



B203 The National Institute of Standards and Technology (NIST) Trace Evidence Data Workshop: Discussions on a Path Forward for Trace Evidence Analysis

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After attending this presentation, attendees will be informed about current efforts at the NIST to expand and improve the accessibility of reference collections, materials, and databases for trace evidence analysis. This presentation will discuss the content of a workshop that took place at the NIST on July 19-20, 2016, in addition to key takeaways, related upcoming projects, and preliminary findings being crafted into a report to be released in 2017.

This presentation will impact the forensic science community by summarizing the content of the NIST meeting, describing future plans for follow-on projects, and reviewing preliminary recommendations obtained from the various discussions that took place. The ultimate goal of this effort is to assist in coordinating a multi-agency push to strengthen data in trace evidence in order to provide better tools to assist practitioners in conducting analyses and interpretation of their casework.

In 2012, the NIST Forensic Science Research Program, with sponsorship from the National Institute of Justice (NIJ), worked to develop a comprehensive list of databases, reference materials, and standard reference collections used by forensic scientists in laboratories at the state and local levels. The main goals were to identify existing data for forensic practitioners and to discover prevailing limitations. The results of the search identified 228 state, federal, and commercially run databases, which are all available to view at <http://www.nist.gov/oles/forensics/forensic-database.cfm>. Since that time, the NIST has been involved in several efforts to assist in expanding the availability of data and reference materials for various disciplines, including biometrics and firearms.

On July 19-20, 2016, the NIST held an event titled, "Trace Evidence Data Workshop: Improving Technology and Measurement in Forensic Science." This event was part of an effort at the NIST to gather feedback from the practitioners and researchers in the forensic science community on further improving access and expanding the development of datasets useful for trace forensic evidence. The main objectives of the event were to: (1) identify major gaps in the availability and accessibility of data for major areas of trace evidence analysis; (2) discuss possible solutions to addressing current gaps and determine future resource needs; and, (3) develop a road map of next steps to strengthen data in trace evidence.

Over the course of two days, attendees heard presentations from several renowned experts, scientists, and practitioners on the importance of references and data in trace evidence analysis. Many pointed out the struggle that forensic laboratories have faced in maintaining trace evidence units with the reductions in submissions and budgets for staff and training. Stakeholders from various levels of government verbalized the role that data could play in the development of new strategies for trace evidence analysis, in support of new approaches to interpretation, and in the development of standards. Presentations during the event covered broad topics, in addition to focused, moderated panels on fiber, hair, paint, tape, glass, explosives, and other miscellaneous particle analysis. Representatives from the private sector also contributed in a panel discussion.

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