Law Enforcement Use of Probabilistic Genotyping, Forensic DNA Phenotyping, and Forensic Investigative Genetic Genealogy Technologies: A Workshop

WEDNESDAY, MARCH 13, 2024

Guiding Questions:

- How are probabilistic genotyping, facial predictions, and genetic genealogy being used by law enforcement across federal, state, local, tribal, and territorial actors?

- How reliable and accurate are these methods in practice?

- What are the relevant legal considerations and precedents that accompany these new technologies?

- What are the disparate impact concerns raised by these technologies or their manner of use?

- What considerations (e.g., accuracy of these technologies, including underlying issues of sensitivity and specificity; privacy, civil rights, civil liberties; and disparate impact) need to be assessed in implementing these technologies and the use of genetic material by law enforcement?

- What are institutional considerations for operations and procedures to ensure that these technologies are being used effectively and equitably?

9:00–9:15   **Welcome and Introduction**

Alicia Carriquiry, *Iowa State University / Chair, Workshop Planning Committee*

Lucas Zarwell, *National Institute of Justice*

Craig O'Connor*, New York City Office of Chief Medical Examiner / Workshop Planning Committee Member*

Heather McKiernan*, RTI International / Workshop Planning Committee Member*

9:15–10:30   **Setting the Stage: Considering Ethics, Equity, and Accountability**

- Tierra Bradford, *The Leadership Conference on Civil and Human Rights*
- Jennifer Lynch, *Electronic Frontier Foundation*
- Daphne Martschenko, *Stanford University*
- Krystal Tsosie, *Arizona State University*

Moderator: Sarah Chu*, Perlmutter Center for Legal Justice at Cardozo Law / Workshop Planning Committee Member*

10:30–10:45   BREAK

10:45–12:00   Surveying the Landscape: DNA Technology Use in The Criminal Legal System [Virtual]

- Paul Belli, *International Homicide Investigators Association*
- Leigh Clark, *Florida Department of Law Enforcement*
- Daniel Katz, *Maryland Department of State Police, Forensic Sciences Division*
- Mark Pooley, *The Center for Human Identification*, *University of North Texas*
- Jeremy Triplett, *Kentucky State Police Central Forensic Laboratory*
- Raymond Valerio, *Queen's County District Attorney's Office*

Moderator: Craig O'Connor*, New York City Office of Chief Medical Examiner / Workshop Planning Committee Member*

12:00– 1:00   LUNCH

1:00–2:15   Forensic Investigative Genetic Genealogy: Considerations for Implementation

- Ray Wickenheiser, *New York State Police Crime Lab System*
- Claire Glynn, *University of New Haven*
- Erin Murphy, *New York University*
- Christi Guerrini, *Baylor College of Medicine* (virtual)

Discussant: Krystal Tsosie, *Arizona State University*

Moderator: Heather McKiernan*, RTI International / Workshop Planning Committee Member*

2:15– 2:30   BREAK

2:30– 4:00   Probabilistic DNA: Considerations for Implementation

- Todd Bille, *National Laboratory Center, US Bureau of Alcohol, Tobacco, and Firearms*
- Jeanna Matthews, *Clarkson University*
- Norah Rudin, *Forensic DNA Consulting*
- Rebecca Wexler, *The University of California, Berkeley* (virtual)

Discussant: Sarah Chu, *Perlmutter Center for Legal Justice at Cardozo Law / Workshop Planning Committee Member*

Moderator: Alicia Carriquiry*, Iowa State University / Chair, Workshop Planning Committee*

4:00   MEETING ADJOURNS- END OF DAY 1

THURSDAY, MARCH 14, 2024

9:00–9:30 **Welcome and Reflections from Day 1**

Alicia Carriquiry, *Iowa State University / Chair, Workshop Planning Committee* with Workshop Planning Committee members

9:30–10:45 **Genetic Phenotyping: Considerations for implementation**

- Susan Walsh, *Indiana University – Purdue University Indianapolis*
- Rebecca Brown, *Maat Strategies*
- Matthias Wienroth, *Northumbria University* (virtual)

Discussant: Daphne Martschenko, *Stanford University*

Moderator: Alicia Carriquiry*, Iowa State University / Chair, Workshop Planning Committee*

10:45–11:00 **BREAK**

11:00–12:00 **Learning from Abroad: Law Enforcement Use of DNA Technology Outside of the United States [Virtual]**

- Dennis McNevin, *University of Technology Sydney* (virtual)
- Rafaela Granja, *Communication and Society Research Centre (CECS), University of Minho, Portugal* (virtual)
- Carole McCartney, *University of Leicester Law School* (virtual)
- Martin Zieger, *University of Bern* (virtual)

Moderator: Natalie Ram*, University of Maryland King Carey School of Law / Workshop Planning Committee Member*

12:00–1:00 **Lunch**

1:00–2:00   **Future Research Needs**

- John Butler, *National Institute of Standards and Technology*
- Daphne Martschenko, *Stanford University*
- Jeanna Matthews, *Clarkson University*
- Erin Murphy, *New York University*

Moderator: Michael Coble*, Center for Human Identification at the University of North Texas Health Science Center / Workshop Planning Committee Member*

2:00–3:00 **Closing Reflections**

Alicia Carriquiry, *Iowa State University / Chair, Workshop Planning Committee* with Workshop Planning Committee members

3:00 **MEETING ADJOURNS- END OF DAY 2**