



## Pathology/Biology Section - 2013

### **G32 The New York City Office of Chief Medical Examiner Fingerprint Project Strategy — A Model Approach for Standardized and Systematic Postmortem Fingerprint Identification**

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After attending this presentation, attendees will understand that, contrary to popular belief, all available fingerprint databases are not linked to one another and, thus many forensic professionals tasked with the identification of Unidentified Human Remains (UHR) are unable to perform complete searches of Postmortem (PM) fingerprint records against all Available Antemortem (AM) fingerprint records. After attending this presentation, attendees will understand the major issues regarding PM fingerprint identification for Medical Examiner/Coroner (ME/C) offices that are not affiliated with Law Enforcement Agencies (LEAs). The submission of PM fingerprint records to various agencies for adequate searching against AM fingerprint records will be discussed, as well as the potential solution developed at the New York City Office of Chief Medical Examiner (OCME).

This presentation will impact the forensic science community by augmenting UHR identification efforts through the proposal of a step-by-step process to utilize current resources available for postmortem fingerprint acquisition, submission, and reporting. As a direct result, utilization of the OCME Fingerprint Project Strategy may aid in the identification of numerous UHR that are currently being held within ME/C offices throughout the United States. In addition, law enforcement agencies will be able to resolve open missing person cases and investigations, as well as close out active warrants. More importantly, the next of kin of these deceased individuals will no longer question the whereabouts of their missing family members and will be able to pursue proper disposition and burial.

Current fingerprint databases utilized by ME/C offices and LEAs exist at federal, state, and local levels, and thus, do not always overlap with the information they contain. In addition, not all ME/C offices and LEA's 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. The OCME Fingerprint Project Strategy was developed to streamline PM fingerprint acquisition, digital conversion, submission, reporting, and case management. Additionally, an electronic fingerprint workflow was developed to integrate with OCME's Unified Victim Identification System (UVIS)/Case Management System (CMS), creating a paperless procedure to minimize manual data entry, redundancy, and reduce chances of human error.

Statistical data from unknown and unverified deceased cases at the OCME will be presented to demonstrate the effectiveness of utilizing the OCME Fingerprint Project Strategy. As of February 14, 2012, PM fingerprint records were acquired from all available UHR and submitted to multiple fingerprint databases in an attempt to exhaust all efforts for forensic fingerprint identification. Prior to this study, fingerprints from UHR at the OCME were generally only submitted to be searched through a local fingerprint database, yielding minimal or no hits and exhibiting a stagnant and unpredictable turnaround time. As a result, these UHR cases were forwarded to the OCME Forensic Biology laboratory for DNA analysis, a costly and lengthy process that is successful only when AM DNA reference samples are available from a missing person or family members.

A very high success rate was achieved resulting in a multitude of positive identification—many that would have been submitted for DNA analysis. Therefore, the results of this study indicate that to ensure all UHR fingerprint files are being searched thoroughly through multiple databases, PM fingerprint records must be submitted to various local, state, and federal agencies. This would allow maximum exhaustion of all resources to attempt identification of the PM fingerprints. An obvious decline in the number of unidentified and unverified deceased was yielded after the OCME Fingerprint Project Strategy was implemented, confirming a direct correlation and acknowledging the significance of leveraging all available fingerprint databases.

Specific resources currently available will be provided to the forensic community and supporting data regarding the OCME Fingerprint Project Strategy. It is recommended that ME/C offices and agencies tasked with the identification of UHR become familiar with the various fingerprint databases.

**Fingerprint, Fingerprint Database, Unidentified Deceased**