

# Careers in Biological Anthropology

## Why is biological anthropology an exciting and rewarding profession?

A profession that is stimulating and satisfying can make an individual's life an extremely enriching experience. Several things make the lives of professional biological anthropologists very exciting. There is the enjoyment of scientific research, with endless questions to be answered and discoveries to be made. Second, there is the opportunity to write and communicate the findings of your research to audiences of all kinds and all ages. Third, teaching, while hard work, is very rewarding, students provide a constant source of stimulation. Finally, most biological anthropologists do research in what is called "the field," outside of the conventional laboratory. Field research can take place in relatively exotic places such as Latin America, Africa, and the Pacific, or in hospitals and zoological parks, for example--anywhere an interesting biological problem has been identified. The "field" is really worldwide and wide open!

## Academic Positions

There are many academic careers for appropriately trained physical anthropologists. At colleges and universities, they can be found in departments of anthropology, anatomy, biological sciences, human biology, zoology, and in medical school departments, and also in combined departments of sociology and anthropology or social sciences. Those who study primates are often in departments of biology or psychology or on the staffs of zoos or zoological research institutes. Human paleontologists may be employed in departments of paleontology, prehistory, or geology, or as staff members of natural history museums, such as the Smithsonian Institution in Washington, D.C. Biological anthropologists who work with living peoples may work at medical schools, or be found in departments of anatomy, physiology, nutrition, or genetics, or programs of physical education and athletics. Community colleges and professional schools also offer employment.

## Non-academic Positions

### CAREERS IN APPLIED ANTHROPOMETRY

Wherever people need information about the size, shape, anatomy, and growth of the human body, there are job opportunities for physical anthropologists. In the private sector, such jobs can be found in the automotive and aerospace industries, with private consulting firms and with engineers and designers. The more broadly trained one is, the easier it is to work with them. Above all, the physical anthropologist must be thoroughly grounded in the physical and life sciences early in his/her training.

In the public sector, job openings in applied anthropometry are concentrated in the military. Appropriate preparation for these jobs involves graduate training in such disciplines as anatomy, genetics, nutrition, biomechanics, kinesiology, and biostatistics. Prior experience doing anthropometry of living subjects is most advantageous. In addition to measurement experience, an individual seeking a career in public sector applied anthropometry could greatly enhance his/her employment opportunities with a sound working knowledge of statistics.

## **CAREERS IN MUSEUMS**

Museums of natural history, anthropology, archaeology, and science and technology offer employment opportunities for physical anthropologists. There are over 700 such institutions in the United States alone.

The classic position for a physical anthropologist is a museum curator. Curatorship's at large research museums are much like professorships at major universities, and competition for such posts is correspondingly stiff. Training for curatorial positions is the same as for academic positions in the same area of specialization. However, computer literacy for collection management and museum studies is useful, if not necessary.

Museums are very much involved with education. Physical anthropologists, with their perspective on humans in the natural world, human biology, and hominid evolution, can be very effective museum education officers and coordinators. They may also find positions in exhibit development, collection management, publications, and museum administration. Museum administration, particularly as director of a smaller institution, is an employment possibility that is overlooked by many young job aspirants. Museum studies background and especially practical training as an intern are invaluable aids in applying for such positions.

Breadth of training is probably the key element in preparing for most museum positions in physical anthropology. Training in the natural sciences, especially anatomy, biology, geology, and paleontology for natural history museums, and in general anthropology for archaeology and anthropology museums, is essential.

## **CAREERS IN ZOOS**

To physical anthropologists trained in primate biology, zoological parks offer career opportunities under two main headings: collection management and captive breeding programs for endangered species. Training in the study of primate behavior is a useful preparation for both sorts of job.

Staff positions for geneticists in zoos focus on the application of new technology (e.g., DNA fingerprinting) to the special problems of zoo populations or on the genetic management of small populations. A demonstrated awareness of the special problems of captive populations and experience in working on such problems are definite assets.

Training in primate behavior has relevance to two main career areas: reproductive studies and improved mental health. Individuals with more advanced training will be stronger candidates for such employment. Regarding mental health, the utilization of behavioral expertise in identifying environmental sources of stress, in providing for relief from chronic under-stimulation, and in conditioning individuals for necessary handling routines are examples of ways in which the welfare of captive primates may be improved.

Applicants for zoo positions need to have a broad zoological background, extending beyond the primates to encompass other mammalian and vertebrate groups. Graduate research experience with zoo populations is probably the best entry into the world of zoo research. The reality is that zoos need scientific approaches to animal management and propagation to a greater extent than most realize. Career opportunities can be enhanced by demonstrating the value of scientific approaches to these problems.

## **CAREERS IN FORENSIC SCIENCES**

Forensic anthropologists use their knowledge of osteology and anatomy to make forensic determinations and identifications involving human remains. They find employment in the offices of medical examiners and coroners across the United States. They are also in demand as expert witnesses in the courtroom.

The Army Central Identification Laboratory in Hawaii has recently increased its staff of forensic anthropologists to aid in the identification of skeletal remains from Southeast Asia and the Pacific area. Non-academic positions for physical anthropologists trained in the forensic area are expanding. With population increases resulting in the rise of crime rates, the demand for physical anthropologists trained in human identification will also increase.

In addition to graduate coursework in skeletal biology and human anatomy, students interested in non-academic careers as forensic anthropologists should also receive training in archaeology field methods, legal evidence, pathology, criminalistics, and forensic laboratory methods (radiography, photography, etc.). Supervised casework and participatory membership in the American Academy of Forensic Sciences are also important in terms of professional development.

## **CAREERS IN EPIDEMIOLOGY**

Epidemiologists study disease frequency, distribution, and determinants in human populations. Physical anthropologists interested in non-academic careers in the field of epidemiology should have certain qualifications as a result of their graduate training. Quantification and measurement are central to careers in epidemiology. The ability to derive measurements, and record and analyze data should be a part of all training. Statistical, demographic and computer skills are also very helpful.

One should also be able to uniquely contribute to identifying subgroups of people at risk for disease. Anthropological/population genetics makes an important contribution to epidemiology; molecular biology is also becoming an increasingly important area. Anthropometric, nutritional, physiological and psychosocial dimensions of disease are important in the identification of individuals and groups at high risk for disease.

Training in analytical reasoning is especially useful in epidemiology for the critical review of the literature. Knowledge of research design, sampling procedures, and questionnaire development and administration are also important.

Physical anthropologists should have many skills for careers in the field of epidemiology. Methodological skills are extremely important; specific courses in epidemiology, biostatistics, and research methods are especially helpful. In pursuing graduate school in physical/medical anthropology, such training should enhance career opportunities in both non-academic and academic settings.

Teaching and research positions in medical schools and in schools of public health are also career options, as are positions in the public and private sectors. Positions in government are available at the local, state, federal and international levels. Private sector careers include consulting and positions in nursing homes and hospitals, to name a few.

# General Information

- Most professional anthropological jobs require a graduate degree.
- As the demand for university/college faculty positions decreases, most openings will exist in consulting firms and government agencies.
- To increase your employment opportunities with a bachelors degree, consider minoring or double majoring in another field such as sociology, business, urban planning, or public administration.
- Anthropology provides a solid background for a variety of graduate programs including law, medicine, forensics, or genetic counseling. Research admissions requirements and take prerequisite courses.
- Anthropology is good preparation for jobs that involve people skills and require an understanding of cultural differences.
- Spend a summer in field school or travel and study other cultures.
- Volunteer to help with a professor's research.
- Gaining relevant work experience through internships, practicums, part-time jobs, or volunteer positions is critical.

# Helpful Websites

- American Association of Physical Anthropologists <http://www.physanth.org/>
- Primate Info Net <http://pin.primate.wisc.edu/>; primate-related internships, volunteer positions, and field schools <http://pin.primate.wisc.edu/jobs/list/avail>
- Smithsonian Institution Fellowships and Internships <http://www.smithsonianofi.com/>
- The American Board of Forensic Anthropologists <http://www.theabfa.org/>
- Paleoanthropology Society <http://www.paleoanthro.org/>
- American Society of Primatologists <https://asp.org/index.cfm>
- Graduate programs in physical anthropology <http://www.physanth.org/career/departmental-graduate-programs-in-physical-anthropology>

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- “Non-academic careers in physical anthropology” (<http://weber.ucsd.edu/~jmoore/bioanthro/brochure2.html>) by the Career Development Committee of the AAPA