

what the study of microscopic hair comparison analysis reveals about the role of forensic testimony in exoneration cases in the united states



Conférence publique de l'Ecole des sciences criminelles

27 mai 2021, 16h00–17h00

Webinaire Zoom: <https://unil.zoom.us/j/95237160804>



Professor Simon A. Cole

Department of Criminology, Law & Society
School of Social Ecology
University of California, Irvine

Director
National Registry of Exonerations

In 2015, the United States Federal Bureau of Investigation (FBI) shocked the world by announcing the results of a review that found that its forensic analysts had given inappropriate testimony about microscopic hair comparison analysis (MHCA) in 96% of the cases they examined. In forensic science, the episode has been cited as evidence of a pathology in forensic science that is broader than the FBI Laboratory and MHCA. Many have interpreted the episode as “a sentinel event for other forensic sciences.” In particular, it has been interpreted as an example of a tendency toward overstatement in forensic reporting, cognitive issues in expert judgment, the excessive identification of forensic scientists with the prosecution and law enforcement, the willingness of forensic scientists to testify without validation and the willingness of courts to allow it, the obscuring of the absence of population data with “meaningless terms of art,” and the contribution of forensic science to wrongful convictions.

While the review covered only testimony by FBI analysts, the FBI noted that its analysts had trained analysts employed in state and local laboratories for decades. This presentation reports on the first study to compare data sets of state and local cases to the FBI Review. The primary data set used is the set of U.S. exoneration cases since 1989 held in the National Registry of Exonerations.

The presentation will:

- Explain what is publicly understood about the data, methods, and analysis in the FBI Review.
- Describe what is currently known about the contribution of MHCA to wrongful convictions in the U.S.
- Compare the occurrence of “inappropriate” testimony at the FBI with its occurrence at state and local laboratories.
- Explore the distinction between “appropriate” and “inappropriate” MHCA and their relative contributions to wrongful convictions.

The presentation will show that when data to quantify uncertainty is unavailable and forensic analysts resort to vague, potentially meaningless statements, wrongful convictions can result. This finding has implications beyond MHCA and is relevant to forensic science more broadly.