



W19 Multidisciplinary Techniques to Assist With Missing and Unidentified Persons Investigations

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Learning Overview: The goals of this presentation are to provide an overview of the different techniques available to generate potential investigative leads in missing persons cases and to assist with the identification of unknown individuals.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by increasing awareness of forensic and investigative techniques utilized to provide support to unidentified and missing persons investigations.

Every year, thousands of people are reported missing to law enforcement agencies while the nation's medical examiners and coroners catalog hundreds of cases involving unidentified human remains. Historically, investigators have utilized forensic techniques as well as investigative methodologies to link an unidentified decedent to a reported missing person. Oftentimes, it is necessary to employ a combination of techniques to obtain adequate information to support an identification. Periodic updates regarding technological advances and new applications allow experienced investigators, as well as novices, with the opportunity to consider additional strategies to assist with the identification process.

Workshop speakers include practitioners from state and federal agencies with specialized knowledge and experience in various disciplines including anthropology, latent print examinations, data basing, odontology, DNA, pathology, and digital media exploitation. Presentations will highlight advances in technology and new initiatives in the disciplines, as well as a variety of biometric repositories.

Anthropologists will discuss how skeletal material can provide biological profile information to narrow the list of possible missing person matches to unidentified decedents, as well as how documentation of skeletal anomalies and antemortem trauma can assist identification comparisons. Additionally, skeletal remains can provide the template for forensic artists to create facial approximations for media releases to generate investigative leads. Odontologists will explain how dental examinations and dental records contribute to the identification process. Pathologists will discuss the use of tattoos and body modifications.

Many identifications are aided using national databases containing biometrics. The utilization of latent print and DNA comparisons have become routine practices in unidentified and missing persons investigations. A new initiative that focuses on searching unknown deceased fingerprint cards will be explored. Additionally, the Combined DNA Index System (CODIS), which compares the DNA profiles obtained from unidentified individuals, missing persons, and relatives of missing persons, will be discussed, as well as new DNA technologies that will have an impact on human remains investigations.

Additional database resources will also be discussed, including the National Missing and Unidentified Persons System (NamUs), the National Crime Information Center's (NCIC) missing and unidentified indexes, and the Violent Criminal Apprehension Program (ViCAP).

A member from an Identification Unit will describe the importance of outreach efforts, such as Missing Persons Day events, and liaison with stakeholders, such as the National Center for Missing and Exploited Children (NCMEC).

New advances in digital media exploitation will be presented, which will include a discussion on tracking human trafficking on the "Dark Web."

Missing Persons, Unidentified Decedents, Human Identification