A201 A Study Conducted to Address the Significance of Submission of Fingerprints Obtained From Unidentified Human Remains to Various Fingerprint Databases

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After attending this presentation, attendees will understand the problems involved with identifying fingerprints from unidentified human remains (UHR). A fact unknown to many forensic professionals tasked with the identification of unknown UHR, all fingerprint databases are not linked to one another and many of them are unable to perform complete searches of all fingerprints available.

This presentation will impact the forensic community and/or humanity by augmenting UHR identification efforts through the presentation of the resources available for unidentified deceased fingerprint identification. As a direct result, utilization of these fingerprint databases may help identify the tens of thousands of UHR that are currently being held within medical examiner/coroner's (ME/C) offices throughout the United States. More importantly, families of these deceased individuals will no longer wonder what happened to their loved ones and struggle with the agony of possibly never having the ability of laying their loved ones to rest.

Current fingerprint databases utilized by medical examiner/coroner (ME/C) offices and law enforcement (LE) agencies exist at federal, state, and local levels and do not always overlap with the information they contain. In addition, not all ME/C offices and LE agencies possess the ability to search every one of these databases—a fact often unfamiliar to many forensic professionals who lack expertise in fingerprint searching and analysis techniques. Moreover, many agencies tasked with the identification of UHR continue to be unaware of the Department of Homeland Security (DHS) Biometric Support Center (BSC) West and the Federal Bureau of Investigation (FBI) Criminal Justice Information Services (CJIS) Special Processing Center (SPC)—both databases that are capable of performing broader searches and containing more fingerprint records than local databases. This study was conducted to acknowledge the significance and shortfalls of various fingerprint databases currently available to assist forensic experts in identifying UHR.

Statistical data from UHR cases at the San Diego County Medical Examiner's Office (SDMEO) will be presented to demonstrate the effectiveness of utilizing all of these fingerprint databases. UHR fingerprints were submitted to three different fingerprint databases to determine of the same results would occur. Prior to this study, fingerprints from UHR at the SDMEO were generally only submitted to be searched through a local fingerprint database, yielding no hits. During the study, UHR fingerprints were resubmitted to the DHS BSC West and the FBI CJIS SPC. A multitude of the submissions received multiple hits from both agencies, resulting in identifications—many that were cold cases dating back as far as 1987. Therefore, the results of this study indicate that to ensure all UHR fingerprint files are being searched thoroughly through multiple databases, copies of fingerprints should be submitted to both DHS BSC West and FBI CJIS SPC agencies, as well as local databases. This would allow maximum exhaustion of all resources in attempt at identifying the decedent's fingerprints. An obvious decline in the number of unidentified persons was yielded, which correlated to the utilization of these fingerprint databases.

Specific resources and supporting data will be provided for utilization of federal fingerprint databases currently available to the forensic community. It is recommended that ME/C offices and agencies tasked with the identification of UHR become familiar with the various fingerprint databases which can assist in the identification of current and "cold case" UHR and linking them to missing person cases. **Unidentified Human Remains, Fingerprint, Fingerprint Database**