



## **F19 The Need for Ethical, Legal, and Social Implications (ELSI) Evaluations in Forensic Science Methods and Police Investigative Technologies**

*Sarah Chu, MS\*, Innocence Project, New York, NY 10013*

---

**Learning Overview:** After attending this session, attendees will better understand the essential need to assess the ethical, legal, and social impacts of forensic methods and investigative technologies prior to their implementation.

**Impact on the Forensic Science Community:** This presentation will impact the forensic science community by recommending policies that can help improve the ethical implementation of forensic science methods and police investigative technologies.

When the National Human Genome Research Institute (NHGRI) was established in the National Institutes of Health, Congress also established the Ethical, Legal, and Social Implications (ELSI) Program as a companion program. The National Institutes of Health Revitalization Act of 1993 mandated that not less than five percent of the NHGRI budget be focused on ELSI research to ensure that as DNA technology advanced, cohorts of bioethicists would be cultivated to be able to answer the pressing problems that DNA technology would present. However, ELSI provisions were never attached to the development of other technologies serving society.

Today, we are in the midst of a technological revolution. DNA profiles can be developed in 90 minutes, police departments can pay private companies to store DNA profiles taken “voluntarily” from arrestees or by DNA dragnets, and sanctioned state DNA databases are being leveraged to non-consensually expand their reach to sift through innocent people in search of an unknown person responsible for committing a crime. Much of the ELSI research programs have focused on biomedical issues and, while experts have raised privacy and racial justice issues with the new uses of state DNA databases, the criminal legal system has pressed forward in supplying law enforcement with investigative technologies without due regard to their validity, reliability, efficiency, and just application. Notably, we have witnessed the national uproar to the use of facial recognition technology and witnessed the first known wrongful arrests attributed to its use. Communities across the country have expressed their concerns about the application of an unreliable technology, its differential impact in both use and application on communities of color, as well as its impact on their rights to a private life.

It has become clear that simply evaluating the scientific validity and reliability of forensic science methods and police investigative technologies is insufficient for the real-life implementation of these tools in a flawed and racially biased criminal legal system. This presentation will identify a few examples of forensic science and police investigative technologies, discuss their ELSI implications, and present policy recommendations to evaluate their valid, reliable, and just application. These policy recommendations will include a special focus on how structural inequalities can contribute to racial disparities in how the benefits and consequences of technologies are distributed. As a community, we must contemplate and address the meaning of our use of forensic science methods and police investigative technologies as applied in the context of our existing criminal justice system. It is only then that science can truly advance justice for all.

---

### **Ethics, Social Implications, Racial Disparities**