

Pathology/Biology — 2019

H144 A Modern Application of Forensic Anthropology in Coroner and Medical Examiner Offices: A Preview

Katharine Chapman Pope, MA*, Division of Forensic Science, Wilmington, DE 19801; Lindsay H. Trammell, PhD, Saint Louis County Office of the Medical Examiner, St. Louis, MO 63134; Sharon M. Derrick, PhD, Texas A&M University-Corpus Christi, Corpus Christi, TX 78412; Elizabeth A. Miller, PhD, California State University Los Angeles, Los Angeles, CA 90032

Learning Overview: The goals of this presentation are to: (1) inform the medicolegal community of the value of forensic anthropology in death investigation, (2) apprise attendees of the details of obtaining valuable assistance in casework from a forensic anthropologist, (3) discuss the certification process within the field, and (4) impart through case examples exactly how forensic anthropologists can assist them in their casework.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by providing insight into the utility of forensic anthropologists in daily tasks of a medical examiner/coroner office.

Forensic anthropologists are gaining attention in the medicolegal community as an underutilized resource whose multi-layered approach to death investigation can be invaluable. Medicolegal death investigators, law enforcement, medical examiners/coroners, criminalists, attorneys, and judges often rely on discipline-specific experts to enhance their expertise. Forensically trained anthropologists are knowledgeable in all aspects of death investigation and can assist in field recovery of decedents, classification of cause and manner of death, identification of unknown decedents, and prosecution or defense of suspects in court. Although anthropologists began serving as consultants in death investigations much earlier, forensic anthropology as a discipline was recognized by the American Academy of Forensic Sciences (AAFS) in the mid-1970s, and the American Board of Forensic Anthropology (ABFA) came into existence in 1977.

Forensic anthropologists are experts in locating clandestine graves and recovering remains from a variety of contexts, such as fire scenes, graves, surface scatters, collapsed buildings, plane crashes, or any scene in which a body is not recently deceased, fully visible, and/or intact. With their knowledge of osseous/cartilaginous tissue anatomy and archaeological recovery methods, anthropologists can differentiate non-human remains during scene searches, and recover remains and associated evidence under circumstances far removed from the routine death scene. These skills save time and effort for each agency involved.

From the autopsy table to the laboratory, the forensic anthropologist can provide a full spectrum of analyses, from biomechanical evaluation of fractures to timing of injuries and healing, to differential diagnoses of pathological conditions. At the request of the medical examiner/coroner, the anthropologist may retain specimens from a fleshed body and remove soft tissue for analysis of the bone or cartilage. Anthropological assessments may establish patterns of trauma in child or elder abuse cases or differentiate inflicted from accidental injury. In skeletal cases, the anthropologist can sort commingled remains into individuals, estimate the number of individuals represented, construct demographic profiles, and reconstruct what happened to the remains from the time of death to the time of recovery, thereby enhancing the opportunity for personal identification. Following analysis, the anthropologist can properly curate skeletal remains and reinvestigate unidentified cold cases.

Medical Examiner/Coroner Office, Forensic Pathology, Forensic Anthropology