Opportunities in Biological Anthropology

**Dr. Michelle Brown** | HSSB 2045 | 893-4269 | mbrown@anth.ucsb.edu

Dr. Brown’s project examines energy balance, stress hormones, and personality in wild monkeys (redtail monkeys and blue monkeys in Kibale National Park, Uganda) in order to understand variation in cooperative and competitive behaviors. This research combines data from behavioral observations, hormone assays using urine and fecal samples, auditory playback experiments, and botanical and vertebrate censuses.

Undergraduates will assist by learning and implementing the following tasks:

- integrating incoming data from Uganda into the database maintained on campus
- cataloging photos
- extracting subsets of data and participating in basic statistical and spatial analyses

For more information on enrollment and application instructions, please contact Dr. Brown directly.

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**Dr. David W Lawson** | HSSB 2055 | 893-4453 | dlawson@ucsb.edu

Dr. Lawson research’s concerns the behavioral ecology of the human family and the application of evolutionary anthropology to questions of population health and international development. He conducts field research in rural Tanzania, and utilizes existing large-scale demographic and health surveys from around the world to study the evolution of family structure and its impact on wellbeing. Information on his research can be found here: davidwlawson.mystrikingly.com

There are occasional opportunities for undergraduate students to assist with:

- Conducting reviews of the literature.
- Developing survey materials for field research.
- Field data collection.
- Data analysis and report writing.

Dr Lawson generally requires a student to have already completed at least one course with him (e.g. Anth170 or Anth130), and achieved an A grade before a student can enroll. For further information contact Dr Lawson directly.
Dr. Amber VanDerwarker | HSSB 1038 | 893-4981 | vanderwarker@anth.ucsb.edu

Dr. VanDerwarker’s current research examines how chronic warfare affected peoples’ abilities to produce enough food to feed themselves and their communities in the Central Illinois River Valley during the 12th century, a period intensive warfare and raiding throughout ancient North America. We will be analyzing the food remains (plant remains and animal bones) from several sites as part of this project.

Through participation in this project students may develop many archaeological lab skills including:
- how to use a flotation system to recover macrobotanicals and small faunal remains
- how to recognize both faunal and floral remains
- taking metric measurements of carbonized plant remains via specialized computer/microscope software accessioning modern specimens in the comparative collection
- sorting small archaeological fauna from flotation samples by taxonomic class (fish, mammal, bird, amphibian, reptile).

For more information on enrollment and application instructions, please visit: http://www.anth.ucsb.edu/vanderwarkerlab/student

Dr. Danielle Kurin | HSSB 1002 | 893-4280 | dkurin@gmail.com

Bone Biochemistry Project: Students will engage in bone collagen and enamel apatite extraction of archaeological human and animal bone. Samples will undergo carbon, nitrogen, and oxygen isotope analysis. These data will be used to reconstruct ancient patterns of diet and migration. Samples are from sites associated with prehistoric United States (Mississippian), the Pre-Incan Peruvian Andes, and pre-contact Burkina Faso.

Undergraduate Contribution: Undergraduates will engage in every part of the collagen and apatite extraction procedure.

Requirements:
- Fundamentals of Lab Safety and attendant EH&S safety courses. Previous experience working with collagen and apatite extraction.
- Experience in osteological and/or faunal analysis. Understanding of stable isotope analysis as it is used in forensic anthropology and bioarchaeology.

For more information on enrollment and application instructions, please contact Dr. Kurin directly.

Dr. Gregory Wilson | HSSB 1038 | 893-4194 | gdwilson@anth.ucsb.edu

Dr. Wilson’s project seeks to understand how chronic and intensified warfare affected peoples’ abilities to produce enough food to feed themselves and their communities. The region of interest is the Central Illinois River Valley during the 12th century, a period intensive warfare and raiding throughout ancient North America. One of the sites that the project is currently examining was once a large, fortified village (Orendorf Site) that was repeatedly burned to the ground by violent aggressors. The site was excavated in
the 1970s, and we will be generating a number of maps of houses and temples as well as creating and editing graphs, tables, and artifact photos.

Through participation in this project students may develop many archaeological lab skills including:

- Learning to use Geographic Information Systems software
- Learning to use Adobe Photoshop
- Learning to use Adobe Illustrator

For more information on enrollment and application instructions, please contact Dr. Wilson directly.

Dr. Stuart Tyson Smith | HSSB 1059 | 893-7887 | stsmith@anth.ucsb.edu

Sudanese Nubian archaeological projects at the ancient Egyptian fortress of Askut (c. 1850-1100 BC) and colonial settlement and cemetery at Tombos (c. 1450-600 BC) provide a focus for understanding culture entanglements and interaction between ancient Egypt and Nubia and the archaeology and social dynamics of small scale settlements and households in the second and first millennia BC. Ceramic analysis is central to both of these projects, providing critical information for establishing regional and site chronologies, tracing cultural identity and interaction, activities in different areas, subsistence and dietary preferences.

Undergraduate Contribution:

- Sorting and analysis of ceramics and other artifacts, including data entry and statistics.
- Archaeological illustration, including drawings of pottery and objects, plans and architectural renderings, and site maps, including computer aided renderings and reconstructions.

Prerequisites:

No prerequisites necessary, but desirable skills/experience include illustration and computer graphics, and statistics.

For more information on enrollment and application instructions, please contact Dr. Smith directly.

Dr. Sarah McClure | HSSB 1029 | 893-3477 | mcclure@anth.ucsb.edu

Dr. McClure’s research examines human-environmental impacts in Mediterranean environments, specifically the relationship between humans and animals with the spread of agriculture into Europe. Students will aid in analyzing bone assemblages and data sets from archaeological sites in Croatia and Spain.

Students will develop archaeological lab skills including:

- Identifying animal bones to species
- Taking metric measurements of animal bones
- Recording data and data management strategies

For more information on enrollment and application instructions, please contact Dr. McClure directly.
Dr. Anabel Ford | North Hall 1041 | 893-8191 | ford@ucsb.edu

Dr. Ford’s project utilizes evidence of settlement patterns with archaeological collections to better understand the socio-environmental interactions at the ancient Maya center of El Pilar. Located on an ecotone dividing the coastal plain of Belize and well drained uplands of Guatemala, El Pilar is a densely settled monumental center. In synthesizing multiple lines of evidence, working with Dr. Ford will help shed light on how past residents utilized the forest garden to sustain local populations.

Undergraduates will have the opportunity to participate in the following tasks:

- Ceramic and lithic analysis
- Digital scholarship for education
- Artifact curation and explanation

For more information on enrollment and application instructions, please contact Dr. Ford directly.

UCSB Repository for Archaeological and Ethnographic Collections | 893-7098 | ucsbrepository@gmail.com

Our goal is to store collections for future use by archaeologists and other researchers. Each collection is curated for perpetuity- this means we are responsible for all of our collections until the end of time. It's our job to make sure our collections last this long. All fees received are used to keep the facility in good repair and ensure that our artifact collections and their associated documentation are stored according to current archival standards set out by National Park Service. Thus our mission is three-fold: (1) Receive and curate new archaeological collections (2) Provide researcher access to our collections, and (3) Perpetually upkeep and maintain our current collections.

Undergraduate research assistants will:

- Receive and process incoming archaeological collections.
- Upgrade older collections to meet modern day archival standards.
- Catalog, identify, and label artifacts.
- Photocopy materials, create labels, file folders, conduct inventories, etc.
- Assist with school tours (usually 4th–6th grades).

For more information on enrollment and application instructions, please contact Jonathan Malindine at ucsbrepository@gmail.com.

The Central Coast Information Center (CCIC) | 893-2474 | centralcoastinfo@gmail.com

The CCIC works closely with the California State Office of Historic Preservation to engage in public education and outreach related to the protection of California's rich cultural heritage. As part of these efforts, the CCIC collects and maintains information on archaeological and
historical resources located in Santa Barbara and San Luis Obispo counties, integrates newly recorded resources into the California Historical Resources Inventory, and maintains a Geographic Information Systems (GIS) database of cultural resources.

Undergraduate students will develop experience in a variety of aspects of cultural resource management and historic preservation, including:

- Interpreting archaeological and historic site records and cultural resource management reports
- Integrating site and report data into the CCIC's cultural resource database
- Learning to use GIS software

For more information on enrollment and application instructions, please contact Brian Barbier at centralcoastinfo@gmail.com.