### **Caseloads in Forensic Anthropology**

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<sup>1</sup>Anthropology and Sociology Department, Western Carolina University; <sup>2</sup>Anthropology Department, University of Nevada, Reno; <sup>3</sup>Hitchcock Center for Chemical Ecology, University of Nevada, Reno Materials and Methods

Data are from on an online survey hosted by Western Carolina University and approved by the Institutional Review Board of this institution as well as that of the University of Nevada, Reno. The survey had a total of 364 respondents who, via self-reporting, had performed forensic anthropology casework. Not all respondents provided an answer to every question.

#### Results

In order to examine factors that had the greatest impact on the average number of forensic anthropology reports written, a Random Forest Model (RFM, n = 500) was used. This RFM found that the variables with the greatest impact on estimating the average number of forensic anthropology reports per year, were (in descending order): number of fieldwork reports per year; primary current employment status; total number of cases analyzed; institution of doctoral degree; number of reports that include both field and laboratory components; and number of fieldwork cases you've participated in (in any capacity).

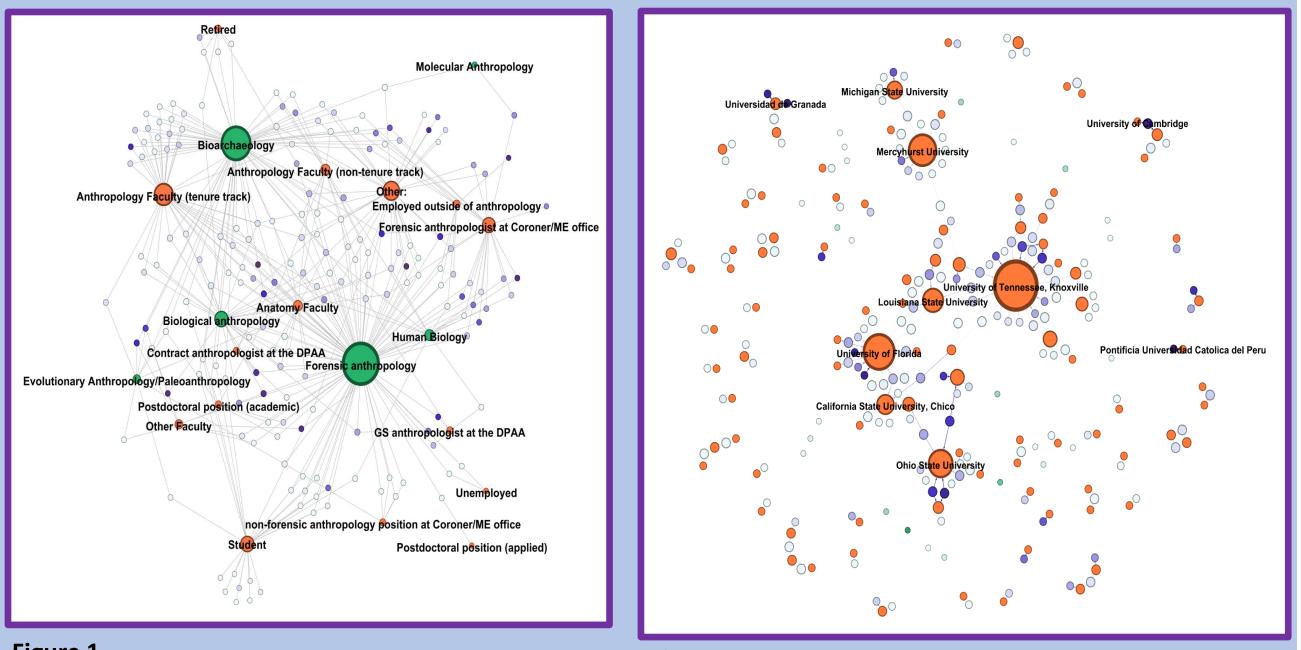
For current employment status (Figure 1), there were clear divisions between applied and academic jobs. The greatest number of forensic anthropology reports per year were written by individuals employed at the DPAA (GS anthropologists=20, median=17.5, SD=18.1; contract anthropologists =32.4, median=30, SD=30.8), followed by forensic anthropologists employed at Coroner/Medical Examiner Offices (C/ME offices) (23.7, median=20, SD=19.7), and finally forensic anthropologists employed in academia (7.9, median=3, SD=13.6).

For reports, on average forensic anthropologists wrote two field reports per year (median=2, SD=6.4). When examining number of reports based on human remains (not fieldwork or medicolegal significance), forensic anthropologists averaged 13 reports per year (median=3, SD=20.9). When considering total human remains reports written compared to years of practice, forensic anthropologists averaged 22 reports per year (median=8, SD=63.7). Note, testifying was rare in this sample, with forensic anthropologists averaging three instances of testifying during their career (median=0, SD=8.6). Additionally, when considering report types, the most common types were: medicolegal significance (34.5%); complete skeletal analysis (30.8%); trauma analysis (13.4%); biological profile (10.2%); radiographic comparison (8.4%); and Postmortem interval estimation (2.7%). Report type also varied by employment.

For institution of doctoral degree (Figure 2), individuals from the University of Tennessee-Knoxville had the greatest number of cases, followed in descending order by: University of Florida, The Ohio State University, and Michigan State University. While certification by the ABFA was not a factor in the RFM, ABFA-Diplomates had much larger numbers of case reports overall (indicative of time writing reports); however, when examined by year, ABFA-Diplomates did not have significantly greater caseloads.

# Forensic anthropologists in applied positions write more reports

# There is a large amount of variability in reports authored per year



#### Figure 1.

Network analysis of number of reports written by thesis/dissertation topic and current employment. White to purple nodes are individuals, darker purple = more reports, edges connect individuals to thesis topic and employment Employment and thesis topic node diameters scaled to degree (number of edges connected to node).

### Conclusions

This study provides baseline data on the amount and types of casework analyzed by forensic anthropologists. Overall, forensic anthropologists write relatively few reports per year, particularly those employed in academic positions; additionally, testifying is very rare. However, for both casework and testifying, there is a large amount of variability between practitioners. As forensic anthropology continues to be professionalized, we should consider the relative importance of the types of reports being authored and balance our education, training, and research in these areas appropriately. The relatively low numbers of forensic anthropology reports suggest forensic anthropologists are under-utilized, this indicates that forensic anthropologists must be greater advocates for our profession and our contributions to death investigations.

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## **Figure 2.** Network analysis of number of reports written by academic program attended

White to purple nodes are individuals, darker purple = more reports, edges connect individuals to academic program at MS or PhD level. Institution node diameters scaled to degree (number of edges connected to node)