

MACDL: DNA Beyond the Basics

State of Case-Law in DNA Cases

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Topics

- Daubert-Lanigan Challenges about Reliability
 - Sufficiency of Evidence
 - Form of Expert Opinion
 - CODIS Database, Hearsay, and Confrontation
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Daubert-Lanigan Challenges

Greineder, 464 M 580 (2013)

- **Reliability challenge unlikely to succeed**, due to “strong scientific underpinning” of DNA tests/methods, quoting **Barbosa, 457 M 773 (2010)** and 2009 NAS Report
 - **But if evidence has been mislabeled or mishandled or data fabricated or manipulated, or analysts’ opinion unreliable or biased**, seek a Daubert-Lanigan hearing
 - **Otherwise, only challenge may be cross-examination** as “as to the risk of evidence being mishandled or mislabeled or of data being fabricated or manipulated, and . . . whether the expert's opinion is vulnerable to these risks”
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Daubert Challenges to Reliability

Recent Novel Challenge to DNA Evidence

Colono, 1:28 Opinion, 14-P-673 (Jan. 4, 2017)

- **Challenge to DNA random match probability statistics:** should have included error rate or rate of false positives re. analyst bias
 - **No error:** no Daubert hearing requested at trial, and neither SJC nor SCOTUS require such testimony
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Form of Opinion

- Fulgiam, 477 M 20 (2017)
 - Fingerprint Case, but application across forensics
 - Builds on Gambora (2010), Joyner & Wadlington (2014)
 - Post NAS report concern = **overstating accuracy** of print comparisons
 - **Error** to express “individualization” as **fact** not **opinion**
 - **But not prejudicial:**
 - Analyst *impliedly* noted fallibility (contrast Wadlington)
 - Analyst was vigorously cross-examined (cf. Gambora)
 - Other evidence of guilt was strong
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Form of Opinion

“No Results” or “Insufficient Data”

- Generally admissible. Cavitt, 460 M 617 (2011)
 - **Be cautious!** Some experts use “insufficient” when they mean “inconclusive.”
 - But not prejudicial as long as expert does not go on to explain the “inconclusive” results in a science-stretching way (e.g., “results could go either way,” “more information would help us include or exclude the defendant or victim”) Almonte, 465 M 224 (2013)
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Form of Opinion

“Inconclusive”

- Generally inadmissible
 - *But can come in if probative of an issue of consequence for either party.* Mathews, 450 M 858 (2008); Nesbitt, 452 M 236 (2008) (e.g., Deft admits to avoid juror speculation)
 - Or admissible if door is opened - Buckman, 461 M 24 (2011) (rebuttal to defense Bowden argument).
 - *But see* Green, 1:28 Opinion, 10-P-2086 (Aug. 4, 2017)
 - Error to admit “inconclusive” results b/c integrity of police investigation not being questioned
 - But no substantial risk of miscarriage of justice
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Form of Opinion

“Non-exclusion / Cannot Be Excluded”

- **Generally inadmissible** unless there is a statistical explanation for why known person cannot be excluded as source
Cameron, 473 M 100 (2015); Mattei, 455 M 840 (2010)
 - *Not the same as “inconclusive” opinion* - **Green, 1:28 Opinion, 10-P-2086 (Aug. 4, 2017)**
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Form of Opinion

“Inclusion” or “Individualization”

- **Admissible with statistical explanation** (e.g., significance of likelihood of similarity between two DNA profiles). **Mattei, 455 M 840 (2010)** (STR test); **Bois, 476 M 15 (2016)** (statistics necessary for male-only, Y-STR tests).
 - *Be cautious of “match”*- Some analysts and labs still like to use term “match.” **Inadmissible. Banville, 457 M 530 (2010)**
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Form of Opinion

“Exclusion”

- **Admissible.** No statistics needed, because there is no sufficient similarity between the DNA profile. **Mattei, 455 M 840 (2010)**
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Sufficiency of Evidence

Anitus – 93 MAC 104 (2018)

- Without more, Deft's DNA at or near crime scene is not sufficient evidence that Deft committed crime. RFNG

Facts

- Armed robbery of Burger King, assailants wore masks. BK manager said "blue surgical masks"
 - Video shows them fleeing, one taking off mask and throwing "something" in the neighboring parking lot
 - Video shows a car drive by that resembles make, model, and year of Anitus' mother's car (expert testimony)
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Sufficiency of Evidence

Anitus – 93 MAC 104 (2018)

Facts (continued)

- Police find a toddler's T-shirt & blue bandana in neighboring lot.
 - CW argues these items are the actual masks.
 - Both contained DNA of multiple people. Anitus' DNA "matched" a DNA profile found on both T-shirt and bandana. PopStats = 1 in 23 quadrillion (T-shirt); 1 in 260K (bandana)
 - Defense: 3 alibi witnesses; and TPC evidence re Anitus' brother (though, DNA excluded brother)
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Sufficiency of Evidence

Anitus – 93 MAC 104 (2018)

Held

- DNA admissible, creates inference of Anitus' presence/involvement
- But . . . the DNA alone is not enough. So, who cares about Stats
- Like a print, cannot tell when DNA was left on items
 - **Portability** of items with DNA on them
 - Problems of **Primary and Secondary DNA Transfer**

The 'match' to Anitus' DNA "(without more) establishes only that [Anitus] may have touched something or someone that then touched the objects"

Line of Sufficiency Cases

- Morris, 422 Mass. 254 (1996)
 - Without more, Deft's fingerprint at scene – or on crime paraphernalia – is not sufficient evidence that Deft committed crime. Here, Deft print on clown mask in armed robbery
 - French, 476 Mass. 1023 (2017)
 - Fingerprint on plexiglass window removed during robbery insufficient. Window in publicly accessible place.
 - Renaud, 81 Mass. App. Ct. 261 (2012)
 - Taped-up bank card left at scene insufficient
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Very Fact Specific

DNA in Multiple Places

Tavares, 1:28 Op., 13-P-255 (Mar. 19, 2015)

- DNA evidence is sufficient. Though pre-dates Anitus, possibly same result
- DNA on a hat, glove, cigarette, beer can – all found at 5 separate B&Es – matching Tavares' DNA, with other inculpatory evidence

DNA in Private or Inaccessible Places (e.g., sperm on vaginal swab)

Baptista, 32 MAC 910 (1992)

- Print on closed, locked vending machine inaccessible to public.

Ye, 52 MAC 390 (2001)

- Print on rarely used cabinet clearly accessed by intruders
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Very Fact Specific

And yet . . .

Fortune, 1:28 Op., 18-P-204 (Apr. 2, 2019)

- Deft DNA on cigarette butt is insufficient to tie Deft to scene
 - Applied Anitus
 - BUT . . . FAR-26782 pending, awaiting CW application
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CODIS Database, Hearsay, and Confrontation

Sullivan, 478 Mass. 369 (2017)

State hearsay analysis

- **No error** to allow testimony that police submitted samples to national database (“state of police knowledge”)
- **Error** to allow testimony about the *results* of CODIS inquiry. **See also Bizanowicz, 459 M 400 (2011)**
- **But no prejudice** (cumulative + jury instruction)

6th Amendment / Art. 12 analysis

- **Testimonial** – Results of CODIS inquiry inadmissible w/o testimony from those responsible for creating database.
 - **But harmless beyond a reasonable doubt.** (cumulative of other properly admitted DNA results & DNA match not disputed)
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CODIS Database, Hearsay, and Confrontation

Sanchez, 476 M 725 (2017)

Substitute DNA analyst

- Analyst who did initial testing of questioned samples no longer with lab
 - No 6th Am/ Art. 12 confrontation clause violation
 - Testifying analyst interpreted raw data
 - Formed own opinions about data & comparison
 - Calculated own pop stats
 - See also Greineder, 464 M 580 (2013); Chappell, 473 M 191 (2015)
 - No common law CC violation
 - Cross-examined analyst & effectively challenged
 - No requirement to prove “unavailability”
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Post-conviction DNA Testing

Two Paths:

- **Rule 30(c)(5)** (discretion of judge, motion has PFC for relief)
- **Gen. Laws ch. 278A** (claims of innocence only, much lower bar)

Chapter 278A

Filing Burden, c. 278A, § 3

Hearing Burden, c. 278A, § 7

Wade II, 467 M 496 (2014); Donald, 468 M 37 (2014)

Chapter 278A (continued)

Clark, 472 M 120 (2015) (no need to prove DNA exists before testing)

Coutu, 88 MAC 686 (2015) (“potential” for results = is it possible?, not is it reasonably possible. May not get results, should still get testing)

Lyons, 89 MAC 485 (2016) (pre-hearing discovery issues. Does the evidence exist?)

Wade III, 475 M 54 (2016) (burden of proof at hearing, and what “reasonably effective assistance of counsel” means)

Moffat, 478 M 292 (2017) (DNA results do not have to be direct evidence of innocence, may be links in chain, but evidence must be proximate to crime to get testing on it)

Chapter 278A (continued)

Williams, 481 M 799 (2019) (can get testing under Chapter 278A if claiming self-defense as claim of innocence)

Putnam, 481 M 1045 (2019) (can get testing under Chapter 278A if claiming no crime occurred)

Questions?



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