A80 Learning From Our Casework: The Society of Forensic Anthropologists (SOFA) Case Database

Cris E. Hughes, PhD*, Department of Anthropology, 109 Davenport Hall, 607 S Matthews Avenue, Urbana, IL 61801; Chelsey A. Juarez, PhD, Department of Soc & Anthro NCSU, 1911 Bldg, 10 Current Drive, Campus Box 8107, Raleigh, NC 27695-8107; and Katharine Chapman Pope, MA, Division of Forensic Science, Wilmington, DE 19801

The goals of this presentation are to: (1) introduce the SOFA Case Database, including a review of the trends in method use for age, sex, ancestry, and stature, as well as biological profile accuracy statistics for the submitted cases; (2) better understand the scope and goals of the database, the user interface, current submitted case statistics, and research potential for users; and, (3) review the submission process, including case eligibility, appropriate case data, and permissions and responsibilities of SOFA Case Database users.

This presentation will impact the forensic science community by introducing a new tool and data resource for research on forensic anthropology case work trends, including method use, biological profile estimation accuracy, and decedent demographics.

SOFA is a United States-based, non-profit organization comprised of practicing forensic anthropologists throughout the country, mostly employed at law enforcement agencies or offices of medical examiners. SOFA's purpose is to promote collaboration of forensic anthropologists, and it seeks to improve the field of practice. In 2013, SOFA began developing the concept and platform for an online forensic anthropology case database tool to serve the broader forensic anthropology community of practitioners and researchers. The purpose for developing the database was to provide a comprehensive and centralized source of information on methods used in forensic anthropology casework. The database is comprised of only identified (positive or presumptive) cases, which then allows researchers to study how forensic anthropological estimations of the biological profile compare to the actual biological profile details of the identified decedent, as well as what methods are being employed in these cases.

The goal of such analyses is to provide insight into avenues for forensic anthropological method development and improvement, as well as decedent demographic trends. To meet this goal, SOFA is engaged in active recruitment of forensic anthropologists with past and present adjudicated cases. With the participation of practitioners and the submission of cases, the SOFA Case Database is the first forensic anthropological community-wide collective resource for case data that can be used to study: (1) the consistency of practitioner-generated estimates of the biological profile with the actual age, sex, stature, and ancestry of the individual, once identified; (2) the trends, accuracy, and precision in method use; and, (3) decedent demographics to address methods gaps. As case data continues to accumulate, interested forensic anthropologists/researchers can access and analyze the anonymous case data (electronically available for download at www.sofadb.com).

SOFA's Case Database fills a data gap in the field of forensic anthropology. At the time of its development, there existed no formal, organized space for the forensic anthropology community to share approaches to casework and casework outcomes. While informal peer interaction is ongoing and useful, a significant source of data was missing — that of casework outcomes (e.g., method-derived *versus* actual biological profile information), a vital aspect for the discipline's ability to self-assess its progress and success.

In the past months, SOFA members have begun actively submitting identified cases to the database, resulting in (as of August 1, 2017) a total of 82 cases representing a wide range of case data, including case year (1993-2017, μ=2012), sex (n_{female}=30, n_{male}=51), age (15-94 years, μ=43), ancestry (n_{White}=34, n_{Black}=23, $n_{Hispanic}$=15, n_{Other}=2), and stature (57-77 inches, μ=67 inches). Additionally, more than 30 forensic anthropological methods were employed by practitioners to assess the biological profile.

Case Report, Methods, Data