



A22 Anatomy and Biological Anthropology: Time for a Family Reunion?

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The goal of this presentation is to acquaint attendees with the academic history of anatomy and biological anthropology in the United States and the nature of anatomy education among biological anthropology graduates. The results of a survey regarding anatomy education, training, and teaching experience among biological anthropology graduates will be discussed.

This presentation will impact the forensic science community by increasing awareness of biological anthropologists' educational training and competencies in the anatomical sciences (anatomy, histology, neuroanatomy, and osteology).

Biological anthropology and anatomy are separate degree programs today, but they share an integrated past. This academic history can be traced to Harvard, where George Dorsey graduated with the first PhD in anthropology in the United States, having received much of his training and mentorship from anatomists. In 1928, at the anthropology section meeting of the American Association for the Advancement of Science, Ales Hrdlička proposed the formation of a new professional society in physical anthropology, and the American Association of Physical Anthropologists (AAPA) was born. Two years later, the first meeting of the AAPA was held in Charlottesville, VA, in conjunction with the American Association of Anatomists annual meeting. More than 50% of founding members were anatomists and physicians, while only eight members were anthropologists. Biological anthropology programs gradually separated from anatomy departments to join the cultural, archaeological, and linguistic fields, following Boas' four-field approach. This movement of physical anthropology programs out of anatomy departments and into anthropology departments changed the foundational education of many physical anthropologists. Today, training varies depending on educational paths and research interests. Still, biological anthropologists increasingly fill faculty positions in non-anthropology departments, including anatomy faculties at medical schools and health sciences education programs, as well as applied positions in medical examiners' offices and government agencies. This study investigated anatomical sciences among biological anthropology master's and doctoral graduates and its implications for career paths.

A 22-question anonymous online survey was administered to biological anthropologists who obtained, or are in the process of obtaining, a graduate degree (Institutional Review Board (IRB) Application #17-001956, determined to be exempt from the requirement for IRB approval (45 CFR 46.101b, item 2) by the Mayo Clinic Internal Review Board). The survey was distributed to potential participants via several email listservs, including the Anthropology Section of the American Academy of Forensic Sciences. Questions surveyed anatomy education and training, graduate teaching experience in the anatomical sciences, the relevance of anatomy education to current and future career and research pursuits, and opinions regarding the need for anatomy training among biological anthropology graduates.

The 305 survey respondents were mostly anthropology graduates, and the majority had PhDs (88% anthropologists; 58% PhDs). The majority of the survey respondents obtained their degrees in the United States (65% of PhD and 75% of master's degree respondents). Europe, Canada, Central and South America, Asia, and Australia were also represented. Fifty-eight percent work/attend school in anthropology/social sciences departments, 16% in anatomy departments, and 5% in biology departments. Most were employed at research universities (65%); 24% reported teaching responsibilities in health sciences programs (medical, dental, and/or allied health professions programs). The majority (72%) of employed respondents consider anatomy knowledge essential to their current position. Sixty-seven percent report that it is relevant to their teaching load, and 72% consider it relevant to their research. Only 36% of PhDs reported that anatomy was/is a *required* course, but 72% of PhD graduates took an anatomy course (63% took gross anatomy with cadaveric dissection). Fewer graduates took histology, embryology, or neuroscience courses, as these are rarely required to obtain a graduate degree in anthropology and are not necessary for the career paths pursued by most graduates. Most respondents (76%) agreed that an anatomy course should be required in biological anthropology graduate programs; 49% agreed that anatomy should be offered as an elective, but not required. Nearly all (94%) respondents reported feeling that their educational training adequately prepared them to teach human osteology. Nearly half (49%) of the respondents reported feeling adequately prepared to teach gross anatomy with or without cadaveric dissection.

Responses indicate biological anthropologists still value, seek, and receive anatomy training, making these graduates uniquely suited to positions requiring an anatomical knowledge base and skillset; however, the nature and amount of anatomy training varies depending on educational paths and career interests.

Anatomy, Biological Anthropology, Survey