A71 Learning From Our Casework: The Forensic Anthropology Database for Assessing Methods Accuracy (FADAMA)

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Learning Overview: After attending this presentation, attendees will understand how data from the FADAMA is informing research on methods use and accuracy, how other researchers can use and access the data, as well as the new data and platform additions to the database in the past two years.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by informing practitioners on how FADAMA supports a vital aspect of the discipline's ability to self-assess its progress and success in terms of casework outcomes.

In 2013, the development of the database was initiated by the Society of Forensic Anthropologists in order to provide a comprehensive and centralized open-source database on methods use and accuracy in forensic anthropology casework. Previously, there existed no formal, organized space for the forensic anthropology community to share approaches to casework and casework outcomes (e.g., method-derived versus actual biological profile information).

This presentation will introduce user platform additions to FADAMA as well as new collaborative opportunities and strategies for data collection support. Additions to the user platform for the database include data on method-specific outcomes, which allows for the assessment of method-specific accuracy. Beginning in the spring of 2020, a trained technician will be available to travel to interested laboratories to assist with data input, alleviating time constraints on participating facilities.

Furthermore, this presentation will address the following research questions with the current data included in the database: (1) accuracy of practitioner-generated estimates of the biological profile, (2) the trends in method use, and (3) decedent demographic trends.

As of August 1, 2019, a total of 243 cases representing a wide range of case data are present in FADAMA, with continued commitments from several high-caseload offices to submit their cases, such as the University of North Texas Center for Human Identification and the New York City Office of Chief Medical Examiner. The current reported case demographics are as follows: Case Year (range=1981-2018, μ=2009.7), Sex (n_{female}=73, n_{male}=169), Age (range=14-94 years, μ=42.6), Ancestry (n_{Asian}=14, n_{black}=65, $n_{hispanic}$=39, n_{other}=2, n_{white}=107), and Stature (range=48-77 inches, $\mu_{females}$=63.5 inches, μ_{males}=69.5 inches). Trends in biological profile estimation accuracies are as follows: Age=98%, Stature=90%, Sex=99.9%, Ancestry=92%). Additionally, more than 30 forensic anthropological methods were reported by practitioners to assess the biological profile. This presentation will review trends in method use for age, sex, ancestry, and stature, as well as biological profile accuracy statistics for the submitted cases. Furthermore, this presentation will review the submission process, including case eligibility, appropriate case data, and permissions and responsibilities of FADAMA users.

As case data continues to accumulate, interested forensic anthropologists/researchers can access and analyze the anonymized case data (electronically available for download at: http://sofainc.org/sofadb/index.php). This presentation will include a live demonstration of the database for interested attendees.

This research was funded by the National Institute of Justice (NIJ). Opinions, points of view expressed in this research, and products discussed represent a consensus of the authors and do not necessarily represent the official position, policies, or endorsement of the United States Department of Justice (DOJ) or NIJ.

Database, Case Reports, Accuracy

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