# FORENSIC SCIENCE OVERSIGHT BOARD

# Subsection (g) Report January 10, 2025



The Forensic Science Oversight Board (FSOB) governing statute, M.G.L. Chapter 6, Section 184A, states, "(g) The board shall develop, implement and periodically review a system to evaluate laboratory accreditation and professional licensing processes, including securing and maintaining such accreditation, and shall ensure that every facility is actively accredited and in compliance with standards promulgated by the International Organization of Standardization." This report is a review of how the FSOB may comply with the statute.

#### **Professional Licensing**

A license is a state's grant of legal authority to practice a profession within a designated scope of practice. Under a licensure system, the state defines by statute the tasks and function or scope of practice of a profession and provides that these tasks may be legally performed only by those who are licensed. All options for FSOB implementing a licensing program will require at a minimum staff to monitor the process and compliance with stated requirements.

The Texas Forensic Science Commission is the only forensic science oversight board to develop their own licensing process. The Commission statute defines that any person who, on behalf of a crime laboratory that technically reviews or performs a forensic analysis or draws conclusions from or interprets a forensic analysis for a court or crime laboratory is required to be licensed to submit forensic testimony. This does not include medical examiners or other forensic pathologists who are licensed physicians. The Commission requires that applicants for licensing meet minimum education requirements including specific coursework and proficiency testing requirements. Candidates for licensure must take and pass the General Forensic Analyst Licensing Exam developed by the Commission. Additional requirements also include analysts applying for licensure must have a three-semester credit hour college-level statistics course from an accredited university and a Mandatory Legal and Professional Responsibility course offered by the Commission once each license cycle. The exam is a remotely administered test. While there is a fee to become licensed by the Commission, the state must finance development and maintenance of the examination, the software required to administer the examination, and staff to administer and monitor the process including tracking of the licensees and their compliance with annual proficiency testing and continuing education requirements.

An alternative to the model implemented by the Texas Commission, the FSOB may develop specific requirements to be licensed to perform forensic analysis. These requirements may include:

- 1. Minimum educational requirements
- 2. Proficiency testing
- 3. Minimum continuing education
- 4. Specific additional training (ethics, testimony, etc.)
- 5. Certification

At least two states require forensic analysts to be certified, Virginia and North Carolina. Certain states have proceeded to develop their own certification programs. Indiana has explicitly developed a <u>Crime Scene Certification Committee</u> to certify crime scene investigators (<u>ILEA: Crime Scene Investigators</u>). Other states may follow suit with some form of licensure or

certification requirements. New York, for instance, has made a ruling on ballisticians who are not certified but must work within a ISO accredited laboratory (<a href="https://dos.ny.gov/system/files/documents/2024/01/determination-forensic-science-technician-ballistics-examiner.pdf">https://dos.ny.gov/system/files/documents/2024/01/determination-forensic-science-technician-ballistics-examiner.pdf</a>. Appendix A has a summary of accredited certification bodies.

In most cases, there are no legal requirements for certification or licensure of forensic scientists. In a 2019 article entitled *Mandatory certification of forensic science practitioners in the United State: A supportive perspective*, the authors present the argument that mandatory certification of forensic scientists can serve to establish a threshold for competency in the profession, provide a universal standard for ethical professional conduct, and enhance the credibility of forensic science users of the profession and the general societal public. The article provides a robust discussion of the historical background on certification, the results of a survey of forensic science practitioner's views on certification, and pathways toward implementing mandatory certification.

All certification programs have specific requirements for their programs that may include: *Prior to achieving certification*:

- Education Requirements
- Training Requirements
- Defined amount of time conducting forensic analysis in the selected discipline
- Successful completion of a written examination
- Successful completion of a practical examination

After achieving certification:

- Annual proficiency testing
- Annual documentation of continuing education
- Adherence to the certification body's Code of Ethics
- Re-examination if specific CE requirements are not met

In an attempt to address standardized training and certification some states have developed alternative models that include either institutes or academies in forensic science. California is one such state (https://oag.ca.gov/cci). Under the umbrella of the California Department of Justice's Bureau of Forensic Services, the California Criminalistics Institute (CCI) provides specialized forensic training to forensic laboratory and law enforcement personnel. In addition to standard forensic discipline classes, they also offer professional conduct classes to prepare scientists and law enforcement personnel to make ethical decisions while handling criminal evidence and to explain their background and findings in court. Instead of an institute model, Arizona has developed a multi-tiered Arizona Forensic Science Academy. The goal of the academy is to increase criminal justice practitioner's understanding of forensic principles, scientific methods, and evidentiary concerns by engaging stakeholders (https://www.azcourts.gov/forensicsciencecenter/AFSAC). In addition to the Academy, Arizona has created a standard curriculum by partnering with the National Forensic Science Academy to offer professional certification.

#### Accreditation

Laboratories may choose to obtain accreditation to demonstrate that the laboratory's management, operations, personnel, procedures, equipment, physical plant, and security procedures meet established standards. There are two forensic science accreditation organizations that are ISO/IEC 17011 accredited, ANSI National Accreditation Board (ANAB) and American Association for Laboratory Accreditation (A2LA). The laboratories accredited in Massachusetts are identified in Appendix B. Ten states mandate the forensic laboratories operating in that state must demonstrate compliance with the standards of the ANAB – ANSI National Accreditation Board (ANAB), the American Board of Forensic Toxicology (ABFT), and/or the Quality Assurance Standards for Forensic DNA Testing Laboratories. Some of the states are: Federal Justice Department, Texas, New York, North Carolina, Oklahoma, and Colorado (toxicology only). Maryland and Texas have addition requirements above the accreditation bodies.

#### Recommendations

**Professional Licensing** 

- All forensic service providers shall encourage and support efforts by analysts to achieve certification in a forensic discipline.
- Forensic service providers should provide both financial aid and time off to allow their analysts to achieve certification.
- All forensic service providers shall submit annually to the FSOB a report of their analysts' certification status. The report shall include the number of analysts currently certified and the discipline in which the certification is held.

#### Accreditation

- All forensic service providers should strive to achieve forensic accreditation to appropriate standards promulgated by the International Organization of Standardization (ISO) in the next 5 years.
- Accredited forensic service providers shall provide the accreditation body's annual inspection report to the FSOB, including corrective actions taken for any Findings identified.
- Nonaccredited forensic service providers shall annually to the FSOB a report on the status of their accreditation efforts, including information as to why they have not achieved accreditation, the progress they are making toward this end, and when they anticipate that they will be provisionally and fully accredited.

Reports shall be submitted to the Executive Office of Public Safety and Security (EOPSS) by January 31<sup>st</sup> of each calendar year. The FSOB shall appoint a committee to review the annual reports provided by the forensic service providers and report to the Board a summary of the reports received.

#### **Appendix A – Common forensic science certification bodies**

In addition to legal certification, many forensic scientists pursue certification in their chosen specialty to improve employment opportunities. The Forensic Specialties Accreditation Board (FSAB) accredits forensic toxicology, criminalistics, and document examination certifications. Each certification has discrete requirements. The certification boards accredited by the Forensic Specialties Accreditation Board (FSAB), include (organization name links to their current website):

#### **American Board of Criminalists (ABC)**

Fellow and Diplomat levels

- Foundational Knowledge
- Drug Analysis (DA)
- Biological Screening
- Forensic DNA

Application Fee - \$75

Examination sitting fee \$250

Annual maintenance fee - \$100

## **International Association for Identification (IAI) Certification Boards**

- Bloodstain Pattern Examiner
- Crime Scene (3 levels)
- Footwear
- Forensic Art
- Forensic Photography
- Forensic Video
- Latent Print
- Tenprint Fingerprint

Certification, re-certification, & re-testing - \$300 IAI members, \$400 others Maintenance — 80 hours of continuing education credits over 5 years

#### <u>American Board of Forensic Toxicology</u> (ABFT)

- Diplomat
- Forensic Toxicology Specialist
- Forensic Toxicology Analyst
- Forensic Alcohol Specialist
- Fellow

Annual maintenance fee - \$120

Examination fee - \$300

### Association of Firearms and Toolmark Examiners (AFTE)

- Firearms
- Toolmarks
- Gun Shot Residue/Distance

Annual maintenance fee - \$250

Examination fee - \$50

**Appendix B** – Accredited forensic laboratory service providers in Massachusetts (accrediting body and standard). Organization name links to their current website.

#### ANSI National Accreditation Board (ANAB) - ISO/IEC 17025

- 1. Boston Police Department Crime Laboratory
- 2. Boston Police Department Firearms Analysis Unit
- 3. Boston Police Department Latent Print Unit
- 4. Federal Bureau of Investigation Digital Evidence Laboratory New England Regional Computer Forensic Laboratory
- 5. Massachusetts State Police Forensic Services Division Crime Laboratory Boston Laboratory
- 6. Massachusetts State Police Forensic Services Division Crime Laboratory Bourne Laboratory
- 7. Massachusetts State Police Forensic Services Division Crime Laboratory Danvers Laboratory
- 8. Massachusetts State Police Forensic Services Division Crime Laboratory Lakeville Laboratory
- 9. Massachusetts State Police Forensic Services Division Crime Laboratory Maynard Laboratory
- 10. Massachusetts State Police Forensic Services Division Crime Laboratory Office of Alcohol Testing (calibration only)
- 11. Massachusetts State Police Forensic Services Division Crime Laboratory Springfield Laboratory
- 12. Massachusetts State Police Forensic Services Division Crime Laboratory Sudbury Laboratory
- 13. Massachusetts State Police Forensic Services Division Crime Laboratory Worcester Laboratory
- 14. Plymouth County Sheriff's Office, Bureau of Criminal Investigation
- 15. University of Massachusetts Chan Medical School, Drugs of Abuse Laboratory
- 16. Worcester Police Department Forensic Services Section

#### ANSI National Accreditation Board (ANAB) – ISO/IEC 17020

17. Cambridge Police Department Crime Scene Services

#### American Association for Laboratory Accreditation (A2LA) – ISO/IEC 17020

18. Genesis Forensics, Inc.