

WHY IT MATTERS





MIND THE GAP



THE STAGE: TEXAS 2015/2016

- Issues with application of CPI/CPE statistic to DNA mixture evidence in DC.
- Same issues existed in Texas, to a greater or lesser degree depending on the laboratory.
- State embarked on a massive review of DNA mixture cases where CPI/CPE used.
- During this process, prob gen was around the corner.
- And we sped that train along....with training but without an ENFSI roadmap.



HOWARD WAYNE LEWIS: CAPITAL MURDER

- In 2018, Lewis was convicted of murdering his 18-month old son. The baby was hanged over the bathroom door. His grandmother (and caretaker) was beaten to death.
- Lewis was estranged from mom and lived in Dallas; the murder occurred in Huntsville (2.5 hour drive).
- The jury sentenced Lewis to death.
- When the DNA testing was done in this case, Texas DPS had just finished validating and launching STRmix.



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- When the DNA testing was done in this case, Texas DPS had just finished validating and launching STRmix.
- They had—at the time—a likelihood ratio range they deemed to be “inconclusive.” For minifiler, the DNA analyst **thought** the range was .01 to 1000.





HOWARD WAYNE LEWIS: CAPITAL MURDER

At the time the following was true:

- They were **used to** an inconclusive range, and having it was perceived as a “conservative” approach;
- They didn’t have confidence in their ability to explain that the lower LR’s may include adventitious matches from their validation;
- Dad (ESR) said it was okay.



Testimony re: Mini- Filer Analysis of White Rope

11 Q. One more thing. Can you tell me what the likelihood
12 ratio for Howard Lewis was?

13 MR. BLAZEK: Your Honor, I made that objection
14 early with regard to the other witness.

15 THE COURT: Right.

16 MR. BLAZEK: I would make that same objection to
17 her and ask it be considered at this time.

18 THE COURT: Yes. The objection is overruled.
19 You may answer.

20 THE WITNESS: May I refer to my notes?

21 THE COURT: If you can, yes.

22 A. 995.

23 Q. (By Ms. Stroud) And when you get to a thousand
24 you're included?

25 A. It would be over a thousand, so a thousand and one



Mini-Filer Analysis of White Rope

would be an inclusionary rage.

Q. And he was?

A. 995.

MS. STROUD: I pass the witness, Your Honor.

MR. BLAZEK: May I have a running objection?

THE COURT: Yes, you may.



5 And you know, I guess maybe I was in a different
6 courtroom or maybe it's because I'm just a lawyer and I didn't
7 take science classes and I'm not a DNA analyst. But do you
8 remember this? And you remember those girls with all that
9 education, do you remember what they said? This is a number
10 scale. And the way we decide where you go on this scale is by
11 a number. And do you remember when I asked Clare, so you're
12 telling me that when you use words like excluded and
13 inconclusive, you're not speaking the same language we are?
14 And she said no, ma'am. Those are our words. They don't mean
15 what you think they mean.

16 Mr. Blazek wants to stand up here and tell you
17 that that DNA exonerated Howard Lewis. And guess what? I can
18 give you 995 reasons why he's not exonerated. 995. It takes
19 1,000 to be included. 995.



CALL FROM FRANK BLAZEK (DEFENSE)

- “I think the DNA analyst misstated the upper end of the inconclusive range.” It should have been 10,000 for minifiler.



THINGS ARE GETTING BETTER

8 YEARS IN....

- Not all labs have transitioned to STRmix.
- DPS ended up having to review all its “inconclusive” cases because a handful of them actually were exclusionary LR’s (where NOC was overstated). AND THEY DID IT.
- Not all labs have transitioned to prob gen but most are in the process.
- Communication is better but **still hard**.



ON THE HORIZON: WE MUST ADDRESS

- Evaluative Reporting in All Other Disciplines: How? When?
- Activity Level Reporting
 - Right now, we answer “is it possible” questions all day;
 - We can transition to talking about the probability of the evidence given two mutually exclusive activity propositions. HOWEVER:
- There is no UNIL here—not even close.
- Risk of ad hoc pseudo evaluations on the stand is HUGE
- No idea how to properly analyze the data/build a Bayes net;
- Traceability!
- Transparency!

