## **Legal Factors**

## Uncertainty In Forensic Science: A Factor Deliberately Down-Played By Forensic Examiners.

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Abstract: Recent admissions by the FBI that it overstated testimony in hair analyses in judicial proceedings follows a related admission by the FBI in 2004 about comparative bullet lead analyses. In both cases, scientific facts and statistical analyses compelled the agency's changes in practice. Evidence of forensic testimony given beyond the limits of science in other areas of forensic practice have been more difficult to reveal as many forensic disciplines, such as firearms identification, are generally not amenable to DNA analyses. Testimony in impression and pattern evidence disciplines are subject to similar statistical issues that have been revealed by the FBI's review of microscopic hair comparison testimony. This presentation will discuss the current practices in forensic testimony and a satellite view of what science can support. This presentation will also suggest alternative testimony supported by the current state of research and statistical principles and offer firearm/toolmarks examiners tools they can implement today in testimony that are safely within the boundaries of the current state of the science as research to support the underlying validity and reliability of the discipline are underway.