# GRADUATE SPECIALIZATION ANTHROPOGENY

**PROGRAM GUIDE** 

# WHAT IS THE GRADUATE SPECIALIZATION IN ANTHROPOGENY?

The Specialization is a graduate-level track for UCSD Ph.D. students who wish to augment their primary degree with research and education on explaining the origins of the human phenomenon, leading to a parenthetical degree in anthropogeny.

The Specialization will equip the next generation of scholars with the transdisciplinary skills, conceptual flexibility, and panoramic perspective needed to advance our understanding of human origins. Students integrate teachings from diverse fields and interact and communicate with peers and internationally renowned experts from radically different disciplines.

The broad topic areas will include:

- · Human and primate genetics and evolution
- · Paleoanthropology and hominid origins
- Mammalian and primate anthropology
- Primate biology and medicine
- · Language and cognition
- Nature-nurture interactions in explaining language and cognition
- · Human and primate society and culture
- Comparative developmental biology of primates
- · General theories for explaining humans

## WHAT IS ANTHROPOGENY?

Anthropogeny is the investigation of the origin of humans (Oxford English Dictionary, 2006; 1839 HOOPER Medical Dictionary).

Anthropogeny seeks to answer the profoundly philosophical questions, Where did we come from? and How did we get here? Definitive answers critically rely on the integration of the social, natural, and biomedical sciences (as well as aspects of arts and humanities, with important technological input from physical, chemical, and computing sciences).

## WHY STUDY ANTHROPOGENY?

Human origins research is a growing field that spans the natural and social sciences and has relevance for many practical issues. Areas as disparate as medicine, public health, social organization, child rearing, education, environmental policy, and marketing increasingly rely on evolutionary approaches for understanding the human phenomenon.

Graduate students complementing their traditional degree with a specialization in anthropogeny will gain valuable training in transdisciplinary research, expanding their capacity to understand and integrate scientific knowledge from widely differing fields. Such skill and qualification will greatly benefit students as they embark on future careers in both public and private sectors, where the ability to mediate between different types of knowledge bases is becoming increasingly important.



# ANTHROPOGENY COURSES

#### **Introduction to Anthropogeny**

An overview of key areas in anthropogeny with an emphasis on transdisciplinarity, as well as discussions of general theories for explaining humans. Lecture topics will coordinate between spheres of investigation, e.g. molecules, anatomy, cell biology, development, genetics, ecology.

- · Graduate elective
- Required course for track students
- 10 lecture/discussion sessions

#### **Current Topics in Anthropogeny**

Participate in the public and private symposia held by the Center for Academic Research and Training in Anthropogeny (CARTA), as well as attend "preview" and "digest" symposium meetings, which serve as an opportunity to learn about the speakers and presentation topics, followed by a discussion of the presentations.

- · Graduate elective
- Required course for track students
- 6 symposia

#### **Advanced Anthropogeny**

An advanced seminar addressing uniquely human traits across multiple domains of knowledge and scientific disciplines. The diverse group of students will be immersed in the full breadth and scope of anthropogeny. The CARTA online "Matrix of Comparative Anthropogeny (MOCA)" will serve as a major scaffold for this course.

- Only open to track students
- Required course for track students
- 10 lecture/discussion sessions

#### **Anthropogeny Field Course** (optional)

Held in Tanzania, Africa, students experience field research emphasizing the ecological context of human adaptation and the three major approaches to studying the origins of our species: fossil evidence, comparative biology, and ethnography of human foragers.

Open only to track students

#### **Anthropogeny Research Rounds** (optional)

Participate in monthly seminars during which students discuss their respective research or interesting outside research related to human origins.

Complete a thesis and dissertation in your home program on a topic broadly related to human origins

## PROGRAM DETAILS

There are two ways to participate:

- As a UCSD Ph.D. student taking elective course, Introduction to Anthropogeny.
- As a UCSD Ph.D. student from one of the participating programs listed below and enrolled in the Specialization. Students must fulfill all requirements of their home program and complete all courses, including **Advanced Anthropogeny** (Fellowships available, see below for details).

Participating Ph.D. Programs at UCSD:

Anthropology
Biological Sciences
Biomedical Sciences
Cognitive Science

Linguistics
Neurosciences
Psychology
Visual Arts

### **OBJECTIVES**

Identify and explain structural and molecular differences between humans and "great apes."

Identify human-functional specializations relative to great apes and explain genetic and biological mechanisms involved in generating these specializations.

Identify and explain the external mechanisms (environmental, cultural, etc.) affecting the expression of these human-functional specializations.

Attempt to define and explain the evolutionary origins of humans.

### **HOW TO ENROLL**

Ph.D. students in any of the above listed departments who have advanced to candidacy may enroll in the specialization track.

Students must work with their "home" department graduate coordinator to complete a general petition adding their major codes to the Anthropogeny Specialization.

Coordinators can contact Mary Allen in Graduate Division for guidance.

Graduate Fellowships in Anthropogeny are competitive, but any Ph.D. student enrolled in the specialization track can apply. Please send student CV, advisor CV, abstract of proposed thesis, statement of interest, and letter of support from advisor as a single, collated PDF file by June 1, to Dr. Pascal Gagneux at pageneux@ucsd.edu