



Criminalistics Section – 2007

B126 Get More From Your Crime Scene Process

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After attending this presentation, attendees will have learned business concepts for improving methods of crime scene and evidence processing as well as understand the application of two new tools to integrate the crime scene and laboratory processing of evidence.

This presentation will impact the forensic community and/or humanity by demonstrating how new technologies can be implemented to integrate the crime scene process of recognition, collection, and protection of evidence with the laboratory processing of evidence to minimize errors and improve effectiveness and efficiency.

There is compelling evidence that the relationship between the crime scene evidence team and laboratory personnel needs to be redesigned or even re-established to provide the best possible product to the criminal justice community. While the science of forensics continues to advance, the process of collecting evidence at crime scenes has remained remarkably unchanged for more than a century. As DNA analysis and other forensic techniques gain increasing importance in today's crime investigations and court cases—in some situations making the difference between life and death for a crime suspect—it is critically important that evidence collection moves into the modern era through the utilization of new technologies.

The following tools help ensure this industry continues to provide America's criminal justice system with high-quality forensic services in a timely manner:

- ISO/IEC 17025: 2005 accreditation standard
- Business concepts for quality management
- New evidence collection tools

This presentation will focus on the use of new technologies designed to simplify the documentation and collection of evidence at crime scenes. Documentation of information taken at the crime scene has not changed very much over time because many investigators still prefer the old-fashioned pen and paper approach of taking notes despite the wide availability of computers or other electronic devices designed for that purpose. Although computers greatly improve the quality and accuracy of crime scene reports, and make it easier to store and access the information, the use of these technologies requires a significant cultural shift that has not yet found wide acceptance. A new device that provides all the benefits of a computer, but still only requires a pen and paper will be described and results from a comparison study will be reported.

The more often evidence is handled, the greater the risk it will become contaminated or be otherwise compromised. With DNA processing becoming even more sensitive, contamination becomes an even greater concern. Additionally, as the sheer number of swab samples taken at crime scenes continues to skyrocket, investigators are seeking more effective ways of packaging and labeling this important evidence to minimize risk.

A new collection device designed to minimize handling, improve packaging and labeling as well as simplify the processing of evidence collected at crime scenes will also be described and results of a comparison study will be reported.

Advances in technology are improving the efficiency and effectiveness of processing crime scenes and the collected evidence. Recently developed tools help to integrate and improve the quality of the collection and processing of evidence. This allows for the processing of more cases without having to increase resources.

Process, Collection, Documentation