

Michigan Task Force on Forensic Science

Report and Recommendations

December , 2022

Table of Contents

Members of the Michigan Task Force on Forensic Science	2
Executive Summary of Findings	3
Overview of Task Force Recommendations	4
Introduction	5
The State of Forensic Science in Michigan	7
Recommendations	13
Recommendation 1: Create a Forensic Science Statewide Body (FSSB)	13
Recommendation 2: Require Accreditation of Laboratories	17
Recommendation 3: Require Registration of Forensic Science Experts	18
Recommendation 4: Establish a Standardized Statewide Process for Complaints and Investigations Regarding Forensic Science	19
Recommendation 5: Model Policies for Disclosing Negligence or Misconduct	22
Recommendation 6: Provide Forensic Science Education and Information	23
Recommendation 7: Make Appropriations to Enable Best Practices in Forensic Science	23
Recommendation 8: Promote Independence of Forensic Science Work within Law Enforcement Agencies	24
Recommendation 9: Standardize and Streamline Access to Forensic Science Service Providers	25
Recommendation 10: Implement Practices to Promote Quality Control and Compartmentalization	26
Recommendation 11: Forensic Science Practitioner Training Requirements	26
Recommendation 12: Require Continuing Education for Attorneys	27
Recommendation 13: Require Forensic Science Evidence Education for Judges	28
Recommendation 14: Accredited Training Programs for Studies of Forensic Science	29
Recommendation 15: Testimony	29
Recommendation 16: Jury Instructions	31
Recommendation 17: DNA Evidence and Discovery	34
Acknowledgements	40

Members of the Michigan Task Force on Forensic Science

Colonel Joseph Gasper (Task Force Cochair), Director, Michigan State Police

Chief Justice Bridget McCormack (Task Force Cochair), Michigan Supreme Court

Christopher Bommarito - Represents a forensic science practitioner with at least five years of experience in the field

Honorable Paul Denenfeld - Circuit Court Judge designated by the Chief Justice

Kent Gardner - Represents a forensic science practitioner from a county forensic service provider

Brandon Giroux - Represents a forensic science practitioner with at least five years of experience in the field

Dr. Jeffrey Jentzen - Represents a board-certified pathologist with experience in forensic pathology

Lori Montgomery - Designee of Michigan Attorney General

Jeffrey Nye, Director, Michigan State Police Forensic Science Division

Dr. Barbara O'Brien - Represents an individual from the private sector or from a university in this state who has published scholarship related to cognitive bias

Jonathan Sacks - Represents a public defender or criminal defense attorney

Honorable (retired) Donald Shelton - Represents individuals from the private sector or from a university in this state who have earned a doctoral degree in a distinct field relevant to forensic science and who have published scholarship related to the field in a peer-reviewed journal

Dr. Ruth Smith - Represents individuals from the private sector or from a university in this state who have earned a doctoral degree in a distinct field relevant to forensic science and who have published scholarship related to the field in a peer-reviewed journal

Matt Wiese - Represents a prosecuting attorney

Non-voting members:

Senator John Bizon (Designated by the Senate Majority Leader)

Senator Stephanie Chang (Designated by the Senate Minority Leader)

Representative Robert Bezotte (Designated by the Speaker of the House)

Representative Laurie Pohutsky (Designated by the House Minority Leader)

Executive Summary of Findings

[]

DRAFT

Overview of Task Force Recommendations

Recommendations 1 – 7 apply to the proposed structure, function, and duties of a statewide forensic science body (FSSB).

Recommendation 1: Create a Forensic Science Statewide Body (FSSB)

Recommendation 2: Require Accreditation of Laboratories

Recommendation 3: Require Registration of Forensic Science Experts

Recommendation 4: Establish a Standardized Statewide Process for Complaints and Investigations Regarding Forensic Science

Recommendation 5: Model Policies for Disclosing Negligence or Misconduct

Recommendation 6: Provide Forensic Science Education and Information

Recommendation 7: Make Appropriations to Enable Best Practices in Forensic Science

Recommendation 8: Promote Independence of Forensic Science Work within Law Enforcement Agencies

Recommendation 9: Standardize and Streamline Access to Forensic Science Service

Recommendation 10: Implement Practices to Promote Quality Control and Compartmentalization

Recommendation 11: Forensic Science Practitioner Training Requirements

Recommendation 12: Require Continuing Education for Attorneys

Recommendation 13: Require Forensic Science Evidence Education for Judges

Recommendation 14: Accredited Training Programs for Studies of Forensic Science

Recommendation 15: Testimony

Recommendation 16: Jury Instructions

Recommendation 17: DNA Evidence and Discovery

Michigan Task Force on Forensic Science

When you talk about criminal justice in general, it starts with investigation of crimes and ends with criminal proceedings; forensic science is in the middle.

— Jeffrey Nye, Director, Michigan State Police Forensic Science Division
Presentation on the State of Forensic Science to the Task Force, June 8, 2021

Governor Gretchen Whitmer created the Michigan Task Force on Forensic Science by Executive Order 2021-04 on April 2, 2021 to advise about the state of forensic science in Michigan and to make recommendations to ensure that the criminal legal system delivers justice for the people of Michigan. Executive Order 2021-15 extended the Task Force through December 31, 2022.

The Task Force is an advisory body operating within the Michigan Department of State Police and is comprised of forensic science practitioners, legal professionals, government officials, academics, private sector experts, and representatives from the Michigan State Police, Michigan Supreme Court, and Attorney General's office.

The Task Force's mission is to review the state of forensic science in Michigan and deliver their completed findings and policy recommendations to the Governor no later than December 31, 2022.

The Executive Order suggests including recommendations to:

1. Improve the practice, delivery, and use of forensic science in Michigan;
2. Strengthen forensic science methodologies and practices in the state;
3. Create statewide protocols for disclosure of negligence or misconduct by employees at forensic science providers;
4. Create a process allowing members of the public to report alleged professional negligence or misconduct related to the practice or use of forensic science;

5. Adopt best practices for individuals who practice or apply forensic science in the criminal justice system;
6. Create procedures for updating stakeholders on developments in forensic science; and
7. Create a post-conviction notification procedure to notify parties affected by misconduct, negligence, or misapplication of forensic science.

Previously in 2019 Senate Bills 276 and 277 were introduced in the Senate Committee on Judiciary and Public Safety. The bills proposed creating a Michigan Forensic Science Commission to accomplish similar objectives to the suggested recommendations from EO 2021-4. However, SB 276 and 277 did not garner enough support at the time to be passed within the Senate due to questions of cost and implementation. Governor Whitmer subsequently created the Task Force on Forensic Science to study the issues in greater detail and work towards compromise regarding a path forward in Michigan.

Chaired by Col. Joseph Gasper and Chief Justice Bridget McCormack, the Task Force held 13 public meetings in 2021 and 2022 and many subcommittee meetings, and received testimony from multiple

Introduction

stakeholders. Each public meeting included an opportunity for public comment.

Public meetings were held on:

- May 11, 2021
- June 8, 2021
- July 20, 2021
- August 10, 2021
- September 18, 2021
- November 22, 2021
- January 25, 2022
- March 8, 2022
- May 10, 2022
- July 19, 2022
- September 20, 2022
- November 1, 2022
- December 13, 2022.

Presentations were provided to the Task Force on:

- **State of Forensic Science in Michigan – Lab Perspective**, Jeffrey Nye and Brad Putnam, June 8, 2021
- **State of Forensic Science in Michigan – Court Perspective**, Judge Donald Shelton, Ph.D., June 8, 2021
- **Lessons from the Texas Forensic Science Commission**, Lynn Garcia, Peter Stout, and Brady Mills, July 20, 2021
- **Flawed Forensics and Wrongful Convictions**, Michigan Innocence Project

and Clinic and exonerees’ testimony, August 10, 2021

- **Quality Systems and Forensic Crime Labs**, Brandon Garrett, September 28, 2021
- **Admissibility of Social Science Testimony**, Judge Donald Shelton, Ph.D, May 10, 2022
- **Illinois Forensic Science Commission**, Jeffrey Nye, May 10, 2022

Subcommittees were formed in June 2021 to address the following:

1. State of Forensic Science in Michigan;
2. Commissions Review;
3. Improving Practices;
4. Credentialing;
5. Education and Application of Forensic Science;
6. Reporting, Testimony, and Rules of Evidence;
7. Negligence, Misconduct, and Misapplication Reporting; and
8. Post-Conviction Notifications.

In March 2022, subcommittees were reorganized and consolidated and continued to meet to address the following:

1. Forensic Science Statewide Body;
2. Forensic Science Practice;
3. Forensic Science Use by Criminal Legal System Stakeholders.

The State of Forensic Science in Michigan

At the core of the American criminal justice system are the basic principles that a defendant is innocent until proven guilty and that every person accused of a crime is entitled to a fair trial. Wrongful convictions deprive innocent people of their freedom, deny closure to victims of crime, and undermine faith in the criminal justice system. Studies have demonstrated that the misapplication of forensic science is the second most common contributing factor in wrongful convictions in the United States. Even though this state's world-class forensic science laboratories reliably deliver sound results, forensic science goes well beyond the work of our labs.

In general, forensic scientists collect, preserve, and analyze scientific evidence during a criminal investigation. Forensic science service providers located within the State of Michigan receive and process evidence from thousands of cases each year, and their findings may be presented in court, directly influencing the determination of innocence or guilt. In addition, expert witnesses draw on forensic science when testifying in criminal cases, often providing expert opinion testimony on issues of critical importance. Therefore, it is essential that attorneys understand how to provide effective counsel when deploying or challenging forensic science to help make their case.

It is vital that the State of Michigan and its courts rigorously adhere to best practices for the use of forensic science within the criminal justice system. Moreover, these practices are evolving faster than ever with the advancement of new technology and scientific practices.¹

Forensic Science Overall

Juror Expectations

With modern technology, television, social media and the Internet, jurors have increased expectations that the prosecution will present forensic science evidence, often without regard for the relevance of such evidence to the particular charged offense.²

Wrongful Convictions

The Task Force heard testimony about Michigan Innocence organization exoneration cases, specifically detailing cases of convictions that hinged upon arson, bite mark, ballistics, and hair fiber evidence.³ In each case, a defendant was wrongfully convicted and served years, or even decades, before exoneration. Upon exoneration, the state has been responsible for paying out millions of dollars in restitution.

The admission of unreliable or misapplied forensic science evidence has led to a substantial number of wrongful convictions.⁴

¹ [Executive Order 2021-04](#).

² *An Indirect-Effects Model of Mediated Adjudication: The CSI Myth, the Tech Effect, and Metropolitan Jurors' Expectations for Scientific Evidence*, by Hon. Donald E. Shelton, Young S. Kim, and Gregg Barak, 12 *Vanderbilt Journal of Entertainment & Technology Law* 1 (2009).

³ Presentation: *Flawed Forensics and Wrongful Convictions*, Michigan Innocence Project and Clinic and exonerees' testimony, Task Force meeting held August 10, 2021.

⁴ "Forensic science, or more specifically, problems in forensic science, contributes to many wrongful convictions, as seen in nearly half (45%) of DNA exoneration cases and one-quarter (24%) of all exonerations in the United States. The problems include:

The Task Force has also considered that some wrongful convictions attributed to forensic science are more accurately the result of system issues such as evidence collection/documentation, misconduct by investigators, withholding of exculpatory evidence, prosecutorial misconduct, or insufficient defense.⁵

Forensic Science Providers and Practitioners in Michigan

Who is providing forensic science services in Michigan?

- Three public accredited public laboratories providing forensic science services in Michigan;
- Many unaccredited public providers of one or two disciplines (such as seized drugs, friction ridge, or crime scene investigation);
- Academic researchers affiliated with a university who typically provide a small volume of unaccredited and unregulated service as an expert witness – usually in a discipline that is more unusual like anthropology, entomology, or statistical expertise;
- Private laboratories that may be accredited or not and provide service in one or more disciplines;
- Private individuals who are often retired public laboratory personnel and provide expert witness evaluations without regulation;
- Medical examiners who may or may not be accredited through the National Association of Medical Examiners, which has different accreditation standards than the International Standardization Organization (ISO); and
- Pathologists with individual certification.

-
- **Unreliable or invalid forensic discipline.** Studies have demonstrated that some forensic methods used in criminal investigations cannot consistently produce accurate results. Bite mark comparison is an example of an analysis that is unreliable and inaccurate.
 - **Insufficient validation of a method.** Some of the forensic disciplines in use may be capable of consistently producing accurate results, but there has not been sufficient research to establish validity. Accuracy of a method should be established using large, well-designed studies. Without these studies, the results of an analysis cannot be interpreted. Analysis of shoeprints as a basis of identifying the unique source of a print is an example of a method that has not been sufficiently validated.
 - **Misleading testimony.**
 - Sometimes forensic testimony overstates or exaggerates the significance of similarities between evidence from a crime scene and evidence from an individual (a “suspect” or “person of interest”) or oversimplifies the data. Examples include testimony that suggests a collection of features is unique or overstates how rare or unusual it would be to see these features, implying that it is quite likely that the suspect is the source of the evidence, and testimony that doesn’t convey all possible conclusions, as can arise with masking in serology testing.
 - Sometimes forensic testimony understates, downplays, or omits the significance of an analysis that establishes that an individual should be excluded as a possible suspect. An example is testimony that an analysis is “inconclusive” when in fact, the analysis excluded the suspect.
 - Sometimes forensic testimony fails to include information on the limitations of the methods used in the analysis, such as the method’s error rates and situations in which the method has, and has not, been shown to be valid.”

The Innocence Project, *Forensic Science: Problems and Solutions*, <https://innocenceproject.org/forensic-science-problems-and-solutions/>.

⁵ Testimony gathered by personal interview with Jeffrey Nye, Director of Michigan State Police Forensic Science Division. Publication pending in 2023: Morgan, John. *Wrongful Convictions and Forensic Science Errors: Case Studies and Root Causes*.

The exact number of forensic science service providers and their accreditation or certification status is not currently tracked in any database. The Task Force conducted two surveys to help assess who is providing services, what regulations they may be adhering to, and what issues they face. Unfortunately, despite widespread outreach, only 31 responses were received to the Forensic Science Service Provider survey, and 26 responses to the Forensic Science Practitioner survey. While the Task Force is confident that many Michigan providers are not represented in the responses received, the exact number of Michigan providers is unknown.

Public Laboratories

The largest provider of forensic science analysis in Michigan is the Michigan State Police's Forensic Science Division (FSD), with seven laboratories located throughout the state in Bridgeport, Detroit, Grand Rapids, Grayling, Lansing, Marquette, and Northville and a staff of 280 employees. The second largest public provider in Michigan is the Oakland County Sheriff's Forensic Science Lab. Both providers served as members of this Task Force,⁶ and both are accredited by an external accrediting body to international ISO/IEC 17025:2017 accreditation standards.⁷ Maintaining accreditation costs FSD approximately \$75,000 annually and \$10,000 annually for the Oakland County Sheriff's Forensic Science Lab.⁸ Both have mature quality management systems that include monitoring educational requirements, training programs, technical policies and procedures, ethics, impartiality, confidentiality, proficiency and competency testing, internal and external audits, corrective actions, investigations, and technical reviews of casework and testimony. The only other known accredited public laboratory is the Battle Creek Police Department forensic science unit, which became accredited in 2019 in seized drugs and friction ridge (latent prints).

Other providers in the state may not have a robust system of quality management; the survey of providers indicated that beyond the few responses from accredited providers, there were minimal proficiency tests, corrective actions, peer reviews, and complaint processes in place. Additionally, some of the respondents indicated an emphasis on quantity and speed of work over quality of the work.

FSD has both civilian and enlisted employees. Once hired within FSD, they are trained in the same manner regarding impartiality in analyzing evidence. Evidence is submitted for testing to FSD from numerous agencies

⁶ Jeffrey Nye, Director, Michigan State Police Forensic Science Division, and Kent Gardner, Director, Oakland County Sheriff Forensic Science Lab.

⁷ "ISO/IEC 17025 enables laboratories to demonstrate that they operate competently and generate valid results, thereby promoting confidence in their work both nationally and around the world.

It also helps facilitate cooperation between laboratories and other bodies by generating wider acceptance of results between countries. Test reports and certificates can be accepted from one country to another without the need for further testing, which, in turn, improves international trade.

ISO/IEC 17025 is useful for any organization that performs testing, sampling or calibration and wants reliable results. This includes all types of laboratories, whether they be owned and operated by government, industry or, in fact, any other organization. The standard is also useful to universities, research centres, governments, regulators, inspection bodies, product certification organizations and other conformity assessment bodies with the need to do testing, sampling or calibration."

ISO/IEC 17025: Testing and Calibration Laboratories. International Standardization Organization.

<https://www.iso.org/ISO-IEC-17025-testing-and-calibration-laboratories.html>.

⁸ Presentation: State of Forensic Science in Michigan – Lab Perspective, Jeffrey Nye, Task Force meeting held June 8, 2021.

across the state – from 678 unique submitting agencies in 2020, and the FSD Director maintains that all requests are treated equally regarding what is tested and the order of testing.⁹

Challenges Facing Forensic Science Providers

Technology advances increasingly quickly, and it is both expensive to keep up with the equipment and a challenge to maintain an adequately-trained staff.

Retention and burnout of employees is also an issue. Employees generally are not leaving to go to another forensic science service provider but leaving the field in general for a lot of reasons.

Volume of Forensic Science Work

There is not one database tracking the volume of all forensic science work being done in the state, nor of all the providers doing the work, for that matter. However, the Michigan State Police Forensic Science Division is the largest provider in the state, completing 69,037 forensic analysis requests in 2021. At a total staff of 280 employees, this comes to an average of 247 cases per employee per year – if none of the personnel were managers and all were performing case analysis.

MSP FSD service requests completed in 2021 by discipline.

Forensic Science Discipline	Number of Cases in 2021
Biology (DNA and body fluid identification)	8,215
Firearms/Toolmarks	8,166
Toxicology (blood alcohol and blood drug)	33,805
Controlled Substances (seized drugs)	14,513
Latent Prints (friction ridge)	3,561
Trace Evidence (fire debris and explosives, question documents, footwear and tire tracks)	686
Questioned Documents	91
Total	69,037

Source: Michigan State Police Forensic Science Division Metrics.
<https://www.michigan.gov/msp/divisions/forensic-science/metrics>.

The science behind the work is rapidly changing with new instrumentation allowing for increased testing capabilities. Every such advancement carries with it a need for validating methods and training or re-training all analysts, which can be challenging to keep up with absent adequate resources.¹⁰

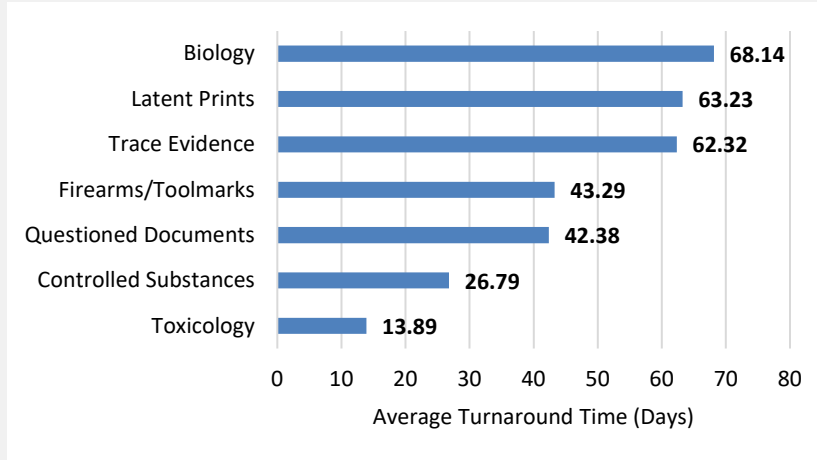
Forensic science analysts are also spending a lot of time providing testimony in court. For example, in 2019 the Michigan State Police Forensic Science Division personnel provided testimony more than 4,000 times; each

⁹ Laboratory scientists and managers focus group, interviewed by the Improving Practices Subcommittee. August 27, 2021. Scientists and managers interviewed: Detective First Lieutenant Gary Daniels, Greta Gill, Jeffrey Nye, and Ashley Sellenraad, Subcommittee members: Col. Joseph Gasper, Dr. Barbara O'Brien, Rep. Laurie Pohutsky, Jonathan Sacks, and Dr. Ruth Smith.

¹⁰ See note 6.

instance involves commuting to the court, waiting, and then actually testifying, which essentially amounts to a lost day of laboratory productivity for the employee.¹¹

MSP FSD average days for case turnaround in 2021.



Source: Michigan State Police Forensic Science Division Metrics.
<https://www.michigan.gov/msp/divisions/forensic-science/metrics>.

Michigan State Police Forensic Science Division has stated that, “...the number one complaint of our services is timeliness. In some forensic disciplines, we do not have enough capacity to meet the needs of the criminal justice community.”¹² Average turnaround time for cases analyzed by FSD in various disciplines in 2021 ranged from 14 days to 68 days.

Funding

In the past few years, Michigan public laboratory scientists and managers noted that although the reliance on their services and volume of testing requests has continuously increased, there has not also been a corresponding increase in available resources.¹³

Defense Access to Forensic Evidence

A focus group of defense attorneys provided insight on access to forensic science case information from their experiences, as well as their suggestions for reforms. They noted the limited access to the underlying case file, with difficult processes for access and a tight timeline from when it would become available. They recommended a database system in the future to access case files and complete information, expansion of access to speak with the

¹¹ Written testimony from Jeffrey Nye, Director, Michigan State Police Forensic Science Division. October 6, 2022.

¹² Michigan State Police Forensic Science Division, Testimony RE: Forensic Science Commission, September 12, 2019.

¹³ See note 6.

forensic analysts performing the work, and the need for a database listing experts in different forensic science disciplines.¹⁴

Criminal Legal System

Michigan is a *Daubert* state, and MRE 702 incorporates the *Daubert* standards of reliability. However, in practice it seems that most state courts continue to routinely admit most forensic science offered by the prosecution, and defense attorneys rarely challenge such forensic science testimony.¹⁵ Defense attorneys likely fail to challenge forensic science evidence due to a lack of training. There are few opportunities to learn about forensic science evidence in law school, and Michigan does not have a mandatory continuing education requirement for attorneys. There are also no continuing education requirements in place for judges in Michigan (although a new requirement will take effect in 2024).

Solutions Needed

Large-volume public forensic science service providers are maintaining accreditation and striving for transparency; we need to ensure that a bar is set that requires all Michigan providers to perform at such levels and serves as a safeguard against priority shifts of future public laboratory leadership or appropriations issues.

This is a systems issue encompassing all stakeholders; solutions must address all stakeholders, as well.

¹⁴ Defense attorneys focus group, interviewed by the Improving Practices Subcommittee. August 27, 2021. Attorneys interviewed: Mary Chartier, Jason Eggert, Daniel Grow, and Mike Nichols. Subcommittee members: Col. Joseph Gasper, Dr. Barbara O'Brien, Rep. Laurie Pohutsky, Jonathan Sacks, and Dr. Ruth Smith.

¹⁵ Presentation: State of Forensic Science in Michigan – Court Perspective, Judge Donald Shelton, Task Force meeting held June 8, 2021.

Recommendations

Recommendations 1 – 7 apply to the proposed structure, function, and duties of a statewide forensic science body.

Recommendation 1: Create a Forensic Science Statewide Body (FSSB)

The Forensic Science Commission Subcommittee surveyed statewide forensic science oversight efforts in other states, focusing on improvements in the quality and consistency of forensic science, impacts to forensic science funding, and any unintended negative consequences of such oversight bodies. At least 16 states have sort of forensic oversight entity, either a purely advisory body that makes recommendations or a commission with a clearly defined oversight role and authority to mandate changes, approve methods, and potentially investigate issues. In considering a model for a statewide body tasked with certain duties related to forensic science in Michigan, various functions of existing models were considered:

- Ensuring consistency between forensic laboratories in states with multiple forensic laboratories;
- Accreditation - some oversight entities create their own accreditation for laboratories (New York, Texas), and others ensure that laboratories practicing forensic science in their state are accredited by external bodies;
- Regulating forensic expert testimony, either through a licensing or registration process;
- Reviewing and investigating public complaints of negligence or misconduct, managing self-disclosures of negligence or misconduct, and issuing reprimands to providers found to be negligent or engaging in misconduct;
- Education and training for forensic science practitioners and legal system stakeholders and requiring forensic science practitioner certifications;
- Legal counsel providing best practice guidance on when to disclose issues and how to comply with mandates;
- Developing guidance on discipline-wide issues as they arise or scientific knowledge evolves and advocating for laboratory resources necessary to adapt; and
- Providing a central database for forensic science information.

A model such as a forensic science commission provides a level of oversight that accreditation cannot. Laboratories are customers of accreditation bodies and maintaining that customer's business could factor into the actions of an accreditation body.¹⁶ There is also a concern that laboratories may not self-report to their accreditation body when an issue arises, but a commission provides an additional layer of accountability and transparency to forensic science work. Some states with commission models have found that it promotes a culture of learning from past experiences and from the experiences of other labs within the state, as well as presenting opportunities to advocate for adequate laboratory resources.¹⁷

Michigan bodies tasked with some level of oversight in different fields were also examined:

- Michigan Commission on Law Enforcement Standards, Executive, Michigan State Police;
- Michigan Indigent Defense Commission (MIDC), Executive, Licensing and Regulatory Affairs (LARA);
- Legislative Corrective Ombudsman, Legislative, Michigan Legislative Council;

¹⁶ Perspective offered by Sarah Chu, Senior Advisor on Forensic Science Policy, The Innocence Project.

¹⁷ Presentation to the Task Force: *Lessons from the Texas Forensic Science Commission*, Lynn Garcia, Peter Stout, and Brady Mills, July 20, 2021.

- State Appellate Defender Office, Judicial.¹⁸

The Legislative Council location was found to provide good independence, access to the legislature for budget advocacy and public policy reform, and support through the Legislative Services Bureau for administration and personnel issues; however, it is also overwhelmed with other duties and might struggle to engage with an expanded mandate, and due to separation of powers concerns a legislative branch agency would lack enforcement authority over executive branch agencies, which would limit the FSSB to making recommendations.

The judicial branch location could be problematic if any official findings or recognition of certain experts or labs were made; judges might rely on that authority from within the judiciary. Also, administrative resolution of complaints and investigations and otherwise regulating forensic science would be outside the branch's authority. The MIDC started in the judicial branch until a Michigan Supreme Court order identified separation of powers concerns. Amended legislation shifted the MIDC to the executive branch. A statewide FSSB within the judicial branch could face similar concerns. Further, although the State Appellate Defender Office successfully functions independently within the judicial branch, its duties relate to direct services within the courts, unlike a FSSB primary task of reviewing work and regulating functions of executive branch agencies.

A combined mandate of registration, accreditation, investigations and complaints, notification, and education has some similarities to the MIDC, housed within LARA, and fits the functions of an executive branch agency.

The Task Force recommends:

a. Where Forensic Science Statewide Body Is Housed in State Government

- i. House the FSSB within the best fit Executive Branch agency.
- ii. Do not house the FSSB within Michigan State Police because of the perception of lack of independence from law enforcement influence.
- iii. The FSSB should operate as an independent entity. To achieve independence, the FSSB statutory language should emphasize that it "is an autonomous entity within the department," and "except as otherwise provided by law, shall exercise its statutory powers, duties, functions, and responsibilities independently of the department."¹⁹

b. Composition of Forensic Science Statewide Body

- i. Appointments, besides the Michigan Supreme Court appointment, should be made by the Governor.
- ii. Members should serve staggered four-year terms.

¹⁸ Jonathan Sacks drew from his own experience as Director of the State Appellate Defender Office and Michigan Independent Defense Commission and conducted the following interviews to gather perspectives on independence and authority to exercise the potential desired mandates that the Task Force was discussing: Keith Barber, Michigan Legislative Corrections Ombudsman (August 19, 2022); Judge Thomas Boyd, Administrator, State Court Administrative Office (September 7, 2022); Kristen Staley, Executive Director, Michigan Indigent Defense Commission (September 9, 2022); Bruce Timmons, Former Committee Counsel, House Judiciary Committee (September 7, 2022); Timothy Bourgeois, Executive Director, Michigan Commission on Law Enforcement Standards (September 2022).

¹⁹ This language mirrors that of the MIDC Act. MCL 780.985(2): "The MIDC is an autonomous entity within the department. Except as otherwise provided by law, the MIDC shall exercise its statutory powers, duties, functions, and responsibilities independently of the department. The department shall provide support and coordinated services as requested by the MIDC including providing personnel, budgeting, procurement, and other administrative support to the MIDC sufficient to carry out its duties, powers, and responsibilities."

- iii. Membership. The FSSB should be scientifically driven and composed of a majority of practicing forensic scientists. To accomplish this and provide perspectives of other criminal legal system stakeholders, the following membership composition is recommended:
- Four (4) forensic science practitioners. At least one of these practitioners should work within the Forensic Science Division of the Michigan State Police and be nominated by the Michigan State Police Director and at least one with a city, county, or private forensic science agency. Each practitioner should have ten years of experience and either an advanced degree from an institution accredited by the Higher Learning Commission, or service with the Organization of Scientific Area Committees for Forensic Science (OSAC) or a comparable organization:
 - One (1) forensic scientist who has received substantial education, training, or experience in the subject of laboratory standards or quality assurance regulation and monitoring;
 - One (1) forensic scientist who has received substantial education, training, or experience in the subject of molecular biology (DNA analysis/population genetics);
 - One (1) forensic scientist who has received substantial education, training, or experience in the subject of forensic chemistry (drug analysis, toxicology, or trace evidence);
 - One (1) forensic scientist who has received substantial education, training, or experience in the subject of pattern evidence (firearms, toolmarks, latent fingerprints, footwear/tire tracks);
 - One (1) forensic pathologist who is board-certified by the American Board of Pathology and employed in an office accredited by the National Association of Medical Examiners (NAME);
 - Two (2) academic research scientists who have earned a doctoral degree in a distinct field relevant to forensic science from an institution accredited by the Higher Learning Commission, have published scholarship related to the field in a peer-reviewed journal, and have made contributions to education and service in forensic science. At least one (1) of the academic research scientists must have DNA expertise;
 - Three (3) criminal legal system stakeholders:
 - One (1) retired judge (Michigan Supreme Court appointment);
 - One (1) prosecutor (Prosecuting Attorneys Association of Michigan nominates three people);
 - One (1) defense attorney / public defender (Criminal Defense Attorneys of Michigan nominates three people);
 - One (1) member of the public. This person could be a justice-involved individual; and
 - One (1) advisory, non-voting member who is a social scientist, cognitive psychologist, data scientist, or an expert in a developing area of forensic science.
 - The Attorney General or a designee serving as an advisory, non-voting member.

c. Scope and Process of Forensic Science Statewide Body

- i. **Scope:** “Forensic science” is defined as the application of scientific or technical practices to the recognition, collection, analysis, and interpretation of evidence for criminal legal issues. The scope includes the study of the portion of an autopsy conducted by a medical examiner or other forensic pathologist. For the Registration and Education portions of the FSSB mandate, the scope includes social science evidence that is not otherwise included in this definition.

- ii. **Mission:** To contribute to a positive culture in crime laboratories while maintaining a role as an independent investigating body. (NIJ, 2022, p. 23)²⁰
- iii. Must comply with the Open Meetings Act, 1976 PA 267, MCL 15.261 et seq.;
- iv. Must comply with the Freedom of Information Act, 1976 PA 442, MCL 15.231 to 15.246;
- v. Certain number of required meetings per year;
- vi. FSSB hires Director who sets the organization chart, identifies appropriate staff, and seeks appropriations;
- vii. Requires dedicated budget and staff (NIJ, 2022, p. 18);
- viii. Ability to retain expert contractors, including, but not limited to:
 - Lab experience to help with investigation and review; and
 - A statistician (NIJ, 2022, p. 17);
- ix. FSSB members should not receive compensation, but should be reimbursed for their reasonable actual and necessary expenses;
- x. Annual report required to the Governor, the legislature, and the Michigan Supreme Court (NIJ, 2022, p. 21);
- xi. The FSSB should create and maintain a website (NIJ, 2022, p. 21);
- xii. Transparency matrix. The FSSB should compile and publish for transparency: public meetings, comments, posted policies, posted adjudications, findings, and lab documents (NIJ, 2022, p. 23).
- xiii. General counsel on staff (NIJ, 2022, p. 19) but not acting as outside counsel to forensic science service providers.

d. Definitions Applicable to Forensic Science Statewide Body

(Adapted from National Commission on Forensic Science; changed to specify “criminal legal issues”)²¹

- **FORENSIC SCIENCE** - The application of scientific or technical practices to the recognition, collection, analysis, and interpretation of evidence for criminal legal issues.
- **FORENSIC SCIENCE SERVICE PROVIDER** – A forensic science agency or forensic science practitioner providing forensic science services.
- **FORENSIC SCIENCE AGENCY** – An organization in the public or private sector that employs forensic science practitioners and issues reports prepared by forensic science practitioners.
- **FORENSIC SCIENCE PRACTITIONER** – An individual who (1) applies scientific or technical practices to the recognition, collection, analysis, or interpretation of evidence for criminal legal issues AND (2) issues test results, provides reports, or provides interpretations, conclusions, or opinions through testimony with respect to such evidence.
- **FORENSIC MEDICINE** – The application of medical knowledge and practices to the investigation of the medicolegal aspects of death, injury, neglect, or behavior for criminal legal issues.
- **FORENSIC MEDICINE SERVICE PROVIDER** – A forensic medicine agency or forensic medicine practitioner providing forensic medicine services.
- **FORENSIC MEDICINE AGENCY** – An organization in the public or private sector that employs forensic medicine practitioners and issues reports prepared by forensic medicine practitioners.

²⁰ Ropero-Miller, J.D., and N. Jones. *Forensic Science State Commissions and Oversight Bodies—A 2022 Update*. Washington, DC: Forensic Technology Center of Excellence. U.S. Department of Justice, National Institute of Justice, Office of Investigative and Forensic Sciences, June 2022. <https://forensiccoe.org/private/62ebd37f553b3>.

²¹ National Commission on Forensic Science. *Views of the Commission: Defining Forensic Science and Related Terms*. U.S. Department of Justice and U.S. Department of Commerce, National Institute of Standards and Technology, May 1, 2016. <https://www.justice.gov/ncfs/file/786571/download>.

- **FORENSIC MEDICINE PRACTITIONER** – A physician, physician extender, or other health care provider who applies medical knowledge and practices to the investigation of the medicolegal aspects of death, injury, neglect, or behavior.

Recommendation 2: Require Accreditation of Laboratories

Accreditation is a measure of the overall performance of a laboratory and its adherence to international standards. Currently, forensic science and forensic medicine agencies in Michigan are not required to be accredited in the disciplines in which they provide services. There could be some positive and negative impacts of requiring accreditation for all forensic science and forensic medicine agencies. Accreditation improves the quality, consistency, and accountability of forensic science analysis. While some agencies may not have the resources or the personnel to complete the accreditation process, requiring accreditation would help bring all Michigan forensic science and forensic medicine agencies to a minimum level of competence and performance. Accreditation will ensure that agencies:

- Have a quality management system;
- Maintain training programs for personnel;
- Hire personnel with minimum educational requirements;
- Disclose to the accrediting body any negligence, misconduct, or nonconformance that has affected the integrity of the forensic science or forensic medicine results;
- Conduct risk assessments; and
- Take corrective actions when appropriate.

The Task Force recommends:

- a. All forensic science agencies be accredited in all disciplines in which they analyze evidence by an accrediting body that requires conformance to the appropriate quality assurance standards and to forensic science-specific requirements, such as International Organization for Standardization's (ISO) standards 17025²² or 17020,²³ and that is a signatory to the International Laboratory Accreditation

²² "ISO/IEC 17025 enables laboratories to demonstrate that they operate competently and generate valid results, thereby promoting confidence in their work both nationally and around the world.

It also helps facilitate cooperation between laboratories and other bodies by generating wider acceptance of results between countries. Test reports and certificates can be accepted from one country to another without the need for further testing, which, in turn, improves international trade.

ISO/IEC 17025 is useful for any organization that performs testing, sampling or calibration and wants reliable results. This includes all types of laboratories, whether they be owned and operated by government, industry or, in fact, any other organization. The standard is also useful to universities, research centres, governments, regulators, inspection bodies, product certification organizations and other conformity assessment bodies with the need to do testing, sampling or calibration."

ISO/IEC 17025: Testing and Calibration Laboratories. International Standardization Organization.

<https://www.iso.org/ISO-IEC-17025-testing-and-calibration-laboratories.html>.

²³ "Requirements for the operation of various types of bodies performing inspection. Accredited inspection provides assurance of technically competent service and consistently reliable results, reducing costs and lowering risks. It is key in demonstrating that products, equipment, structures, and systems meet required specifications. Governments and industries around the world are increasingly requiring use of accredited inspection services. Accreditation to ISO/IEC 17020 allows an organization to demonstrate integrity, reliability, and technical competence, as well as compliance with internationally recognized good practices."

ISO/IEC 17020 Inspection Body Accreditation: How It Works. American National Standards Institute National Accreditation Board. <https://anab.ansi.org/inspection-body-accreditation>.

Cooperation (ILAC) Mutual Recognition Arrangements for Testing Laboratories. The accreditation requirement does not apply to practitioners who only analyze or offer opinions on testing results generated by other practitioners.

- b. Forensic science practitioners who render opinions based only on the review or evaluation of data from examinations conducted by other entities or on the review of procedures, tests, or methods used by other entities should not be included in this requirement.
- c. Forensic medicine agencies be accredited by the National Association of Medical Examiners (NAME). Examinations in suspected homicide cases should be performed by a physician certified by the American Board of Pathology. The medical examiner should demonstrate no fewer than 15 American Medical Association continuing medical education (AMA CME) hours in medico legal death investigation every three years.
- d. The FSSB evaluate the need and feasibility for additional accreditation requirements to ISO standards for forensic medicine agencies.
- e. The FSSB should consider the challenges of providing experts for indigent defendants and should review and provide recommendations on the accreditation requirements periodically to ensure equitable access to quality scientific experts.
- f. Timeframe to become accredited: Three years after the effective date of the statute.
- g. The FSSB should verify that forensic science and forensic medicine agencies have obtained the accreditation required under this subsection.
- h. If a forensic science or forensic medicine agency cannot meet the accreditation requirements within the required timeframe, the agency may submit a petition to the FSSB requesting an extension of time.
- i. In addition to these accreditation requirements, to be recognized by the FSSB, all forensic science and forensic medicine agencies must comply with investigation and document provision requests made by the FSSB.

Recommendation 3: Require Registration of Forensic Science Experts

A process to register forensic science experts testifying in criminal proceedings will simplify and standardize screening of such experts for the benefit of prosecution, defense, and judicial gatekeeping.

The Task Force recommends:

- a. The FSSB establish a process to register forensic science experts that requires conformance to forensic science-specific requirements. This process should consider the challenges of providing experts for indigent defendants and be reviewed periodically to ensure equitable access to quality scientific experts.
- b. The registration requirement should apply to social science and other experts who provide expert testimony and are not otherwise included in the definition of forensic science.
- c. The FSSB establish and maintain a publicly accessible record of forensic science experts that includes their registration status, prior cases in which they have testified, and records of past misconduct determined by the FSSB. The FSSB should evaluate removing misconduct reports after a certain period.
- d. The FSSB should examine and establish minimum qualifications for certain disciplines and examine whether certain disciplines should require certifications, proficiency testing, or educational requirements.
- e. In addition to these registration requirements, to be recognized by the FSSB, all forensic science service providers comply with investigation and document provision requests.

Recommendation 4: Establish a Standardized Statewide Process for Complaints and Investigations Regarding Forensic Science

The Task Force recommends:

a. Applicability of a Statewide Complaint and Investigation Process

- i. This section applies to all forensic science service providers and forensic medicine service providers. All references to forensic science service providers in this section also encompass forensic medicine service providers.
- ii. Who discloses: Design a system of to report a forensic science service provider's negligence, misconduct, or nonconformance that affects the integrity of the forensic science or forensic medicine result, or the practice of forensic science or forensic medicine. The complaint can be filed by the forensic science service provider, a member of the public, a criminal justice system stakeholder, or the defendant in a case.
- iii. What and when to disclose:
 - o Any significant event, nonconformity with policies, procedures, or accreditation standards, or error related to an accreditation requirement that substantially affects the integrity of the forensic science results.
 - o A provider must disclose if there is a reasonable expectation that the information would call into question the quality of the forensic science service provider's work.
 - o The results / work product must be impacted. The FSSB complaint process will not become a forum for personnel complaints that do not substantially impact the work product.

b. Types of Reports / Complaints (made in a manner required by FSSB)

- i. Formal lab reports and responses – Negligence, misconduct, nonconformance that has affected the integrity of the forensic science or forensic medicine results.
 - a. These reports are mandatory – Forensic science service providers should have a procedure for documenting professional negligence and misconduct. When issues of professional negligence or misconduct occur, the forensic science service provider is obligated to report these to the FSSB and provide all relevant documentation for review. Accredited forensic science service providers are separately required by their accrediting body to report to it issues of professional negligence or misconduct.
 - b. Reporting of forensic science agency internal audits if they meet the reporting requirements (e.g., forensic science method audits; not personnel or financial audits); provision of management system review should be provided annually to the FSSB.
- ii. Employee whistleblower – If an employee of a forensic laboratory or any other individual has discovered, has suspicion, or has reason to believe an act of professional negligence, misconduct, or nonconformance affected the integrity of a forensic science or forensic medicine result, that employee or individual may report that act.
- iii. Media – Complaints stemming from news reporting.
- iv. Criminal legal system stakeholders – Complaints arising out of specific prosecutions from judges, prosecutors, defense attorneys, or people prosecuted.

c. Types of Investigations

- i. Complaints and reporting resulting in investigations
- ii. Invited investigations by the agency

Recommendations | Recommendation 4: Establish a Standardized Statewide Process for Complaints and Investigations Regarding Forensic Science

- iii. Retroactive case reviews – When advancements are made in a forensic science method and cases using older and/or debunked methods are reviewed (e.g. DNA, hair microscopy, bitemark).²⁴

d. Complaints and Reporting

- i. FSSB to notify forensic science service providers of a complaint received against them.
- ii. Process for the majority of complaints: evaluate on a severity and risk of recurrence framework to be implemented by the FSSB.
- iii. FSSB staff will make initial recommendations to the FSSB. The staff review includes contacting the forensic science service providers to review what actions have already commenced. Unless there is a “high severity” and “high risk of recurrence,” there is a presumption that the initial investigation and review done by the provider will resolve complaints.
- iv. Only a finding of “high severity” and “high risk of recurrence” results in automatic independent investigation and response. All other complaints should be referred to the forensic science service provider for an investigation and report.
- v. Certain complaints will require information requests of the forensic science service providers to evaluate severity and risk of recurrence.
- vi. Multi-layer response: The FSSB will generally request an internal response from the forensic science service, then FSSB will evaluate whether a further investigation is necessary. The FSSB will establish a timeline for this response and process.
- vii. For the majority of complaints that are referred for investigation and report, upon delivery of findings, the FSSB reviews, provides an opportunity for the complainant to respond, and then closes the case or refers for further investigation and/or corrective action.
- viii. The FSSB should receive a copy of this report and response and publicly disclose, absent confidential information.
- ix. For all independent FSSB investigations, either those occurring because of high severity and high risk of recurrence or because the referral for investigation and report is insufficient, 7 or more out of 11 members of the FSSB are required to approve initiation of the FSSB investigation. If one or more members of the FSSB are recused from this decision, then the votes needed for approval are reduced by the number of recused members.
- x. If there is an independent investigation by FSSB, steps must be implemented to avoid redundancy of investigations by the provider, the accrediting body, and the FSSB.
- xi. In exceptional circumstances where there is demonstrated and significant harm, the FSSB may review a non-criminal matter involving forensic science practice on this same framework of a “high severity” and “high risk of recurrence” upon a vote to pursue investigation by 7 or more out of 11 members.²⁵

e. Process Issues

- i. **Confidentiality** – The specific target of a complaint should not be made public until the investigation(s) is complete and only if the issue(s) rises to the level of misconduct or complaint founded.
 - o One potential model: MCR 9.261, Judicial Tenure Commission.
 - o The FSSB process must maintain compliance as appropriate with Open Meetings Act.

²⁴ (NIJ, 2022, p.28)

²⁵ An example is the Averhealth drug testing scandal, where the former lab director testified that up to 30 percent of drug tests in Michigan were incorrect. Averhealth testing results informed child custody decisions. *Vice News*. Averhealth’s Drug Tests Were Wrong Up to 30% of the Time, Former Employee Testifies. June 10, 2022. <https://www.vice.com/en/article/n7zj3m/averhealth-drug-tests-false-results>

Recommendations | Recommendation 4: Establish a Standardized Statewide Process for Complaints and Investigations Regarding Forensic Science

- o Issue to leave for FSSB determination, public comment - Policy balancing compliance with the Open Meetings Act, *Brady* disclosure, and need for confidentiality.²⁶
- ii. The FSSB should set the timeline for the stages of responses to complaints and potential investigations. There will be separate timelines for individual investigations as opposed to a more general review of a particular discipline.
- iii. An investigation should not apply to an active prosecution of a person that involves forensic science evidence until conclusion of trial court proceedings and exhaustion of appeal by right.
- iv. **Investigation powers:**
 - a. The FSSB requests forensic science service provider voluntary compliance and provision of documentation;
 - b. The registration and accreditation requirements mandated by the FSSB include cooperation with investigation and documentation requests.

f. Investigation Results

- i. The FSSB complaint process does not supplant the judicial appellate process;
- ii. Public report, recommendations, reprimands, and corrective actions;
- iii. Legal system stakeholders should be notified of founded complaints, especially as to discoverable material;²⁷
- iv. Subjects of complaints should be notified and afforded an opportunity to request reconsideration of the decision;²⁸
- v. The FSSB may provide a recommendation for a larger-scale, institutional response if appropriate;
- vi. Recommendation for legislative changes to include future enforcement powers as needed;
- vii. A founded complaint is not an admission by the State of responsibility.²⁹

g. Notification of Findings of Misconduct, Negligence, Reprimands, Recommendations, or Correction Actions

- i. The FSSB should develop and implement a notification procedure for investigations conducted and information disclosed under this section resulting in findings of misconduct, negligence, reprimands, recommendations, or corrective actions that includes all of the following:
 - a. Who to notify:
 - Institutional stakeholders: Prosecuting Attorneys Association of Michigan; Criminal Defense Attorneys of Michigan; the State Appellate Defender Office; the Michigan Indigent Defense Commission; local prosecutors and public defenders; the Michigan Judges Association; the Michigan District Judges Association; the Department of Attorney General; and prosecution Conviction Integrity Units.
 - A convicted person in a criminal case and that person's attorney:

²⁶ "The issue of confidentiality also needs to be clarified. Certain personnel matters must remain confidential, at least during the pendency of an investigation. However, in general, commission meetings should be public. This issue is one reason why having a general counsel is helpful for a commission. During any meeting, a person must be available to provide guidance on matters that may require closed sessions." (NIJ, 2022, p.20)

²⁷ (NIJ, 2022, p.25)

²⁸ (NIJ, 2022, p.25)

²⁹ Language similar to the Texas Forensic Science Commission legislation: "Not a comment upon the 'guilt or innocence of any party in an underlying civil or criminal trial involving conduct investigated by the Commission.'" (NIJ, 2022, p.25).

- A requirement that the convicted person in the criminal case acknowledge receipt of the information described under this subsection and a method for the commission to receive the acknowledgment.
- b. A description of the technical issue and a written summary of the facts.
- c. A protocol for the FSSB to provide potentially affected defendants with information regarding relevant resources including, but not limited to, public defenders.
- d. Information that any remedy still must follow standard appellate and post-conviction remedies, rules, and procedures.
- ii. The notification procedure should apply to both independent FSSB investigations and provider disclosures.
- iii. Notification by the FSSB of an FSSB investigation and determination to the relevant accrediting body.
- iv. The FSSB should ensure notification procedures respect due process concerns and respect provider remediation and corrective processes.
- v. This notification procedure should also apply when forensic science agencies and forensic science service providers self-report misconduct, negligence, reprimands, recommendations, or corrective actions, or this information comes from other sources.
- vi. Includes notification of the disposition, if that disposition includes a finding that an act of professional negligence, misconduct, nonconformance, or a change in science affected the integrity of the results of a forensic analysis.

Recommendation 5: Model Policies for Disclosing Negligence or Misconduct

In considering disclosure of acts of negligence and misconduct to a statewide body, there is a balance between the public and criminal legal system stakeholder awareness, *Brady/Giglio* requirements for legal proceedings (any type of impeachment evidence or pattern of dishonesty that can damage an expert's credibility to testify), and individual rights as they relate to human resources proceedings and union representation with labor laws and the rights of the individual.

There is also an opportunity for redundant investigations. The Michigan State Police has a Professional Standards section that follows a standardized process for internal investigating and addressing complaints which encompasses any complaints regarding the Forensic Science Division.³⁰ There are also existing requirements for any accredited provider to report such incidents to its accrediting body.

Providers may struggle to understand when incidents of alleged negligence and misconduct must be reported to a statewide body and what types may not need to be disclosed.

The Task Force recommends:

- a. The FSSB should create a model policy for reporting negligence/misconduct. The intent is to track patterns of specific individuals, transfer of employees to new employers, and be a further obligation above *Brady* disclosure.

³⁰ Subcommittee testimony from Lieutenant Brody Boucher, Michigan State Police Professional Standards Section, September 13, 2021. The Professional Standards Section receives and investigates approximately 700 complaints annually and averages about 5 percent of those complaints sustained. Lieutenant Boucher stated that his section has the resources and independence necessary to adequately investigate forensic science complaints and can bring in outside investigators from the Federal Bureau of Investigation if necessary.

- b. The FSSB should create a model policy related to methodologies used in laboratories and quality related disclosures that are not based upon negligence/misconduct.

Recommendation 6: Provide Forensic Science Education and Information

This section applies to social science expertise that is not otherwise included in the definition of forensic science.

Defense attorneys, in particular, have stated the difficulty for those in the legal system to keep up with forensic science practice and have asked for creation of a database of information and of experts in different forensic disciplines to reference as needed.³¹

The Task Force recommends:

- a. The FSSB should provide a clearinghouse and disseminate information on developments in forensic science and forensic medicine.
- b. The FSSB should provide information on available education and training to all stakeholders.
- c. Criminal legal system stakeholders should have an opportunity to comment on or provide suggestions for the information provided by the FSSB.
- d. The FSSB should provide a central database of forensic science and forensic medicine experts.
- e. The FSSB should review a forensic science discipline for educational purposes if the FSSB determines that the investigation would advance the integrity and reliability of forensic science.
- f. The FSSB should collect and analyze information related to the impact of current laws, rules, policies, and practices on forensic crime laboratories and the practice of forensic science; evaluate the impact of those laws, rules, policies, and practices on forensic crime laboratories and the practice of forensic science; identify new policies and approaches, together with changes in science and technology; and make recommendations for changes to those laws, rules, policies, and practices that will yield criminal justice system results more consistent with the sound practice of forensic science.

Recommendation 7: Make Appropriations to Enable Best Practices in Forensic Science

The survey of forensic science service providers revealed existing resource needs at local and county laboratories, although the survey was limited in the number of participants and detail regarding specific resource needs.

One of the statewide body oversight models examined by the Task Force, the MIDC, created a system of grantmaking to ensure that local indigent defense providers could access funding necessary to meet new requirements imposed by the MIDC Act.³² There is great concern amongst some Task Force members to ensure forensic science and forensic medicine service providers are not met with expensive unfunded mandates which could exacerbate backlogs or reduce the number of providers doing business in Michigan. There were also concerns, however, regarding: (1) using public funds to issue grants to any private providers that could consequently experience an increase in profits; and (2) the same agency that is providing regulatory and investigative functions also controlling enabling funding. At this time there was no consensus reached regarding a recommendation for the FSSB to establish a grants program to incentivize meeting best practices.

³¹ Defense attorneys focus group, interviewed by the Improving Practices Subcommittee. August 27, 2021. Attorneys interviewed: Mary Chartier, Jason Eggert, Daniel Grow, and Mike Nichols. Subcommittee members: Col. Joseph Gasper, Dr. Barbara O'Brien, Rep. Laurie Pohutsky, Jonathan Sacks, and Dr. Ruth Smith.

³² MCL 780.993

The Task Force recommends:

- a. Cooperation to reduce backlogs and respond to developing issues.³³
- b. Assessing system capabilities and needs by conducting a detailed annual needs assessment across the state of Michigan forensic science service providers to better understand the needs in the community.³⁴
- c. The FSSB should make recommendations so that adequate resources and facilities are available for the FSSB, for the Michigan State Police Forensic Science Division and other public forensic science and forensic medicine service providers to improve the capacity, quality, and scope of forensic science testing offered.
- d. The FSSB should identify and encourage best practices for forensic science service providers to improve the practice, delivery, and use of forensic science in Michigan.
- e. Priority areas for best practices include:
 - i. Compartmentalization and independence from the prosecution function and limiting the impact of cognitive bias;
 - ii. Compliance with accreditation requirements;
 - iii. Strengthening forensic science methodologies and quality assurance standards;
 - iv. Access to evidence for defendants in criminal prosecutions.

Recommendation 8: Promote Independence of Forensic Science Work within Law Enforcement Agencies

The Task Force evaluated various models of forensic science service providers. These models included forensic science service providers housed within law enforcement agencies, as an independent state department, and as an independent quasi-governmental entity with a board of directors. The Forensic Science Practice subcommittee concluded that there is no one-size-fits-all solution to where a forensic science service provider should be housed; rather it is dependent upon the circumstances of the jurisdiction and the relationship a public forensic science service provider has with its parent organization. Because the bulk of forensic science cases are currently analyzed in a physical lab facility and on equipment housed within the Michigan State Police, Task Force members who were initially in favor of recommending that the state Forensic Science Division fully separate from the Michigan State Police – in keeping with recommendation from the 2009 National Academy of Science’s report,³⁵ thought that this solution was too burdensome and costly and instead independence should be ensured through other means.

A specific concern was raised regarding the employment of law enforcement officers in forensic laboratories. Various positive and negative possibilities of employing enlisted staff members were discussed. There are public perception concerns about the relationship between law enforcement and forensic science analysis, namely the potential for bias. However, bias comes in many different forms and is not isolated to just law enforcement officers.

³³ (NIJ, 2022, p.12-13, 24)

³⁴ (NIJ, 2022, p.23-24)

³⁵ National Research Council. 2009. *Strengthening Forensic Science in the United States: A Path Forward*. Washington, DC: The National Academies Press. Recommendation 4 states: “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.*” (emphasis added)

Adhering to certain accreditation standards should mitigate bias and independence concerns. For example, ISO 17025:2017 has standards evaluated by independent assessors related to: bias training; mitigating the influence of bias; and organizational independence by having the authority to carry out the forensic science service provider's objectives and eliminating outside influences.

The Task Force examined the concept of separating lab scientists/examiners from potentially biasing information from investigators through a context management system (also known as a case manager or clearinghouse process). This is recommended to remove task-irrelevant contextual information.³⁶ However, there are also difficulties with the complexity of limiting information to laboratory staff and the net negative effect on efficiency, as well as considering the funding required to create new case manager positions.

The Task Force recommends, **with dissent on items** ³⁷:

- a. Forensic science service providers evaluate and implement, where possible, practices that limit lab staff access to potentially biasing information either through policy, case managers or clearinghouse process, or other possible methods.
- b. Forensic science service providers regularly require training on cognitive bias.
- c. Law enforcement agencies evaluate their hiring practices to ensure the most qualified and competent individual is hired for any given position within a forensic science laboratory, without special consideration for enlisted member status.
- d. Future monitoring by the Commission of forensic science service providers housed within law enforcement agencies for potential conflict or bias that may result from undue influences.
- e. Phase out through attrition enlisted personnel within public forensic science agencies.
- f. Guarantee public forensic science agency independence from law enforcement by establishment of an independent advisory body for issues such as access, bias, quality control, and compartmentalization. This should apply to all forensic science service providers housed within a law enforcement agency.

Recommendation 9: Standardize and Streamline Access to Forensic Science Service Providers

The Task Force has heard from defense attorneys that they struggle to equally access forensic science service providers and forensic science information and specifically requests for additional analysis. FSD has an existing process that includes defense and prosecution discussion followed by a request from the investigating agency. Specifically, a request from a defense attorney can be vetted by the presiding judge and a court order submitted for testing. FSD admits it has opportunities for improvements in this area specifically related to pretrial conferences and access to case file information.

Defense attorneys may have a different experience with other forensic science service providers.

The Task Force recommends:

- a. **FSD Create a Standardized and Documented Process for Requests for Additional Analysis**
 - i. Non-MSP service providers to use similar models for requesting analysis.

³⁶ National Commission on Forensic Science. *Views of the Commission: Facilitating Research on Laboratory Performance*. U.S. Department of Justice and U.S. Department of Commerce, National Institute of Standards and Technology, September 13, 2016. Page 3. <https://www.justice.gov/archives/ncfs/page/file/909311/download>.

³⁷ **Law enforcement dissent explanation.**

Recommendations | Recommendation 10: Implement Practices to Promote Quality Control and Compartmentalization

- ii. Provide training to attorneys, judges, and investigating agencies on laboratory capacity, technical competencies, and process for making additional requests. Make this training recording available online.

b. Contact with Experts by Stakeholders

- i. FSD should create model policies to improve access by defense to experts and case information. FSD will then distribute these model policies to other forensic science service providers.
- ii. FSD should create a model MOU with non-criminal justice partners (e.g. Innocence Clinics) regarding access to case file materials and at the same time protecting sensitive personal identifying information and criminal justice information.

Recommendation 10: Implement Practices to Promote Quality Control and Compartmentalization

Proficiency testing is an evaluation of performance against pre-established criteria. Blind proficiency testing may refer to the agency not knowing it is being testing (also sometimes referred to as “double blind”), the individual being testing does not he or she is being testing, or the result of the test is unknown. Proficiency testing can help agencies monitor their continuing performance, as well as identify problems related to inadequate procedures, training, or equipment calibration.³⁸

Implementing a blind proficiency testing program would require significant monetary and resource costs. There are also challenges related to keeping the program “blind” and requiring participating from law enforcement agencies as “actors,” and it may not be practicable in many disciplines.

Sequential unmasking is the process of releasing case details only as they are needed in a manner that would limit the potential for bias. For instance, releasing only the evidence items for testing with no case information. Once the evidence is tested and potential evidence of comparison quality is determined, providing the reference materials from persons of interest for comparison. Then providing case context to determine probative value. This concept is similar/related to the case manager or liaison for communications with law enforcement role. If instituted, this has the potential to add significant inefficiencies to case processing.

a. Blind Proficiency Testing

- i. All forensic science service providers should work to institute a blind proficiency testing program with the intention of evaluating each discipline and method on an annual basis.
- ii. All forensic service providers should consider interlaboratory evaluations or re-analysis audits (QARA-MSP) as an additional quality assurance measure.

b. Sequential Unmasking

- i. Further studies and research should be conducted to determine the feasibility of instituting sequential unmasking and its effect on case productivity and bias reduction.
- ii. Forensic science service providers should create policies internally that address unmasking.

Recommendation 11: Forensic Science Practitioner Training Requirements

Forensic science providers hire employees who typically have a bachelor’s degree in a natural science, like biology or chemistry, but who may not have any training or education in the requirements for the admissibility of forensic

³⁸ National Commission on Forensic Science, *Proficiency Testing in Forensic Science*, March 2016, pp. 1-4, <https://www.justice.gov/archives/ncfs/page/file/831806/download>.

science testimony.³⁹ Training of forensic science service provider staff varies from provider to provider. Accrediting bodies require that providers have a training program, but there are no minimum standards for how extensive the training program must be.

The Task Force recommends:

- a. Creating an initial training program that covers topics such as bias, courtroom testimony including the *Daubert* basic requirements for the admissibility of forensic science evidence in court, ethics, technical discipline specifics that cover the range of testing/conclusions the expert will be expected to encounter etc.
- b. Creating a continuing education program that requires a minimum of 8 hours annually of technically relevant material, externally provided, based on the scope of testing the individual conducts.
- c. Ethics and bias training be provided annually to all forensic science service providers.

Recommendation 12: Require Continuing Education for Attorneys

The admission of unreliable or misapplied forensic science evidence has led to a substantial number of wrongful convictions.⁴⁰

Many attorneys, particularly defense counsel, are unaware of the requirements for admission of forensic science evidence, and the procedures required by *Daubert*. This results in a lack of appropriate objections to the introduction of forensic science evidence and the routine admission of questionable testimony.⁴¹

There is no requirement, and little opportunity, for law students to learn about the legal requirement for the admission of forensic science testimony in law school. It is typically only touched upon briefly as “expert testimony” in a general survey class on evidence, which may or not be required, or possibly as an elective course.⁴²

There is no general mandatory continuing education requirement for attorneys in Michigan. Of the 50 states and Washington, D.C., all but 5 (Maryland, Massachusetts, Michigan, South Dakota, and Washington, D.C.) have a mandatory continuing education requirement for all attorneys.⁴³

³⁹ A review of curricula for biology and chemistry majors at major universities in Michigan indicates that there is no requirement for education concerning forensic science applications or the evidentiary impact of scientific reports or testimony.

⁴⁰ “Forensic science, or more specifically, problems in forensic science, contributes to many wrongful convictions, as seen in nearly half (45%) of DNA exoneration cases and one-quarter (24%) of all exonerations in the United States.” The Innocence Project, *Forensic Science: Problems and Solutions*, <https://innocenceproject.org/forensic-science-problems-and-solutions/>.

⁴¹ Peter J. Neufeld, *The (Near) Irrelevance of Daubert to Criminal Justice and Some Suggestions for Reform*, 95 Am. J. Pub. Health 107 (2005), at 110, https://media.law.wisc.edu/s/c_649/fmnwd/neufeld_article_on_daubert.pdf; Chorn, J. A., & Kovera, M. B. (2019). *Variations in reliability and validity do not influence judge, attorney, and mock juror decisions about psychological expert evidence*, *Law and Human Behavior*, DeMatteo, Fishel, and Tansey, (2020) *Expert Evidence: The (Unfulfilled) Promise of Daubert*, <https://journals.sagepub.com/doi/full/10.1177/1529100619894336>.

⁴² See University of Michigan Law School Course Catalogue, <https://michigan.law.umich.edu/course-catalog/>; Wayne State University Law School Course Listings, <https://law.wayne.edu/academics/courses>; Michigan State University College of Law Course Descriptions, <https://www.law.msu.edu/registrar/courses.php>; Western Michigan University Cooley Law School Required Courses, <https://www.cooley.edu/academics/required-courses>.

⁴³ American Bar Association, *Mandatory CLE*, <https://www.americanbar.org/events-cle/mcle/>.

For appointed counsel for indigent defendants in Michigan, the Michigan Indigent Defense Commission establishes training standards through the Michigan Indigent Defense Commission Act. Forensic science evidence training is recommended but not required.⁴⁴

The Task Force Recommends:

- a. The Michigan Supreme Court should require mandatory continuing education for attorneys in Michigan. As part of that program, any attorney appearing in a trial or appellate criminal proceeding should be required to include one annual course on forensic science evidence prior to appearing in a criminal proceeding.
- b. For appointed trial attorneys, the Michigan Indigent Defense Commission should modify their training standard per MCL 780.989(a) and MCL 780.991(2)(e) to add a mandatory forensic science requirement for a certain number of hours per year. Once the MIDC makes this modification process through the Department of Licensing and Regulatory Affairs, the state would be required to fund these new trainings as they are implemented by local indigent defense funding units.
- c. For appellate attorneys, a similar requirement should be adopted by the Appellate Defender Commission for attorneys from the State Appellate Defender Office and the Michigan Appellate Assigned Counsel System.

Recommendation 13: Require Forensic Science Evidence Education for Judges

The admission of unreliable and/or misapplied forensic science evidence has led to a substantial number of wrongful convictions.⁴⁵

Many judges are unaware of the requirements for admission of forensic science evidence, and the procedures required by *Daubert*. This results in the routine admission of questionable testimony.⁴⁶

Voluntary judicial education has been provided by the Michigan Judicial Institute.⁴⁷ The Michigan Supreme Court recently adopted a mandatory continuing judicial education program, or MCJE, for the state's justices, judges, and quasi-judicial officers. The MCJE program is currently in the planning stage and has an expected effective date of January 2024. The program requires 12 hours of MCLE with 3 of those hours dedicated to "integrity and demeanor" (including ethics) and the other 9 hours in areas to be determined by a "Judicial Education Board". The Judicial Education Board should recommend that the Michigan Judicial Institute include an annual requirement for forensic science evidence education at all future annual judicial conferences.

⁴⁴ Presentation of Marla McCowan, MIDC Director of Training, Outreach and Support, June 28, 2021; Michigan Indigent Defense Commission Act, MCL 780.989; MCL 780.991(2)(e), <https://michiganidc.gov/standards/>.

⁴⁵ See note 13.

⁴⁶ Sophia I. Gatowski et al., *Asking the Gatekeepers: A National Survey of Judges on Judging Expert Evidence in a Post-Daubert World*, 25 Law. & Hum. Behav. 433 (2001); Hilbert, Jim, "The Disappointing History of Science in the Courtroom: Frye, Daubert, and the Ongoing Crisis of "Junk Science" in Criminal Trials" (2019). *Faculty Scholarship*, (2019) <https://open.mitchellhamline.edu/facsch/460>; Dobbin, S.A. & Gatowski, Sophia & Richardson, James & Ginsburg, G.P. & Merlino, Mara & Dahir, Veronica. (2002). Applying Daubert: How well do judges understand science and scientific method. 85. 244-247. https://www.researchgate.net/publication/294749899_Applying_Daubert_How_well_do_judges_understand_science_and_scientific_method; David Caudill and Lewis Larue, *Why Judges Applying the Daubert Trilogy Need to Know About the Social, Institutional, and Rhetorical - and Not Just the Methodological - Aspects of Science*, 45 Boston College L. Rev. 1 (2003).

⁴⁷ Presentation of Dawn McCarty, Director, Michigan Judicial Institute, June 29, 2021.

The Task Force Recommends:

Under the recent mandatory judicial education order of the Michigan Supreme Court, the Judicial Education Board should include an annual requirement for forensic science evidence education for all judges. The Supreme Court should appoint members of the Judicial Education Board who are experienced and/or knowledgeable in forensic science evidence.

Recommendation 14: Accredited Training Programs for Studies of Forensic Science

Only two higher education institutions in Michigan offer degrees in Forensic Science. Michigan State University offers a master's degree in forensic science.⁴⁸ Madonna University offers a Bachelor of Science degree in Forensic Science.⁴⁹ Both programs are accredited by the Forensic Science Education Programs Accreditation Commission⁵⁰ and that accreditation should be a requirement for any school offering forensic science education.

The Task Force recommends:

Colleges and Universities offering degrees in forensic science should be accredited by the Forensic Science Education Programs Accreditation Commission of the American Academy of Forensic Sciences.

Recommendation 15: Testimony

There has been concern for some time that judges have not adhered to their role as gatekeepers of forensic science evidence. Both the National Academies of Science and the President's Council of Advisors on Science and Technology (PCAST) have expressed concerns.⁵¹ Some judges have ruled that the requirements for admissibility under Rule 702 go to weight and not admissibility.⁵² While weight is a matter for the jury, admissibility is the basic function of the judge. Proposed revisions to Rule 702 would clarify that the proponent of forensic science evidence must demonstrate its reliability by a preponderance of the evidence before the judge at a *Daubert* hearing. The revisions would also require that the judge find that a proposed expert opinion is a reliable application of the expert's methodology to the facts. The proposals were adopted by the U.S. Judicial Conference Committee on Rules of Practice and Procedure in June of 2022⁵³ and will be presented to the U. S. Supreme Court for adoption later this year.

"A proposed amendment to Federal Rule of Evidence 702, which governs the admissibility of expert testimony in federal court, could clarify the evidentiary burden on proponents of expert testimony and a court's role regarding its admissibility. Motions under Rule 702, frequently called Daubert motions after the Supreme Court's opinion Daubert v. Merrell Dow Pharmaceuticals Inc., are used to limit or otherwise exclude an expert's testimony to a jury. These motions are often critical to a case's success, especially in fields that rely heavily on experts such as antitrust, product liability, toxic torts, and environmental

⁴⁸ <https://cj.msu.edu/graduates/forensic-science/forensic-home.html>

⁴⁹ <https://www.madonna.edu/academics/programs/forensic-science/>

⁵⁰ <https://fepac-edu.org/>

⁵¹ Lander, *Fixing Rule 702: The PCAST Report and Steps to Ensure the Reliability of Forensic Feature-Comparison Methods in the Criminal Courts*, 86 Fordham L Rev 1661, 1676 (2018); Bernstein & Lasker, *Defending Daubert: It's Time to Amend Federal Rule of Evidence 702*, 57 William & Mary L Rev 1 (2015).

⁵² *Federal Rule of Evidence 702: A One-Year Review and Study of Decisions in 2020*, Lawyers for Civil Justice, https://www.lfcj.com/uploads/1/1/2/0/112061707/lcj_study_of_rule_702_decisions_from_2020_-_sept_30_2021.pdf.

⁵³ Committee on Rules of Practice and Procedure Meeting, June 7, 2022, https://www.uscourts.gov/sites/default/files/2022-06_standing_committee_agenda_book_final.pdf.

litigation. An amendment to Rule 702 currently under consideration looks to clarify the proper evidentiary standard for such motions. Under the seminal cases regarding admissibility of expert testimony, a federal judge acts as a gatekeeper of expert testimony, including by excluding any proposed expert testimony deemed to be unreliable. The proponent of the expert testimony must convince the judge of the reliability of the testimony by a preponderance of the evidence to be admissible.”⁵⁴

The amendments are generally supported by the civil defense bar, opposed by the National District Attorneys Association⁵⁵ and the Prosecuting Attorneys Association of Michigan,⁵⁶ and also opposed by the civil plaintiff’s bar. On the other hand, the amendments are strongly supported by the Innocence Project and the National Association of Criminal Defense Lawyers.⁵⁷

The Michigan State Bar convened a work group to consider whether MRE 702 should be revised to reflect FRE 702. The work group recommended that MRE 702 be amended to correspond to FRE 702 and the State Bar Board of Commissioners forwarded that recommendation to the Supreme Court on November 18, 2022. The memo recommending that amendment included the following:

This amendment reflects an attempt to correct judicial missteps, rather than to substantively change the law. Judges must make Rule 702 determinations under FRE 104(a). FRE 104(a), in turn, mandates the court to actively decide whether the evidence is admissible. While the “preponderance” standard is the appropriate standard for those decisions, this fact is not readily apparent. Instead courts must search case law to find it.

The Committee also felt that FRE 702 has been widely misinterpreted by treating factors (b) and (d) as questions of weight, rather than admissibility. Questions of weight are decided by the jury, whereas questions of admissibility are questions for the court. This leaves jurors to weigh up flawed testimony that should not have reached the courtroom, and leaves practitioners with cross-examination as their only recourse. Nonetheless, many courts misinterpret the requirement so greatly as to presume that expert testimony is admissible. In fact, a study on 2020 federal court decisions found that 13% of judicial decisions on expert testimony incorrectly noted a presumption of admissibility under FRE 702. The Committee believes that embedding the standard directly into the rule will help judges take notice, and follow through, on actively making Rule 702 determinations.

There is no data to suggest that the situation in Michigan courts is any different from the shortcomings elsewhere. As the work group stated, however, “there is no reason to believe the same problems affecting federal courts would not also affect state courts; arguably, given less resources, busier dockets and many cases involving lesser financial stakes, one might hypothesize that the problem would be worse in state courts.”

⁵⁴ *Changes to Rule 702 Cement Judge’s Role as Gatekeeper for Expert Testimony*, National Law Review, <https://www.natlawreview.com/article/changes-to-rule-702-cement-judge-s-role-gatekeeper-expert-testimony>.

⁵⁵ *Comment from National District Attorneys Association*, National District Attorneys Association, February 15, 2022, <https://www.regulations.gov/comment/USC-RULES-EV-2021-0005-0105>.

⁵⁶ The Prosecuting Attorneys Association of Michigan Board voted to oppose the proposed change at a meeting held on December 2, 2022.

⁵⁷ *One Step Closer to a Revised Standard for the Admissibility of Expert Testimony Under Rule 702*, National Law Review, <https://www.natlawreview.com/article/one-step-closer-to-revised-standard-admissibility-expert-testimony-under-rule-702>.

The Task Force recommends, with one member dissenting⁵⁸:

The Michigan Supreme Court should amend MRE 702 to correspond with proposed amendments to FRE 702 to improve the quality of *Daubert* hearings, set the evidentiary standard and burden at *Daubert* hearings, and reinforce the gatekeeping obligation of the trial judge.

The revision is as follows:

FRE 702 current revision

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if the proponent has demonstrated to the court that it is more likely than not that:

a) the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;

b) the testimony is based on sufficient facts or data;

c) the testimony is the product of reliable principles and methods; and

d) ~~the expert has reliably applied~~ expert’s opinion reflects a reliable application of the principles and methods to the facts of the case.

Recommendation 16: Jury Instructions

Expert Witness

The current Michigan criminal jury instruction regarding “expert” testimony provides:

M Crim JI 5.10 Expert Witness

(1) You have heard testimony from a witness, _____, who has given you [his / her] opinion as an expert in the field of _____. Experts are allowed to give opinions in court about matters they are experts on.

(2) However, you do not have to believe an expert’s opinion. Instead, you should decide whether you believe it and how important you think it is. When you decide whether you believe an expert’s opinion, think carefully about the reasons and facts [he / she] gave for [his / her] opinion, and whether those facts are true. You should also think about the expert’s qualifications, and whether [his / her] opinion makes sense when you think about the other evidence in the case.

The National Commission on Forensic Science concluded that it is improper and misleading for a trial judge to declare a witness to be an expert in the presence of the jury. The Commission⁵⁹ recommended that such a “vouching” instruction not be given. For 15 years, the American Bar Association standards have provided that “The court should not, in the presence of the jury, declare that a witness is qualified as an expert or to render an expert

⁵⁸ Task Force member Prosecutor Matthew Wiese dissented from this recommendation, representing the views of the National District Attorneys Association and the Prosecuting Attorneys Association of Michigan.

⁵⁹ National Commission on Forensic Science, <https://www.justice.gov/archives/ncfs/file/880246/download>.

opinion, and counsel should not ask the court to do so.”⁶⁰ The standard has been adopted for both civil and criminal cases.⁶¹

The current Michigan Jury Instruction regarding expert witness testimony is improper and misleading and should not be given.

“Anti-CSI” or “Adequacy of Police Investigation” Instructions

The popularity of “CSI” and other forensic science television programs soon gave rise to a claim by prosecutors that juries were wrongfully acquitting defendants when they did not see the type of forensic science evidence portrayed on those television programs. Whether any such “CSI Effect” ever existed was problematic.⁶² Nevertheless when defendants raised a claim that the police investigation was inadequate for failing to conduct certain forensic science examinations, judges have been requested to give a jury instruction to the effect that the government is not obligated to present any scientific evidence and some judges have even given such an instruction sua sponte.⁶³

In Michigan, there is one supposed unpublished Court of Appeals case where the trial judge, apparently sua sponte, instructed the jurors during voir dire:

“Now, how many of you watch television shows like CSI and Law & Order and Harry's Law and some of those?

I have to admit to some Law & Orders myself once in a while. You can probably imagine why I ask that question. We don't want you to be sitting there under the delusion that what you're about to see in the real world of the Frank Murphy Hall of Justice bears much relationship to how you see trial reenacted on television and in the movies.

Although I know those television trial shows are very popular these days, . . . they can give you a very false or misleading idea of how cases are investigated and how they're tried in a courtroom. Especially when it comes into the area of forensic science . . ., or the ability of either side to produce scientific evidence that proves or disproves the case. Most of that stuff is just fantasy that lives in the minds of television script writers.

Please do not confuse what you see on TV with reality. Please don't expect here, for example, the prosecutor is going to produce a lot of exotic scientific evidence . . ., or that he is going to produce

⁶⁰ American Bar Association Civil Trial Practice Standard 14 (2007).

<https://www.americanbar.org/content/dam/aba/administrative/litigation/leadership-portal/ctps.pdf>.

⁶¹ American Bar Association Midyear Meeting (2012)

https://www.abajournal.com/news/article/resolution_tackles_expert_evidence_issues_in_criminal_cases.

⁶² *A Study of Juror Expectations and Demands Concerning Scientific Evidence: Does the “CSI Effect” Exist?*, by Donald E. Shelton, Young Kim and Gregg Barak, 9 *Vanderbilt J. Ent. & Tech. L* 334 (2006); *An Indirect-Effects Model of Mediated Adjudication: The CSI Myth, the Tech Effect, and Metropolitan Jurors’ Expectations for Scientific Evidence*, by Hon. Donald E. Shelton, Young S. Kim, and Gregg Barak, 12 *Vanderbilt Journal of Entertainment & Technology Law* 1 (2009); *Examining the “CSI-effect” in the Cases of Circumstantial Evidence and Eyewitness Testimony: Multivariate and Path Analyses*, by Young S. Kim, Gregg Barak, and Donald E. Shelton, 37 *Journal of Criminal Justice* 452-460 (2009).

⁶³ *United States v. Saldarriaga*, 204 F.3d 50 (2d Cir. 2000).

superbly articulate witnesses who look like GQ models and have been trained at the actor[']s studio because I can guarantee you that is not going to be the case here.”

The Court of Appeals held that the instruction was not reversible error.⁶⁴

The danger of such comments or instructions is that they can be interpreted by the jury as lessening or undermining the prosecutor’s duty to prove guilt beyond a reasonable doubt. The Maryland Court of Appeals considered an “anti-CSI” instruction in *Stabb v. State*⁶⁵ and found that it was “improper because it relieved the State of its burden to prove Stabb was guilty beyond a reasonable doubt, invaded the province of the jury, and, thus, violated Stabb's constitutional right to a fair trial”.⁶⁶ The Maryland court added a guiding comment:

In closing and with a nod to the future, we observe that, because of the currently inconclusive state of the scholarly legal and/or scientific communities' research, taken as a whole, regarding whether such a phenomenon as the "CSI effect" exists, the use of "anti-CSI effect" jury instructions (especially when given preemptively before closing arguments or otherwise improper defense questioning or commentary during trial regarding the absence of scientific evidence as part of the State's case) is fraught with the potential for reversible error. To the extent that such an instruction is requested, its use ought to be confined to situations where it responds to correction of a pre-existing overreaching by the defense, i.e., a curative instruction. We may revisit this view at such time as a proper case comes before us where it can be demonstrated by appropriate scholarly research that a "CSI effect" has been found to exist by the relevant legal and/or scientific communities and its scope and effect can be relied upon to tailor an appropriate response through voir dire questions and/or jury instructions.⁶⁷

Scholars discourage the use of such anti-CSI instructions. In a 2014 law review article, Wyatt Feeler concludes:

After examining the case law in light of the research regarding the existence of a CSI effect and a tech effect, I take the restrained approach of a skeptic. I conclude that courts should avoid giving instructions to counter the CSI or tech effect and should allow voir dire only cautiously. Instructions that tell jurors that the government does not need to conduct any specific tests to prove its case are especially problematic, because they lower the government's burden of proof and insert the opinion of the trial judge into the case. These instructions should be given only to correct improper arguments by defense counsel.

...

Because there is little evidence of an effect on juror expectations caused by forensic dramas, any voir dire or jury instructions should avoid mentioning CSI or similar forensic television shows. Mentioning these shows may suggest to jurors that they have unrealistic expectations for evidence, when in fact they may not. If jurors do expect more scientific evidence than they used to, whether because of CSI or not, the best solution is for the government to do a better job of producing additional forensic evidence or of explaining why it cannot.⁶⁸

⁶⁴ *People v. McReynolds*, No. 307453 (Mich. Ct. App. Mar. 4, 2014).

⁶⁵ 423 Md. 454 (2011).

⁶⁶ *Id.*, at 472.

⁶⁷ *Id.*, at 473.

⁶⁸ Feeler, Wyatt. *Can Fiction Impede Conviction: Addressing Claims of a CSI Effect in the Criminal Courtroom*, 83 Miss. L.J. 1 (2014).

After a thorough review of the case law and empirical studies, Feeler concludes that “Because there is no proof that jurors have unrealistic demands for forensic evidence, courts should not generally give CSI-effect instructions or ask CSI-effect voir dire questions.”

There is no conclusive indication that jurors are improperly biased for the defense as a result of exposure to media portrayals of forensic science. Instructing the jury or conducting voir dire concerning the so-called “CSI Effect” or the adequacy of police investigation can improperly dilute the prosecution duty to prove guilt beyond a reasonable doubt. Instructing the jury or conducting voir dire concerning the so-called “CSI Effect” or the adequacy of police investigation may in fact cause jurors to have unreasonable expectations for forensic science evidence.

The Task Force recommends:

a. Expert Witness Instruction

The Michigan Supreme Court delete M Crim JI 5.10 Expert Witness and replace it with the statement that “No instruction regarding expert witness testimony should be given.”

b. Anti “CSI” or “Adequacy of Police Investigation” Instruction

The Michigan Supreme Court should add a section to the Michigan Criminal Jury Instructions stating that “No instruction should be given concerning the adequacy of police investigation or the so-called “CSI effect”.

Recommendation 17: DNA Evidence and Discovery

DNA evidence is extremely powerful and can often influence or dictate the outcome of a criminal trial. As the National Academies of Science Report stated, “DNA typing is now universally recognized as the standard against which many other forensic individualization techniques are judged. DNA enjoys this preeminent position because of its reliability and the fact that, absent fraud or an error in labeling or handling, the probabilities of a false positive are quantifiable and often miniscule. However, even a very small (but nonzero) probability of false positive can affect the odds that a suspect is the source of a sample with a matching DNA profile.”⁶⁹ DNA is a “double-edged sword” that can prove innocence or guilt with equal force:

The past decade has seen great advances in a powerful criminal justice tool: deoxyribonucleic acid, or DNA. DNA can be used to identify criminals with incredible accuracy when biological evidence exists. By the same token, DNA can be used to clear suspects and exonerate persons mistakenly accused or convicted of crimes. In all, DNA technology is increasingly vital to ensuring accuracy and fairness in the criminal justice system.⁷⁰

Because of this power, it is imperative that all details of its testing and interpretation in a criminal case be made available to the defense well in advance of a trial.

Current Michigan Court Rule 6.202 regarding discovery and “certification” of forensic laboratory reports states:

RULE 6.202. DISCLOSURE OF FORENSIC LABORATORY REPORT AND CERTIFICATE; APPLICABILITY; ADMISSIBILITY OF REPORT AND CERTIFICATE; EXTENSION OF TIME; ADJOURNMENT

⁶⁹ National Academies of Science, *Strengthening Forensic Science in the United States: A Path Forward*, at p. 130.

⁷⁰ Department of Justice, *Advancing Justice Through DNA Technology: Using DNA to Solve Crimes*, March 2017, <https://www.justice.gov/archives/ag/advancing-justice-through-dna-technology-using-dna-solve-crimes>.

- (A) This rule shall apply to criminal trials in the district and circuit courts.
- (B) Disclosure. Upon receipt of a forensic laboratory report and certificate, if applicable, by the examining expert, the prosecutor shall serve a copy of the laboratory report and certificate on the opposing party's attorney or party, if not represented by an attorney, within 14 days after receipt of the laboratory report and certificate. A proof of service of the report and certificate, if applicable, on the opposing party's attorney or party, if not represented by an attorney, shall be filed with the court.
- (C) Notice and Demand.
- (1) Notice. If a party intends to offer the report described in subsection (B) as evidence at trial, the party's attorney or party, if not represented by an attorney, shall provide the opposing party's attorney or party, if not represented by an attorney, with notice of that fact in writing. If the prosecuting attorney intends to offer the report as evidence at trial, notice to the defendant's attorney or the defendant, if not represented by an attorney, shall be included with the report. If the defendant intends to offer the report as evidence at trial, notice to the prosecuting attorney shall be provided within 14 days after receipt of the report. Except as provided in subrule (C)(2), the report and certification, if applicable, is admissible in evidence to the same effect as if the person who performed the analysis or examination had personally testified.
- (2) Demand. Upon receipt of a copy of the laboratory report and certificate, if applicable, the opposing party's attorney or party, if not represented by an attorney, may file a written objection to the use of the laboratory report and certificate. The written objection shall be filed with the court in which the matter is pending, and shall be served on the opposing party's attorney or party, if not represented by an attorney, within 14 days of receipt of the notice. If a written objection is filed, the report and certificate are not admissible under subrule (C)(1). If no objection is made to the use of the laboratory report and certificate within the time allowed by this section, the report and certificate are admissible in evidence as provided in subrule (C)(1).
- (3) For good cause the court shall extend the time period of filing a written objection.
- (4) Adjournment. Compliance with this court rule shall be good cause for an adjournment of the trial.
- (D) Certification. Except as otherwise provided, the analyst who conducts the analysis on the forensic sample and signs the report shall complete a certificate on which the analyst shall state (i) that he or she is qualified by education, training, and experience to perform the analysis, (ii) the name and location of the laboratory where the analysis was performed, (iii) that performing the analysis is part of his or her regular duties, and (iv) that the tests were performed under industry-approved procedures or standards and the report accurately reflects the analyst's findings and opinions regarding the results of those tests or analysis. A report submitted by an analyst who is employed by a laboratory that is accredited by a national or international accreditation entity that substantially meets the certification requirements described above may provide proof of the laboratory's accreditation certificate in lieu of a separate certificate.

The early pretrial discovery of DNA testing and interpretation of DNA evidence is essential to a fair trial. The current Michigan Court Rule is general as to all types of forensic science evidence but does not adequately address the particular aspects of DNA evidence discovery.

The American Bar Association has adopted specific criminal justice standards relating to the use of DNA evidence in criminal trials, including specific rules relating to discovery.⁷¹ The committee used those ABA standards as the starting point for this recommendation but made some specific and significant modifications. This is the ABA recommendation:

Standard 4.1 Disclosure

(a) The prosecutor should be required, within a specified and reasonable time prior to trial, to make available to the defense the following information and material relating to DNA evidence:

- (i) laboratory reports as provided in Standard 3.3;
- (ii) if different from or not contained in any laboratory report, a written description of the substance of the proposed testimony of each expert, the expert's opinion, and the underlying basis of that opinion;
- (iii) the laboratory case file and case notes;
- (iv) a curriculum vitae for each testifying expert and for each person involved in the testing;
- (v) the written material specified in Standard 3.1(a);
- (vi) reports of all proficiency examinations of each testifying expert and each person involved in the testing, with further information on proficiency testing discoverable on a showing of particularized need;
- (vii) the chain of custody documents specified in Standard 2.5;
- (viii) all raw electronic data produced during testing;
- (ix) reports of laboratory contamination and other laboratory problems affecting testing procedures or results relevant to the evaluation of the procedures and test results obtained in the case and corrective actions taken in response; and
- (x) a list of collected items that there is reason to believe contained DNA evidence but have been destroyed or lost, or have otherwise become unavailable;
- (xi) material or information within the prosecutor's possession or control, including laboratory information or material, that would tend to negate the guilt of the defendant or reduce the punishment of the defendant.

(b) The defense should be required, within a specified and reasonable time prior to trial, to make available to the prosecution the information and material in subdivision (a)(i) through (ix) of this standard for each expert whose testimony the defense intends to offer.

Standard 4.2 Defense testing and retesting

⁷¹ American Bar Association, *Criminal Justice Standards: DNA Evidence* (2007), https://www.americanbar.org/groups/criminal_justice/publications/criminal_justice_section_archive/crimjust_standards_dnaevidence/.

(a) Upon motion, made with notice to the prosecution, a court should permit the defense to inspect and test DNA evidence in the prosecution's possession or control. An affidavit in support of the motion may be presented to the court ex parte.

(b) The motion should specify the nature of any test to be conducted, the name and qualifications of the expert designated to conduct the test, the place of testing, and the evidence upon which the test will be conducted.

(c) The court should issue any orders necessary to make the evidence to be inspected or tested available to the designated expert and condition its order so as to preserve the integrity of the material to be tested or inspected.

(d) Prosecution monitoring of the preparation and testing should not be permitted unless consumptive testing is involved as described in Standard 3.4.

Standard 4.3 Defense experts

(a) Expert assistance should be provided to an indigent defendant at government expense prior to and during trial if there is reason to believe that the prosecution will present DNA evidence or if expert assistance may lead to the discovery of relevant evidence.

(b) The defendant should be permitted to make an application for expert assistance ex parte.

(c) If the expert will not testify as a defense witness at trial, the prosecution should not be permitted to interview or call the defense expert as a prosecution witness unless the court determines that the prosecution has no alternative means to obtain equivalent evidence that the expert possesses.

The committee recommends that the general principles of the ABA standards be incorporated into a new Michigan discovery court rule specifically addressing DNA evidence. However, there were concerns expressed that the mandatory disclosure of complete DNA evidence could impede the taking of pleas in cases where that is appropriate and that there needed to be a mechanism for the waiver of these disclosure requirements by the defense. The recommendation incorporates those modifications as indicated in the highlighted portions of the recommendations.

The Task Force recommends:

The Michigan Supreme Court amend the Michigan Court Rules regarding forensic science evidence as follows:

- a. Amend MCR 6.202 (A) to read: This rule shall apply to *forensic science evidence, except DNA evidence governed by Rule 6.203*, in all criminal trials in the district and circuit courts.
- b. Add the following provisions as MCR 6.203:

Rule 6.303 DNA TESTING RESULTS; APPLICABILITY; DISCLOSURE; DEFENSE TESTING AND RETESTING; DEFENSE EXPERTS

- A. This rule shall apply to criminal proceedings in the district and circuit courts.
- B. Disclosure. **Unless waived by the Defendant in open court**, the prosecutor shall be required, within a specified and reasonable time **after arraignment in Circuit Court** and prior to entry

of a plea, to make available to the defense the following information and material relating to DNA evidence:

(1) laboratory reports, which should be sufficiently comprehensive so that an independent expert can identify the process used and the conclusions reached and should include:

(a) a summary of all DNA testing and data interpretation that is recorded promptly in the report;

(b) what items were tested;

(c) who conducted the testing;

(d) identification of the type of testing kit used for the testing;

(e) the data and results produced by the testing or data interpretation;

(f) all raw electronic data (including but not limited to any .hid and .fsa files);

(g) the examiner's interpretation of the results and conclusions therefrom;

(h) the method and results of any statistical computation;

(i) the name and results of any probabilistic genotyping software used; and

(j) any additional information that could bear on the validity of the test.

(2) the laboratory case file including but not limited to, if applicable, photos of evidence, all communications, bench notes, worksheets and summary sheets, electropherograms, and CODIS reports.

(3) the chain of custody documents showing the location where and the place or thing from which the evidence was collected or the person from whom or the entity from which it was collected, the date and time it was collected, the identity of the person who collected it, and the manner in which it was collected and preserved.

(4) reports of contamination and other problems affecting testing procedures or results relevant to the evaluation of the procedures and test results obtained in the case and corrective actions taken in response.

C. **Thirty days before trial or upon request of defense counsel**, the prosecutor shall produce:

(1) the curriculum vitae for each testifying expert and for each person involved in the testing;

(2) reports of all proficiency examinations of each testifying expert and each person involved in the testing;

- (3) a list of any collected items that there is reason to believe may have contained DNA evidence but which have been destroyed or lost, or have otherwise become available.

D. Defense testing and retesting.

- (1) Upon motion, made with notice to the prosecution, a court shall permit the defense to inspect and test DNA evidence in the government's possession or control. An affidavit in support of the motion may be presented to the court ex parte.
- (2) The motion must specify the biological evidence to be evaluated, the type of anticipated testing, the name and qualifications of the expert/laboratory designated to conduct the testing, and the place of testing.
- (3) The court may issue any orders necessary to make the evidence to be inspected or tested available to the designated expert and condition its order so as to preserve the integrity of the material to be tested or inspected.
- (4) If the testing may involve complete consumption of the evidence. The court may limit or regulate defense testing under appropriate conditions.
- (5) The defense shall be required, within a specified and reasonable time prior to trial, to make available to the prosecution the information and material in subdivision B and C of this rule for each expert whose testimony the defense intends to offer.
- (6) If an expert will not testify as a defense witness at trial, the prosecution may not be permitted to interview or call the defense expert as a prosecution witness, unless the court determines that the prosecution has no alternative means to obtain equivalent evidence that the expert possesses.

Acknowledgements

The Task Force would like to thank the below individuals and organizations for their assistance and input throughout the Task Force's work. They generously devoted their time and expertise and were invaluable to the success of this body.

State Court Administrative Office staff and intern:

Lynette Durnell, Lisa Harris, Amy Lindholm, LaRay Nagele, Gabrielle Simon-Lake, and Victoria Williams (Intern).

Michigan State Police staff:

Daniel Churchman, Heather Luebs, Nicole Marsh, and Linda Strauch.

Legislative staff:

David Biswas and Caitlin Stadler

Invited expert testimony (either for full Task Force or subcommittee):

Brandon Garrett, Duke Law Director, Wilson Center for Science and Justice

Lynn Garcia, Peter Stout, Brady Mills,

David Moran, Michigan Innocence Clinic; Marla Mitchell-Cichon, WMU-Cooley Innocence Project; Megan Richardson, Michigan Innocence Clinic; exonerees

Lieutenant Brody Boucher, Michigan State Police Professional Standards Section

Linda Jackson, Director, Virginia Dept. of Forensic Sciences

Dr. Ray Wickenheiser, Director, New York State Police Crime Laboratory System

Brian Hoey, Laboratory Director, Missouri State Highway Patrol

Sarah Chu, Senior Advisor on Forensic Science Policy, The Innocence Project

Jeffrey Nye, Director, Michigan State Police Forensic Science Division

Brad Putnam, American National Standards Institute National Accreditation Board

Kent Gardner, Director, Oakland County Sheriff Forensic Science Laboratory

John Evans, Director, Delaware Division of Forensic Science

Detective First Lieutenant Gary Daniels, Michigan State Police Forensic Science Division

Greta Gill, Forensic Toxicology Analyst, Michigan State Police Forensic Science Division

Ashley Sellenraad, Latent Print Unit Manager, Michigan State Police Forensic Science Division

Mary Chartier, Chartier & Nyamfukudza, P.L.C.

Acknowledgements

Jason Eggert, Assistant Defender, Michigan State Appellate Defender Office

Dan Grow, defense attorney

Mike Nichols, Trial Attorney, The Nichols Law Firm, PLLC

Keith Barber, Michigan Legislative Corrections Ombudsman

Judge Thomas Boyd, Administrator, State Court Administrative Office

Kristen Staley, Executive Director, Michigan Indigent Defense Commission

Bruce Timmons, Former Committee Counsel, House Judiciary Committee

Timothy Bourgeois, Executive Director, Michigan Commission on Law Enforcement Standards

Additional written testimony received from:

Angelo Bommarito, Director of Quality Assurance, Illinois State Police - Division of Forensic Services

Katherine Ignowski, Trace Evidence Supervisor, Minnesota Bureau of Criminal Apprehension

Kathy Boone, Trace Evidence Supervisor, Indiana State Police Laboratory

Ruth Henk, Chemistry Supervisor, Wisconsin State Crime Laboratory

Faith Love, Director, Quality Management Division, Pennsylvania State Police Bureau of Forensic Services

Katrina Featherston, Quality Supervisor, Kentucky State Police Forensic Laboratories

Ted Manasian, Forensic Scientist, Ohio Bureau of Criminal Investigation Laboratory