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Forensic Science Oversight Board (FSOB) Meeting
Friday, September 12th, 2025
10am – 1pm

Via Microsoft Teams

- 1. Welcome/Roll Call
- 2. June Meeting Minutes
- 3. Social Law Library
- 4. OCME General Discussion BORIM Referrals
- 5. Texas FSOC Lynn Garcia Presentation
- 6. Tiffany Roy Complaint
- 7. Essex Complaint
- 8. Subsection updates
- 9. NAFSB U New Haven October Conference
- 10. Topics not reasonably anticipated within 48 hours
- 11. Public Comment
- 12. Adjourn

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Undersecretary Collins brought the meeting to order at 10:03am.

1. Roll Call

Forensic Science Oversight Board - Attendance		
Name	Preser	nt Absent
Undersecretary Kerry Collins, Chair	Х	
Sabra Jones, PhD		Х
Dr. Robin Cotton	X	
Richard Lempert, PhD	X	
Gina Papagiorgakis	X	
Dr. Ann Marie Mires	X	
Clifford Goodband	Х	
Professor Timothy Palmbach	Х	
Lucy Davis	Х	
Benjamin Selman Esq.		
Adrienne Lynch, Esq.	х	
AAG Gabriel Thornton	Х	
Lisa Kavanaugh, Esq.	Х	
Justice Nancy Gertner * (left at 11am)	Х	

1. June Meeting minutes passed with typos corrected

2. Social Law Library Updates:

Date: December 3rd

Time: 4:00 PM - 6:00 PM

Format:

1.5-hour presentation

30 minutes for questions and comments

The Social Law Library is hosting a program titled "Chasing Forensic Testimony: Pitfalls and Guardrails", structured around a fact pattern that could be interpreted as either an accident or a homicide. The event will proceed chronologically, from crime scene response to courtroom testimony.

They are waiting on names from Kristen Sullivan (Mass State Police Crime Lab) for experts in DNA and fingerprints.

Robin is a potential independent DNA expert, and Henry Swafford, a NIST fingerprint expert, has been contacted.

The team is working on including a fingerprint report summary in the fact pattern.

Judge Isaac Borenstein (ret.) will also be speaking.

The scenario will be used to highlight how forensic evidence may be interpreted in court.

Adrian Lynch is mentioned in a possibly fictional or metaphorical role ("assassination"), while Lisa Kavanaugh will act as the defense attorney.

Each expert will have 8 minutes to discuss their area of focus, especially the pitfalls and guardrails related to activity-level propositions

The cost is \$75, free for all court personnel, each presenter gets 2 free passes, there is a possibility of coupon/discount codes.

Kathy will work with Ann Marie and Anne regarding setting up a rehearsal presentation before, possibly in October for the initial with a follow up in November.

3. OCME Complaint



Adrienne - I don't believe this complaint is appropriate for the Forensic Science Oversight Board to review. The medical examiner's role is to determine the cause and manner of death—not to decide if a homicide was justified or not. A homicide simply means a death caused by another person. Whether it was self-defense is a legal issue, not a medical one, so the medical examiner wouldn't factor in the complainant's statement or the police report when making that determination. The medical examiner concluded the heart attack was linked to the assault, which is consistent with Massachusetts case law—like the Tatro case I mentioned previously. This is a medical judgment, not a legal one, and we are not doctors. We're also not able to say whether they had access to or considered every medical record—if certain records weren't submitted, the examiner couldn't review them. It seems that the complaint is being used to challenge the medical finding. I don't think this is something we should investigate further. Our board is here to review systems, policies, and procedures—not to re-examine individual medical opinions or trial outcomes. Based on what I've seen, I don't believe there's a basis for us to take this case up.

Ben - wants to respectfully disagree and questioned some of the earlier comments from past meetings about whether the McGee matter falls within our board's jurisdiction, which in his opinion does. Not opening a formal investigation, but to take a closer look at the statutes says the board has oversight authority over all Commonwealth facilities involved in forensic services in criminal investigations. The Office of the Chief Medical Examiner fits that description. It's more about how forensic evidence, the cause of death that was presented and used in a

criminal prosecution. That is exactly the kind of forensic service our board was created to oversee. This complaint clearly falls within our jurisdiction, and if we want to consider next steps, we do have access to transcripts and procedures that would allow us to do so in an informed way.

Ben also wanted to clarify that the Adams case, which has come up before, is different, it didn't involve a criminal investigation. It was an unattended death, and I agree that it likely falls outside our scope.

US Collins explained to the board that this complaint is going to be discussed at the Medicolegal Commission meeting in two weeks' time, therefore it is suggested that this complaint be tabled until after that meeting.

4. Texas Forensic Science Oversight Board/Lynn Garcia presentation:



Jarrah emphasize that these issues are challenging across the forensic community, with no universal agreement on best practices. Unlike DNA comparisons—where standards have long been established—activity-level evaluations (e.g., gunshot residue or trace evidence) are less straightforward.

Despite the difficulty, forensic disciplines should continue working toward providing meaningful value judgments in their conclusions rather than relying solely on vague statements. Education and communication across the entire justice system—investigators, lawyers, judges, and scientists—are essential, as misunderstandings about forensic results remain common.

DNA analysts often feel pressured to answer every question, but sometimes the most honest response is admitting uncertainty or insufficient information. Stressing the need for a holistic, system-wide approach (like the Armstrong report's perspective) to improve how forensic science communicates findings and manages expectations, both in testimony and investigations.

Lucy thanked the Lynn and Jarrah for their clear explanation of complex DNA and probabilistic analysis concepts, saying it helped her understand why she had stepped away from DNA work. She noted that each forensic case is unique and raised a question about situations where DNA is *not* detected, asking how that fits within the evaluative framework.

Jarrah - explained that from a DNA comparison standpoint, analysts can exclude someone, sometimes even express it numerically, but most labs prefer simple exclusion language for clarity. In some cases, DNA may not be obtained or may be uninterpretable, stopping at the quantitation stage. Evaluating such results within an *activity-level framework* can still provide meaningful context to the case—whether DNA is detected, excluded, or absent—because it helps interpret what those outcomes imply in a balanced and impartial way.

Rick – Thanked Lynn and Jarrah for their outstanding presentation. He then offered an observation and a related question. He mentioned that while quantitative likelihood ratios make sense for DNA source-level evaluations, activity-level propositions should likely rely only on *qualitative* likelihood ratios, since there's substantial uncertainty in estimating those probabilities. My main concern was how analysts can establish a solid empirical basis for activity-level likelihood ratios. Controlled laboratory experiments differ greatly from real-world (field) conditions, making replication difficult. Factors such as shedding rates, individual behavior, and the specifics of how contact can occur and influence transfer probabilities, how can scientific estimates for activity-level probabilities can be made with confidence?

Lynn - Supporting quantitative likelihood ratios (LRs) over purely verbal qualifiers like "more likely" or "much more likely." Verbal expressions are too subjective—often based on intuition or personal experience—and make it unclear what evidence or reasoning underlies the assessment. In contrast, quantitative LRs—especially when built through Bayesian networks—offer transparency. Each node in the network shows the inputs and assumptions that inform the final probability. This allows others to question, test, and adjust those inputs, perform sensitivity analyses, and see how different assumptions affect the outcome. Even if the model's assumptions turn out to be flawed, at least they are visible and can be scrutinized—unlike vague verbal statements. My colleague, John Butler told me to "Follow the data." For me, this principle underscores the importance of grounding conclusions in explicit, data-driven reasoning rather than intuition.

Jarrah - What is nature the of probability, uncertainty, and transparency in forensic DNA evaluations—particularly when using likelihood ratios (LRs) for activity-level propositions. There is no single "true" probability; all probabilistic assessments, including traditional DNA comparisons, rely on assumptions. The goal should not be to find a perfect number but to ensure the reasoning behind it is transparent and justifiable. Sensitivity analysis—adjusting assumptions to see how much they affect the LR—can show whether small changes meaningfully alter results. Often, such adjustments have little effect because forensic experiments typically involve modest data sets with limited precision. Analysts must be well trained to select appropriate data and justify their probability assignments. Reporting a number doesn't make it "correct" or objective, but it provides a traceable, reviewable rationale for how the conclusion was reached—something verbal statements like "more likely" lack. Ultimately, transparency and justification are more important than precision.

Lynn - agreed about the value of transparency but raised a key concern: what is the empirical basis for assigning numerical values to activity-level probabilities? Unlike source-level DNA statistics, which are grounded in extensive population data, activity-level judgments (e.g., transfer probabilities) lack such strong empirical foundations. The participant questioned whether forensic analysts truly have sufficient data—or training—to assign meaningful numeric likelihoods, even with good intentions and clear documentation. The speaker believes that DNA scientists should not give opinions about DNA transfer during courtroom testimony without proper preparation and training. Only a few experts might handle such questions well on the spot, but for most, doing so is risky and unscientific. Testifying "on the fly" based on intuition or limited experience can mislead judges and juries, especially since ground truth data about DNA transfer is rarely available. DNA transfer analysis is a separate discipline requiring specialized training and calibration through research and collaboration with other experts. Just because someone works with DNA doesn't mean they're qualified to testify on every DNA-related topic. Instead, experts should prepare formal evaluations in advance whenever possible and recognize when they are not qualified to give an opinion. Overall, DNA experts need more formal training and caution before testifying about complex issues like DNA transfer.

Lisa – Thank you for providing system-level guidance and would like to expand the discussion beyond DNA to include other disciplines, like gunshot residue (GSR). Thank you to Tiffany Roy for raising the issue, which has prompted valuable discussion within the board. Lisa also noted that while the FSOB doesn't accredit labs, they maintain close, collaborative relationships with them. Also, our FSOB would like to continue communicating and sharing data with the Texas FSOB.

The Chair noted that in the essence of time, and the board agreed, that both the Tiffany Roy complaint and the Mark Admas complaint be tabled until the next meeting (October)

5. Public Comment:

Tiffany Roy - if there is a presentation about the evidence in the Richardson case, I would like to be part of that discussion. I would like to help analyze and explain how that case differed from established best practices—comparing what should have happened, what actually happened, and why they disagreed with the approach taken. Would Attorney Belger also be part of this discussion?

The Chair acknowledged that it isn't known who will present the Richardson case and would make sure to inform Ms. Roy and Attorney Belger once that's decided. Lisa will reach out to Attorney Belger to discuss what the presentation might involve. You're also welcome to share any thoughts with Kathy so we can keep the board members informed.

Mark Adams - Today's presentations were interesting and asked The Chair to confirm that no further business will be conducted today

The Chair informed Mr. Adams that the remaining matters will be tabled until the next meeting, which has not yet been scheduled.

Mark Adams – Raised the point about the board's oversight authority, specifically whether it extends to individuals working inside labs. Citing Massachusetts as an example, he explains that oversight boards there typically include authority over both facilities and their employees.

The Chair Thanked everyone for their time and hard work, acknowledges that the meeting has gone past the scheduled time. The agenda for the next meeting will be developed thoughtfully, with additional time allotted if needed.

Meeting Adjourned 1:08pm