



Jurisprudence Section – 2011

E21 The Systemic Scientific Problems With Firearms and Tool Mark Identification

Adina Schwartz, JD, PhD, John Jay College of Criminal Justice, CUNY, Department of Law & Police Science, 899 10th Avenue, New York, NY 10019*

The goal of this presentation is to alert attendees to the severe scientific problems with the discipline of firearms and tool mark identification.

This presentation will impact the forensic science community by stimulating critical reflection on the scientific status of firearms and tool mark identification and, more generally, the traditional forensic identification sciences

There are grave, systemic scientific problems with firearms and tool mark identification (often improperly termed "ballistics"). Firearms and tool mark examiners' identity conclusions are not grounded in adequate statistical empirical foundations. Disagreements among experienced examiners about when identification conclusions are warranted make it impossible to calculate a day-to-day error rate for the discipline of firearms and tool mark identification. Further systemic problems are the absence of rigorous and blind proficiency testing and the confirmation bias that permeates both firearms and tool mark examiners' day-to-day practice and the "studies" that purport to show that their identification conclusions are warranted.

Firearms, Tool Mark, Identification