirmed in a March 24, 2011, memorandum from OJP's Assistant Attorney General Laurie Robinson.

- Recommendation #2: Strengthen the Science Mission

The NRC report argues that a successful research enterprise depends on a multiyear strategic plan that establishes research priorities and articulates a path to develop a body of cumulative research knowledge. Strategic planning should clearly describe how individual research programs are initiated, sustained, and culminated, and it must include the commitment of resources necessary to make the plan work. A research agenda signals a clear strategic plan for funding, reflects the involvement of the research field and clearly conveys agency priorities to the field.

NIJ's strategic plan centers on translational research to transform criminal justice practice and policy. This plan has four essential components: generating knowledge, building and sustaining the research infrastructure, supporting the adoption of research evidence in practice and policy, and

innovative dissemination and communication. With the goal of strengthening the science mission at NIJ, we have taken the following steps:

In February 2011, the Office of Research and Evaluation (ORE) conducted a two-day retreat to discuss strategic planning and research priorities for the office as a whole. In addition, each of the divisions within ORE — Violence and Victimization Research, Crime Control and Prevention Research and Justice Systems Research — has initiated its own strategic planning process. Each division is focusing in part on high-priority research areas within its subject areas that the agency could pursue over the next three to five years to build a cumulative base of knowledge in the field of criminology and criminal justice.

In addition, ORE convened three topical working groups of leading experts in the field to discuss existing research, emerging issues and gaps in the subject area under discussion. The first group focused on crime prevention (October 2010), the second group focused on gangs (February 2011), and the third focused on neighborhoods and crime (April 2011). Summaries of these meetings are being prepared for posting on our website.

The Office of Investigative and Forensic Sciences (OIFS) research and development (R&D) team engaged in two days of strategic planning for the R&D process and portfolio. As a result, changes were made for forensic science R&D solicitations posted for fiscal year 2011: The Basic Research solicitation was created to solicit and hopefully fund strong basic research projects that will supplement our applied research program. OIFS also added "New Investigator" qualifications in an attempt to solicit proposals from researchers in the life and physical sciences who are not currently doing research in forensic sciences. In addition, the OIFS's training solicitation was changed this year to incorporate a research component to evaluate the effectiveness of training in the forensic sciences.

The Office of Science and Technology (OST) has also taken several steps to strengthen its science mission. In particular, OST focused its efforts to realign the structure of the National Law Enforcement and Corrections Technology Center (NLECTC) System to better support NIJ's science

mission and, in the process, addressed some of the concerns noted in the NRC report. The blurring of functions between the NLECTC regional centers and technology centers of excellence (COEs) was eliminated with the establishment of three regional centers in 2009 that have a research and development function. The quality of the technical and engineering support provided to NIJ's technology research efforts by the COEs was improved by a second round of COE solicitations completed in 2010. In OST, NIJ now supports four technology COEs in the areas of communications technologies, electronic crime technologies, information and sensor systems technologies, and weapons and protective systems technologies. NIJ is not completely satisfied with NLECTC System's ability to support NIJ's science mission, but progress has been made and will continue to be made.

In January 2011, the Science Advisory Board of the Office of Justice Programs held its inaugural meeting and a considerable portion of the discussion regarding my presentation to the Board focused on NIJ's research priorities and our efforts to build a cumulative base of knowledge for the field. In addition, an NIJ subcommittee of the Science Advisory Board was established. This subcommittee will provide important input and independent guidance for NIJ as it works to strengthen its science mission.

One of my goals in support of strengthening science is to create research partnerships within OJP and DOJ at large. Not only does this make sense from an intellectual standpoint, it also avoids duplication and encourages the pooling of resources and expertise. To date, several partnerships have been launched. For example, NIJ and the Bureau of Justice Statistics (BJS) have launched a joint research project, "Mining of Police Data for Statistical and Research Purposes." Also, BJS and NIJ have launched a brown bag lunch seminar series to further exchange of ideas between staff and encourage collaboration on projects of mutual interest. The Bureau of Justice Assistance (BJA) and NIJ have launched a larger and more ambitious project — a multisite demonstration field experiment of Hawaii's Opportunity Probation with Enforcement (HOPE), an innovative probation initiative designed to reduce recidivism. Along with their continuing work on research relating to offender reentry and reentry courts, BJA and NIJ are currently exploring topics of mutual interest to work on in the future. NIJ is working with the Office for Victims of Crime and the Office on Violence

Against Women on an action research project examining untested sexual assault kits. NIJ and the Access to Justice Initiative in the Department of Justice convened a workshop on a wide range of issues regarding indigent defense. And, finally, NIJ is in discussions with the Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking about research on sex offending and with the Office of Community Oriented Policing about research on procedural justice.

Over the last several months, I have explored potential partnerships with private foundations. The partnership furthest along is with the W.T. Grant Foundation and focuses on the topic of research evidence and how it is used in the field. The idea here is consistent with the National Institute of Health's grant program, Translating Research into Practice (TRIP). However, consistent with translational criminology, I would take this a step further.

In recent months, NIJ has conducted two "listening sessions" — one with the National Governors Association (February 2011) and the second with the Justice Research and Statistics Association (March 2011). These conversations are important to NIJ because they allow us to hear directly about the areas of interest and concern to stakeholders in the field. Our plan is to continue holding listening sessions during the next year.

Over the last several months, NIJ has re-established the Institute's connection to the broader community of federal science agencies. I met with several leaders of other federal science agencies including the National Institute of Standards and Technology, the National Science Foundation, the National Institute on Drug Abuse, and the Department of Education's Institute of Science. With the Director of the Bureau of Justice Statistics, Dr. James Lynch, I met with the Social, Behavioral, and Economic Sciences subcommittee of the National Science and Technology Council Committee on Science to seek their advice on strengthening and safeguarding science at NIJ.

Since my arrival in July 2010, I have been meeting with congressional staff to discuss the science mission of NIJ and my goals and direction for the agency as we move forward. My aim is to continue fostering these relationships so that Congress has a better understanding of the value of NIJ to the field as the premier science agency working on issues concerning crime and justice.

At the core of a strong science agency is a rigorous and fair peer review process. All grants, for instance, must be awarded as the result of a fair, open, and competitive peer review process. NIJ is examining its peer review system and is currently taking the initial steps to create standing peer review panels. It is noteworthy that the use of standing panels is consistent with peer review practices at science agencies throughout the federal government. At the NIJ Conference in June, NIJ will make the formal announcement regarding its inauguration of standing peer review panels. Along with providing a stronger scientific review of grant proposals, the use of standing panels ensures improved processes and greater transparency in several ways. First, by employing larger panels of more experienced researcher reviewers, standing panels will provide better safeguards against peer reviewer bias and conflict of interest. Second, the membership of NIJ's standing review panels will be a matter of public record, as it is at the National Institutes of Health and other science agencies. This will greatly enhance transparency of NIJ's review processes. Third, standing panels (with rolling multiyear appointments of reviewers) will provide significantly greater consistency in peer review across successive solicitations and successive years.

NIJ has redoubled its efforts to develop a "culture of science" at the agency (see http://www.nij.gov/nij/about/director/welcome.htm), assuming responsibility for the prominent seminar series, "Research for the Real World" (inaugurated by OJP's Assistant Attorney General Laurie Robinson), and has brought several of the world's best researchers to NIJ to present their research work to a wide audience. (These seminars are replayed in streaming audio available on NIJ's website.) In addition, NIJ is bringing new vigor to its intramural seminar series led by NIJ staff. The new series will call on NIJ staff to make presentations on aspects of their research programs and to conduct review sessions of important published research work. Finally, NIJ's science advisor has developed a new outreach to NIJ staff to introduce them to the science mission of NIJ, including a recap of the NRC report and the way in which NIJ is responding to it.

ORE has begun the arduous task of developing standard operating procedures that will provide for consistent practices across time. These procedures will cover the gamut of ORE's work from identifying potential candidates for peer review to detailing the entire grant-making process.

NIJ has begun the challenging task of resolving the appropriate role of capacity-building programs within NIJ. Upon release of this response, NIJ will begin negotiations with OJP to transfer management of the Paul Coverdell Forensic Science Improvement Grants Program from NIJ to BJA. NIJ has begun a review of its other capacity-building activities in the areas of forensics and technology; decisions on whether these programs should continue to be managed by NIJ will be made later this year (see next section for a detailed discussion).

- Recommendation #3: Bolster the Research Infrastructure

NIJ supports increasing resources for the purpose of further developing programs to grow the pool of researchers in all aspects related to research, development, testing and evaluation of criminal justice policies, programs and technologies. In the past, NIJ's approach to investments in the infrastructure of research (through fellowship grants, awards to young scholars, the data archive and secondary data analysis program, outreach to the research community, and other efforts) has been more substantial and better coordinated. More recently, even with limited resources, NIJ has endeavored to make significant investments in research infrastructure. It supports a widely acclaimed research and evaluation conference that brings more than 1,000 researchers and practitioners to Washington, DC, each year. Since the inception of the Graduate Research Fellowship program (which makes awards to support doctoral dissertations on criminal justice topics), NIJ has provided financial support to more than 50 criminology and criminal justice-related dissertations. In addition, NIJ's online repository of final reports and national data archive are exemplars among federal science agencies in terms of providing access to the findings and the data of government-sponsored research.

NIJ is working to expand its Graduate Research Fellowship program to provide support across a wider range of social, physical and forensic sciences. NIJ also plans to re-establish an outreach program to graduate programs at colleges and universities, including a focus on Historically Black Colleges and Universities and other minority students.

Along the same lines, in 2010, NIJ re-established the Visiting Fellows program. (The program had been on hiatus for nearly a decade.) In addition, NIJ is considering ways to improve the current NIJ Visiting Fellows program including short-term residencies for senior criminal justice practitioners and policymakers and shared fellowships with other federal science agencies.

The NRC report recognized the scientific strength of NIJ's data archiving and secondary data analysis programs and NIJ is working to ensure the continued success of these programs. Specifically, conversations have begun with BJS regarding summer research programs and cost sharing for data archiving.

- Recommendation #4: Enhance the Scientific Integrity and Transparency of Research Operations

As stated above, NIJ is committed to establishing and maintaining a rigorous and transparent peer review process in which applicants can have full trust and confidence. NIJ views strengthening the peer review process as the top priority in response to this recommendation, and important work has already begun regarding this matter.

With regard to NIJ reports, many problems noted in the NRC report have been addressed through a number of improvements to the National Archive of Criminal Justice Data (NACJD) and the National Criminal Justice Reference Service (NCJRS). These include an improved process for data archiving, partial withholding of grant funds to encourage submission of products, new requirements regarding submission of a data archiving strategy as part of each funding application, and improved tracking of grantee products in both NACJD and NCJRS. NIJ will continue developing and implementing other improvements such as actively identifying other grant products generated from NIJ-funded research (e.g., research articles and presentations) and improving the online experience for users of these systems. For example, the Office of Investigative and Forensic Sciences (OIFS) research and development team has implemented changes to be more transparent about the projects NIJ is funding — links to abstracts and final technical reports (completed projects) are now available at the NIJ website (http://www.nij.gov/topics/forensics/forensic-awards.htm).

Over the past few years, NIJ has taken specific steps to improve record keeping and grant management. For example, in 2010, NIJ conducted a 100-percent audit of OJP's Grant Management System (GMS) — the official grant record repository for NIJ grants. More specifically, grant files from three previous years were reviewed to ensure all required grant documentation were included in each NIJ grant file. NIJ plans to continue this review on an annual basis. In 2010, NIJ instituted monthly reconciliation meetings with OJP's Office of the Chief Financial Officer to review and align OJP's financial records and NIJ's internal files. In addition, NIJ leadership has issued supplemental guidance to NIJ staff on specific financial management and conflict of interest issues related to grants. OJP has made other improvements to GMS to provide better record-keeping processes from receipt of grant application through grant management to closeout.

NIJ will work to improve its systems for tracking projects to assess whether NIJ research programs are accomplishing their intended outcomes and to identify other needed improvements to NIJ's research programs and grant management systems. For instance, NIJ is developing a series of standard operating procedure documents for financial transactions such as interagency agreements and specific grant-processing activities (e.g., grant closeouts). The agency is conducting an inventory of all its records and is working to establish new policies on record retention. Monthly meetings with OJP's Office of Audit, Assessment, and Management are focusing on identifying and trouble-shooting specific grant actions requiring immediate resolution. NIJ continues to work with OJP to create better record keeping and greater transparency. For example, NIJ working groups are advising OJP on improvements to GMS.

In addition, one of the first decisions I made when I arrived at NIJ was to join other federal agencies in an ongoing measurement of "transparency" via Web content. NIJ will now receive a quarterly transparency rating based on Web visitors' answers to questions such as: How thoroughly does the website disclose information about what the agency is doing? How quickly is agency information made available on the site? How well can information about NIJ's actions be accessed by the public through the site? NIJ's online transparency score for the first quarter of 2011 was 82 on a 100-point scale (by comparison, the aggregate score for the 31 participating federal sites was 76.1).

Finally, we are posting periodic updates about our response to the NRC report (http://www.nij.gov/nij/about/director/strengthening-nij.htm). Along similar lines, we are considering posting progress reports or brief snapshots for a number of active grants so that our constituents can see how our research is unfolding over time rather than waiting to read the final report. These efforts encourage transparency and enhance communication with the field.

- Recommendation #5: Establish a Culture of Self-Assessment

As discussed in some detail above, in response to the NRC report, I began a series of all-staff discussions to uncover the weaknesses and shortcomings in NIJ's processes. The commitment to engage all of NIJ in developing the agency's response to the NRC report was an intentional decision that began to build a culture of self-assessment throughout the agency. NIJ continues to build on the energy that these initial planning efforts have created.

A culture of self-assessment begins with a willingness to measure the return on investment in terms of clearly established goals. New processes are being developed for regular program reviews of all NIJ's research programs. These reviews will hold NIJ accountable for establishing clear knowledge-building goals for each individual program and for making measurable progress toward achieving these goals.

I have also invited the NIJ subcommittee of the OJP Science Advisory Board to play a key role in the assessment of NIJ's work. It is my hope that the NIJ subcommittee will provide input on the research priorities of NIJ on a regular basis and will assess progress made to build cumulative knowledge in each of NIJ's areas of responsibility.

**Remaining Issues**

Specific aspects of some of the recommendations in the NRC report warrant further discussion within and outside of NIJ. There are three such issues — defining what it means for NIJ to be an "independent" science agency yet reside within the Office of Justice Programs, the role of

an advisory board to NIJ and NIJ's involvement in "capacity building," which includes program activities for enhancing the efficiency and productivity of the nation's crime labs.

- Independence

Without reservation, NIJ affirms the importance of securing and sustaining the independence and authority necessary to fulfill its mission. NIJ recognizes that the principles of independence and authority are the bedrock of a science agency's programs and operations. Through statute and policy, NIJ will seek to affirm the necessary and practical independent authority in four core domains: appropriations and budget, grant-making and acquisitions, publication and dissemination and functional support operations. This will be accomplished in the next six months. We support the NRC recommendation to keep NIJ in OJP, but we will revisit this issue in two years if the necessary independence and authority needed for NIJ as a science agency is not forthcoming.

- Advisory Board

As indicated above, a new external advisory board called the Science Advisory Board has been established by the Office of the Assistant Attorney General for the Office of Justice Programs. The membership of the new OJP advisory board, which held its inaugural meeting in January 2011, was appointed by the Attorney General and includes social science researchers and criminal justice practitioners. An initial review of the composition of this group suggests that the advisory board may be inadequate to meet the diverse needs of NIJ, in large part because it lacks individuals with expertise in important research areas such as the physical sciences, technology, and forensic sciences.

This spring, a subcommittee devoted to NIJ was created including social scientists from the Science Advisory Board and three additional members were added representing the physical and forensic sciences. We are committed to working with the OJP Science Advisory Board and the NIJ subcommittee. However, we will revisit the issue of whether or not NIJ needs to have its own advisory board in two years.

- Capacity Building

The NRC report asserts that capacity-building and technical assistance programs are inconsistent with a science mission and weaken NIJ's overall commitment to science. To better strengthen its research mission, NRC recommends that NIJ cease its current work in capacity building, including the DNA and forensics capacity-building programs.[1] NIJ continues to explore specific avenues for achieving this goal, including considering whether removing capacity-building programs from its purview would, indeed, strengthen the agency's science mission. As indicated above, NIJ has initiated discussions to move the Paul Coverdell Forensic Science Improvement Grants Program to BJA. However, beyond that specific program, the link between building a stronger science mission and managing capacity-building programs is ambiguous. Certainly, NIJ can strengthen its science mission in important ways without altering its involvement in capacity-building programs; and at the same time, eliminating the responsibility for capacity-building programs would not by itself ensure stronger science at NIJ.

There may be liabilities in co-locating capacity-building or technical assistance programs within a science agency committed to advancing scientific knowledge. The integrity of the agency rests on its consistent adherence to the scientific method for prioritizing its activities, making funding decisions, and supporting "what works" (through agency publications and informing the nonscientific community, for instance). When a science agency supports capacity-building or assistance program activities that have not fully met that evidence standard nor are part of a rigorous ongoing evaluation, it may call into question the agency's commitment to scientific principles and the integrity of its scientific processes. An example of this would be encouraging forensic lab practitioners (by providing capacity-building funds) to adopt program practices or policies that have not been evaluated and are not the subject of an ongoing, rigorous research or evaluation effort.

[1] Although the language of the recommendation (in chapter 7) names only the DNA capacity-building program specifically, we take the thrust of the NRC report and this recommendation to include the capacity-building and technical assistance programs discussed in chapter 5, specifically the technical assistance programs that operate through the National Law Enforcement and Corrections Technology Center System.

On the other hand, NIJ's management of both research programs and capacity-building programs may provide a context for making better decisions about both research and capacity building. Having these programs co-located in a single agency may create a synergy in which each program informs the other, helping to shape better decisions about the expenditure of capacity funds, identifying the field's most pressing research needs, and developing evidence-based responses to those needs.[2]

NIJ recognizes that affirmatively deciding the best way to manage research and capacity-building programs must be a priority for the agency and the field. NIJ is committed to examining all aspects of this issue to fully resolve it and to come to an unambiguous strategy for the future. NIJ will decide this issue during the next six months.

**Conclusion**

The NRC report, *Strengthening the National Institute of Justice*, presented five important yet challenging recommendations that speak to the continued improvement and growth of the National Institute of Justice. NIJ agrees with the principles conveyed in these recommendations and has already enacted new policies and procedures that respond to the changes called for in the report. In other significant ways, NIJ has gone beyond the recommendations of the NRC report to strengthen the science mission of the agency.

It must be noted that NIJ's current funding is sufficient to fulfill only a small portion of the mission Congress has assigned to NIJ. This funding has often been used in ways that have sacrificed long-term cumulative knowledge-building in the interests of a broad "buffet" of research and other investments. The NRC report envisions a more ambitious and successful NIJ where a strategic approach builds a body of knowledge in each critical program area of the agency. Although we aspire to this model for NIJ, it is hard to see how more than a few initial steps can be taken toward

[2] Recent work at NIJ suggests a stronger connection between capacity building programs and evidence based research and practice than presented in the NRC Report. For example, the special report ―*Making Sense of DNA Backlogs: Myths vs. Reality* ― provides important empirical data to inform policy and practice. In a similar vein, NIJ staff are assessing the efficacy of collecting DNA profiles from arrestees.

this vision without a commitment of significant additional resources to support the three sciences working on research on crime and justice at NIJ. We welcome efforts from others who are concerned with achieving a more efficient and effective NIJ to help address this underlying constraint to NIJ's success as the nation's premier criminal justice research agency. By any standard, the current level of federal funding for criminal justice research fails to match the widespread and persistent challenges we face in preventing crime, managing offenders, and enhancing justice.

With a renewed sense of purpose, NIJ is ready to make great strides in providing the social, physical, and forensic science research that will be needed to make wise decisions about criminal justice policies and practices. We look forward to working with Congress, with the Administration, with the Justice Department, with our partners in the Office of Justice Programs, and with other federal, state and local partners to deliver the knowledge needed to ensure safer communities, a more effective and efficient criminal justice system, and justice for all. The intellectual challenges regarding research and practice in the areas of crime, justice and the social order are long standing and well documented. Nevertheless, these intellectual challenges offer NIJ an unprecedented scientific opportunity to advance the field.

## Appendix

**Recommendation 1: ENSURE INDEPENDENCE AND IMPROVE GOVERNANCE.** The committee recommends that Congress provide for the requisite independence and authority of the National Institute of Justice while retaining its organizational placement within the Office of Justice Programs and the Department of Justice. Among the key issues to be considered in pursuit of this goal are a statutory advisory board, a set term of office and minimum qualifications for the NIJ Director, and clear authority for NIJ to make awards and control its budget resources.

**Recommendation 2: STRENGTHEN THE SCIENCE MISSION.** To strengthen its science mission, the National Institute of Justice should direct its efforts toward building a body of cumulative knowledge that will assist the criminal justice field in its effort to prevent and control crime and improve the criminal justice system; sponsoring research that will improve and upgrade current scientific methods used to study crime; and supporting new areas that have heretofore been neglected due to NIJ's incapacity to commit resources required to support projects of long duration, great complexity, and substantial expense. To improve NIJ's ability to support research, the committee recommends that Congress remove responsibility for forensic capacity-building programs and reinstate them in other DOJ and OJP agencies, such as the Bureau of Justice Assistance and the Community Oriented Policing Services office, that have a clearly defined technical assistance mission, are closely linked to state and local criminal justice agencies, and have larger financial reserves to draw on.

**Recommendation 3: BOLSTER THE RESEARCH INFRASTRACTURE.** The National Institute of Justice should undertake efforts to nurture and grow the pool of researchers involved in criminal justice research as well as activities that support the research endeavor itself. These efforts should include increasing the resources devoted to supporting graduate education for persons pursuing a career in criminology and criminal justice studies and other disciplines engaged in research and teaching on criminal justice topics, such as the Graduate Research Fellowship Program and the W.E.B. Du Bois Program, and enhancing the Data Archive Program.

**Recommendation 4: ENHANCE THE SCIENTIFIC INTEGRITY AND TRANSPARENCY OF RESEARCH OPERATIONS.** The National Institute of Justice should revise its research operations to allow for greater transparency, consistency, timeliness, and appropriate involvement of the research and practitioner communities. In particular, NIJ should make information about its research operations and activities publicly available, easily understood, and consistent with the highest standards found in other high-quality federal research agencies.

**Recommendation 5: ESTABLISH A CULTURE OF SELF-ASSESSMENT.** NIJ should measure the influence of its programs on research and practice and assess the quality of operations and program-level technical and managerial matters.

Source: National Research Council of the National Academies. *Strengthening the National Institute of Justice.* Washington DC: National Academies Press, 2010.

## About the National Institute of Justice

The National Institute of Justice — the research, development and evaluation agency of the Department of Justice — is dedicated to improving our knowledge and understanding of crime and justice issues through science. NIJ provides objective and independent knowledge and tools to reduce crime and promote justice, particularly at the state and local levels.

NIJ's pursuit of this mission is guided by the following principles:

- Research can make a difference in individual lives, in the safety of communities and in creating a more effective and fair justice system.
- Government-funded research must adhere to processes of fair and open competition guided by rigorous peer review.
- NIJ's research agenda must respond to the real world needs of victims, communities and criminal justice professionals.
- NIJ must encourage and support innovative and rigorous research methods that can provide answers to basic research questions as well as practical, applied solutions to crime.
- Partnerships with other agencies and organizations, public and private, are essential to NIJ's success.

The National Institute of Justice is a component of the Office of Justice Programs, which also includes the Bureau of Assistance; the Bureau of Justice Statistics; the Community Capacity Development Office; the Office for Victims of Crime; the Office of Juvenile Justice and Delinquency Prevention; and the Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking (SMART).

Our principal authorities are derived from:

- The Omnibus Crime Control and Safe Streets Act of 1968, amended (see 42 USC §§ 3721-3723)
- Title II of the Homeland Security Act of 2002
- Justice For All Act, 2004

To find out more about the National Institute of Justice, please visit:

*www.nij.gov*

or contact:

National Criminal Justice
Reference Service
P.O. Box 6000
Rockville, MD 20849-6000
800-851-3420
*www.ncjrs.gov*

**U.S. Department of Justice**
Office of Justice Programs
*National Institute of Justice*

*Washington, DC 20531*

Official Business
Penalty for Private Use $300


PRESORTED STANDARD
POSTAGE & FEES PAID
DOJ/NIJ
PERMIT NO. G–91

JUNE 2011

# EXHIBIT N

# Texas Forensic Science Commission

*Justice Through Science*

January 18, 2012

*Via E-mail*

Assistant Chief Michelle Gardner
El Paso Police Department
2 Civic Center Plaza
El Paso, Texas 79901

RE: Texas Forensic Science Commission, Complaint #11-11

Dear Assistant Chief Gardner:

Thank you for attending the Texas Forensic Science Commission's ("FSC" or "Commission") meeting on Friday, January 13, 2012. This letter summarizes the FSC's recommendations to the El Paso Police Department's Crime Laboratory ("EPPDCL") as discussed during the meeting.

1) By February 7, 2012, the Texas Department of Public Safety ("DPS") will conduct an audit of the EPPDCL, including but not limited to: (a) technical and administrative review of every controlled substance case processed by EPPDCL since November 1, 2011; (b) interviews with each laboratory employee, ensuring that new policies and procedures have been implemented and are understood by the examiners; and (c) any other applicable audit standards that DPS would typically utilize when conducting an internal audit of a DPS system laboratory.

2) By April 6, 2012, DPS will re-test every controlled substance examination performed by analyst Sifuentes, giving priority to the 60 cases on the DPS list with the greatest possible impact.

**Commission Office**

**Lynn M. Robitaille**
*Commission General Counsel*

**Leigh M. Tomlin**
*Commission Coordinator*

*Texas Forensic Science Commission*
*1700 North Congress Avenue, Suite 445*
*Austin, Texas 78701*

*Phone: 1 (888) 296-4232*
*Direct: (512) 936-0770*
*Fax: 1 (888) 305-2432*

3) Within seven days, the City of El Paso will retain a qualified full-time interim laboratory director for EPPDCL until a permanent qualified laboratory director is hired. The hiring of a permanent qualified laboratory director shall be accomplished by April 6, 2012 (the expiration date for EPPDCL's ASCLD-LAB Legacy accreditation).

4) The interim laboratory director will conduct technical and administrative review of all casework performed during his or her tenure.

5) The EPPDCL shall provide periodic progress reports to the Commission regarding the hiring of the permanent qualified laboratory director.

It is the Commission's understanding that these recommendations are acceptable to the EPPDCL and the City of El Paso. If this understanding is incorrect or if circumstances change for any reason, please contact me as soon as possible.

At its next meeting in April, the Commission will engage in further deliberations regarding the complaint in this matter pursuant to its enabling statute (TEX. CODE CRIM. PROC. §38.01). Commissioners may make additional recommendations at that time. If you have any questions, please feel free to contact our office.

Sincerely,

Lynn M. Robitaille

cc: John Batoon, City of El Paso
Jaime Esparza, El Paso District Attorney
Ron Fazio, Integrated Forensics
Pat Johnson, Department of Public Safety
Ralph Keaton, ASCLD-LAB
Stephen Saloom, Innocence Project (Complainant)
Sushma Smith, Office of Senator Jose Rodríguez
FSC Members