



B106 The Identification Process Involving American Citizen (AMCIT) and Undocumented Border Crossers (UBCs): The Pima County Office of the Medical Examiner (PCOME) Experience

Bruce E. Anderson, PhD, Pima County OME, Forensic Science Center, 2825 E District Street, Tucson, AZ 85714*

After attending this presentation, attendees will better understand the complexities encountered during the identification process. Additional postmortem descriptors may be necessary to complete some identifications.

This presentation will impact the forensic science community by describing how personal identification may require more than the match between a databased DNA profile or fingerprint record. Unless the true name and nationality can be deciphered, Next Of Kin (NOK) notification is usually not possible. Emerging technologies that can be utilized to extend the postmortem description beyond DNA profiles and fingerprint records can address this issue.

The PCOME is actively monitoring the case files of more than 1,000 unidentified persons dating back 50 years. The great majority of these cases have been sampled for DNA analyses, with more than 600 of these cases having already yielded complete or nearly-complete DNA profiles. Many of these profiles have been entered, or are in the process of being evaluated for entrance, into the Federal Bureau of Investigation's (FBI's) Combined DNA Index System (CODIS). Although the vast majority of these unidentified individuals are currently believed to be foreign national migrants who died while in transit from Mexico to Arizona as UBCs, their unidentified status requires the PCOME to consider each case as a potential AMCIT until identified as a foreign national. Thus, all technological tools available within the United States medicolegal sphere to assist with the identification process are utilized. In addition to CODIS, the FBI's Automated Fingerprint Identification System and National Dental Image Repository, the Department of Homeland Security's Biometric Support Center's US-VISIT and IDENT databases, the Open-GIS Mapping System, the National Missing and Unidentified Persons System, and the National Center for Missing and Exploited Children are all employed toward this end. While the PCOME actively engages in the identification process armed with DNA profiles, fingerprint records, dental records, and missing person reports, the suspected nationality status of the unidentified decedents is regularly being reviewed. Thus, any identification technology, emerging or long-established, that will assist with global region of birth or a migratory pattern is of great interest. Recent advances in technologies such as isotope ratio analysis may allow the PCOME to be more confident in the categorization of unidentified individuals as either likely UBCs or likely AMCITs. The importance of this categorization lies in the fact that a missing person's antemortem records, essential in the identification process, may be more readily located if a specific nationality is suspected or has been excluded from consideration. Examples of "identified" foreign nationals, who have matched to their own DNA profiles in CODIS but remain unidentified according to PCOME protocols because an alias name was provided to United States law enforcement, will be discussed. In these cases, the true name, nationality, and thus NOK remain unknown. This discussion should highlight the need for additional postmortem descriptors in order to achieve a more complete resolution of some unidentified cases. Innovative and emerging technologies that provide these additional descriptors hold the promise to improve the identification process by allowing for a more thorough comparison of antemortem and postmortem records.

Identification Process, Postmortem Descriptors, Emerging Technologies