

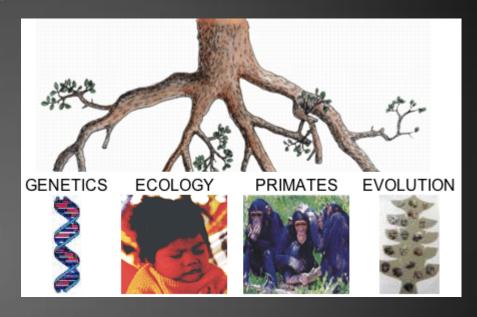
# CAREERS IN BIOLOGICAL ANTHROPOLOGY

HUMAN ORIGINS, EVOLUTIONARY HISTORY, AND HUMAN VARIATION

Study of human beings and human behavior that considers biology and culture.

### **Biological anthropology includes:**

- primatology
- paleoanthropology
- growth and development
- genetics
- osteology
- human reproduction
- forensic science
- nutrition



Traditional opportunities are in teaching.

Emergence of nontraditional opportunities are primarily in biomedical research.

# Teaching at a community college (teaching focus) Teaching in a university (research focus)

- Paleoanthropology
- Primatology

#### Research

- Medical, nursing, and public health schools
- Medical genetics research
- Government research: biomedicine and public health
- Private industry: research for profit

Museums (collections, education, and research)

Public health and international nutrition
Kinesiology and human biology
Independent consulting

Journalism: bringing science to the public

Forensic science



Source: A Guide to Careers in Physical Anthropology

Alan S. Ryan

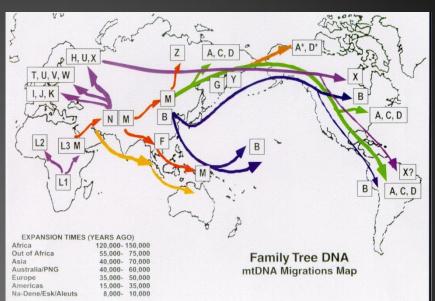
# BIOLOGICAL ANTHROPOLOGY-GENETICS

#### **Forensics**

Analyzing crime scene
 DNA

### **Population genetics**

- Analysis of ancient DNA
- Analysis using mtDNA or Y-chromosomal DNA to study human migration patterns
  - Useful for identifying when peopling of certain areas of the world occurred, such as providing a picture of how the Americas were peopled.



# THE BRAIN, MIND, AND CULTURE

Approaching anthropological fieldwork from a neuroscience perspective

"Laboratory research that is ecologically and ethnographically valid... field research that draws on... cognitive science and human development."

Mixed methods of ethnography, psychology, and neuroimaging

# **CURRENT "NEUROANTHROPOLOGY"**

#### The Encultured Brain

Greg Downey and Daniel H. Lende

## **Institute of Cognitive and Evolutionary Anthropology**

- Emma Cohen
- Robin Dunbar

#### **Semel Institute for Neuroscience and Human Behavior**

- Center for Culture and Health
- Center for Neurobehavioral Genetics
- Cultural Neuropsychology Initiative

# **FORENSIC ANTHROPOLOGY**

The analysis and application of identifying human remains that are largely skeletal, badly decomposing or otherwise unidentified in the legal and often humanitarian contexts using the science of biological anthropology.

**Masters Degree or Doctorate Degree** 

Usually in Physical or Biological Anthropology

**Academic and research institutions** 

**Medical Examiner's Office** 

Non-government organizations

Mass graves

Usually not employed on a full-time basis

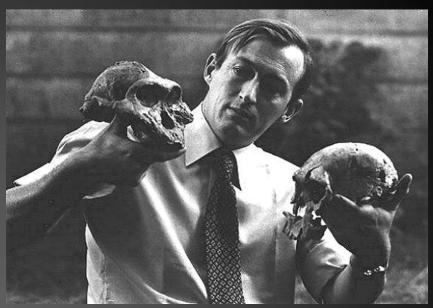
Competitive field to enter



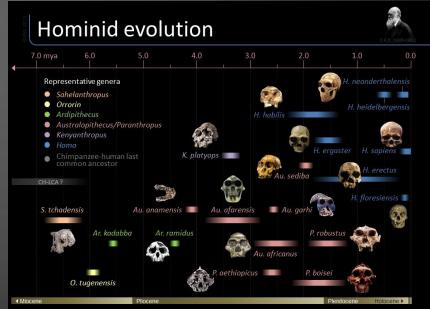
# PALEOANTHROPOLOGY

- Why become a paleoanthropologist?
- Positions: Academic to Museums
- Requirements
- From undergraduate to college professor, a case study in the difficulties of succeeding in academia.
  - Undergraduate
  - Graduate School Applications
  - Graduate School
  - Job Search
  - First Job
  - Professorship
- The Field: marketing yourself and your project (international requirements ("quirk of biogeography"), specialty positions)

Source: A Guide to Careers in Physical Anthropology
Alan S. Ryan



http://afflictor.com/2012/03/08/leakey-tends-to-view-humankind-through-a-very-long-lens-and-pessimistically/



http://visual.ly/timeline-hominid-evolution

## **EPIDEMIOLOGISTS**

Investigate the causes of disease and other public health problems to prevent them from spreading or from happening again.

Most positions as an epidemiologist require at least a master's degree from an accredited institution in the area of public health. Coursework in epidemiology includes public health, biology, and biostatistics.

Many states report shortages

of qualified workers for applied epidemiology positions.



"Employment opportunities in biomedicine or public health at a federal institution are an untapped resource for physical anthropologists" (Ryan, 2002).

Job growth is expected at 24%. Overall, Epidemiologists should have good job prospects. In 2010 the median pay was \$63,010. (BLS.gov)

They work in health departments, offices, universities, laboratories, or in the field. They spend most of their time studying data and reports in a safe lab or office setting.

