Spring 2021
Undergraduate Research Apprenticeship Positions

-AREAS/CONCENTRATIONS FOR RESEARCH-

Archaeology
Bioarchaeology
Environmental Social Science
Evolutionary Anthropology
Geology
Global Health
Museum Studies
Physical Anthropology
Social Sciences
Sociocultural Anthropology

Students should be certain to review all positions as many opportunities are combined with one or more other concentrations or disciplines.

Highlighted positions can be completed remotely and by online students.
Research Project or Internship Title:
Culture, Health, and Environment Laboratory Intern

Academic Discipline:
Global Health
Sociocultural Anthropology

Project Description:
The Culture, Health, and Environment Laboratory (CHEL) has several ongoing projects each semester that combine methods and theory from anthropology, public/global health, and sustainability. Primarily, our work focuses on the Global Ethnohydrology Study (GES), a transdisciplinary, multi-year, multi-site research project that examines cross-cultural perceptions of water issues in the context of globalization, urbanization, and climate change. Our work this semester will primarily focus on water sharing as a form of disaster response. CHEL’s internship program operates each semester with approximately 15 undergraduate interns who work collaboratively with each other and graduate students in data management, analysis, and tool design. The program is designed to encourage students to return in subsequent semesters to develop more advanced research skills. Typically this research apprenticeship is in-person but due to the unforeseeable future of COVID-19, some assignments may be done remotely.

Student’s Duties:
As a result of our many projects, students’ duties will vary. Each student will likely participate on more than one project within the lab. First-time interns will begin with data entry and data quality management of the 2020 GES. Returning interns will be working on qualitative data coding of GES surveys. Other duties and projects may develop throughout the semester.

Required Qualifications or Pre-requisites:
There are no requirements or pre-reqs; we welcome interns at all stages of undergrad study. *Please indicate if you are fluent in languages other than English on your application. *Please indicate if you have any experience with analytic software (e.g., R, SPSS, SAS, MAXQDA, NVivo, UCInet) ** Please indicate if you are a returning intern on your application.

Project/Internship Location:
Remote, SHESC 265

Hours Per Week or Days and Times Needed:
3 hours per week minimum (preferably in one time block). Exact times will be set around selected Interns.

Project Supervisor:
Charlayne Mitchell

Supervising Faculty:
Drs. Alexandra Brewis Slade and Amber Wutich
Research Project or Internship Title:
Intergenerativity and Community in the Society for Creative Anachronism (SCA)

Academic Discipline:
Sociocultural Anthropology

Project Description:
My dissertation research examines how youth and adults can partner in the worldwide medieval historical re-enactment group called The Society for Creative Anachronism. Some themes I examine are community resilience, subculture, diversity and inclusion, community development, and youth subcultures. This is an ethnographic study combining semi-structured interviewing, participant observation, and digital ethnography (a.k.a. Netnography). This work seeks to build on extant research on community resilience and how Intergenerativity may or may not contribute to it.

Student's Duties:
Interview transcription
Code book development
Inter-eater reliability testing

Required Qualifications or Pre-requisites:
Anthropology 101 and an interest in the fields of sociocultural anthropology, sociology, and community development

Project/Internship Location:
ASU Tempe campus

Hours Per Week or Days and Times Needed:
5 hours per week, dates and times can be flexible for student schedules

Project Supervisor:
Lily Villa

Supervising Faculty:
Takeyuki (Gaku) Tsuda

Contact Information:
(602)703-5459
lkpierce@asu.edu
Research Project or Internship Title:
Anthropology Collections Practicum

Academic Discipline:
Archaeology
Bioarchaeology
Museums
Physical Anthropology
Sociocultural Anthropology

Project Description:
This internship is ideal for students who are interested in the possibility of working in museums and those who would like to gain experience with material culture collections (ethnographic, archaeological, physical anthropological, and archival). Interns will learn standard museum collections practices relating to the research, cataloging, and care of anthropological artifacts by working with the anthropology collections curated at ASU. The anthropological collections include materials from the subdisciplines of archaeology, physical anthropology, and sociocultural anthropology. The majority of the collections are archaeological and were acquired in the course of systematic research at thousands of sites, primarily from Arizona and the Southwest, but there are also research collections pertaining to physical anthropology and sociocultural anthropology from all over the world. For Spring 2021, parts of the internship may need to be accomplished remotely and may involve distance learning activities related to collections management, collections inventories, or assistance with management of databases and spreadsheets.

Student’s Duties:
Students will work with faculty and graduate supervisors in assisting with care and curation of Anthropology Collections. Please indicate your areas of interest on your application (you may choose more than one).
1) If students are interested in working with archaeological collections, they will gain experience with a variety of ceramics, lithics, groundstone, and other objects recovered from archaeological excavations. These projects have associated archives including field notes, laboratory analyses, photographs, maps, and reports. The students will help to create permanent records in the catalog database. To do this they will learn how to catalog, categorize and describe artifacts, label, and photograph artifacts and objects. Transitioning artifacts to archival packing and preparing appropriate curation spaces are part of the activities.
2) If students are interested in working with physical anthropology collections*, they will gain experience with a variety of materials and will learn about these collections, the archaeological excavation collections that recovered these, and appropriate care and documentation for the collections. They will learn identification and documentation procedures while assisting with preparing and verifying the research catalog records. Transitioning collections into appropriate archival packing and storage materials will be included in these activities. *Osteology course preferred.
3) If students are interested in working with ethnographic collections or archival records, they will gain experience with professional and research materials related to projects and collections. Students will learn the basic principles of sorting, inventorying, arranging, describing, preserving, and rehousing historical and archival materials.

**Required Qualifications or Pre-requisites:**
There are no prerequisites for this internship. This internship is ideal for students looking for ways to gain more experience in the field of anthropology through experience with material culture collections. We are looking for students with the following personal qualities: punctuality, ability to commit to and keep a regular schedule, attention to detail in record keeping, a sense of curiosity, and a desire to learn. Recommended qualifications: Strong writing and research skills, experience using Excel spreadsheets, and the ability to work with a team are highly recommended. If you have some skills in photography or previous experience in a museum or museum-like setting, or data entry and record keeping, be sure to mention that in your application.

**Project/Internship Location:**
SHESC curates Anthropology collections in three different buildings. A variety of collections are curated at each location and internship opportunities provide experience with a variety of materials. > Center for Archaeology and Society Repository (Alameda Building), 734 W. Alameda, Suite 120, Tempe, AZ 85282. Free parking available. Students should allow time in their schedules to get back and forth between CASR and campus for classes.

**Hours Per Week or Days and Times Needed:**
You can receive academic credit for this internship. If you can commit to 6 hours a week you will receive 2 credits; if you can commit to 9 hours a week you will receive 3 credits. You must commit to at least 6 hours a week to qualify. Acceptance of an applicant is also based on schedule coordination. Be sure to specify your days and hours of availability in your application. [M-F, 8-5. There are no evening or weekend hours available.]

**Project Supervisor:**
Dr. Melissa Powell, Curator of SHESC Collections

**Supervising Faculty:**
Dr. Melissa Powell

**Contact Information:**
melissa.powell@asu.edu
Center for Archaeology and Society Repository
734 W. Alameda Drive, Suite 120
Tempe AZ 8528
Research Project or Internship Title:
3D Dental Topography and Tooth Wear of Primate Molars

Academic Discipline:
Bioarchaeology
Evolutionary Anthropology
Physical Anthropology

Project Description:
Many primates rely on their molar teeth to break food into smaller particles to facilitate digestion. The function of these teeth is therefore critical to survival of individual animals, but how do primate teeth maintain their function as the teeth become increasingly worn? Does molar tooth wear affect all primates equally or do tooth shape and diet play important roles? Can 3D scanning improve our understanding of how the shape of teeth changes over the course of an animal’s lifespan?

This project seeks to answer these questions by measuring 3D digital models of primate molar to quantify functionally relevant aspects of tooth shape like sharpness, relief, and complexity. These measurements will be taken from teeth at varying stages of wear to determine whether primates maintain certain tooth functions throughout their lives, and whether the functions that are maintained differ in species with varying diets. The sample for this project focuses on the Old World monkeys and apes, which share a last common ancestor 30 million years ago and have evolved very different dietary strategies and dental morphologies. This project includes digital models of teeth from living species and from fossil ancestors of Old World monkeys and apes dated between 28 and 15 million years ago.

Student's Duties:
The student will be trained in how to measure tooth wear from 3D digital models (“meshes”) of primate teeth. Measurements will be taken in the open-source scientific image-processing program ImageJ. This program can be run on Mac, Windows, or Linux, making it easy for the student to complete these measurements from home.
For interested students, introductory training in analysis using the statistical programming language R and/or the 3D visualization software Meshlab can be provided. These programs are used in many fields, including archaeology, geography, geology, and design. A basic understanding of how to use 3D visualization programs can be a useful skill for students with a wide variety of interests.

Required Qualifications or Pre-requisites:
None

Project/Internship Location:
Can be done remotely

Hours Per Week or Days and Times Needed:
3 - 6 hours per week / flexible schedule

Project Supervisor:
Ellis Locke

Supervising Faculty:
Dr. Kaye Reed

Contact Information:
emlocke@asu.edu
**Research Project or Internship Title:**
ASU ADVANCE: Equity among Faculty

**Academic Discipline:**
Global Health

**Project Description:**
ASU ADVANCE is a social science project that examines how ASU's explicitly interdisciplinary environment affects the academic life course of faculty. We are particularly interested in how diverse faculty members build their careers in this context.

**Student's Duties:**
- Assisting graduate research associate with reviewing interview transcripts and helping with the development of a qualitative analysis code book.
- Assisting graduate research associate with collecting and entering data related to the research project as it broadly defined
- Assisting graduate research associate with analyzing faculty Curricula Vitae (CVs)
- Attending and contributing to research design and protocol meetings to ensure program goals are being met

**Required Qualifications or Pre-requisites:**
1. Familiarity with Microsoft Suite, especially Word and Excel
2. Ability to work with minimal supervision
3. Working knowledge of Google Drive

**Project/Internship Location:**
Remotely given Covid-19 pandemic

**Hours Per Week or Days and Times Needed:**
Flexible; most work can occur on your own time

**Project Supervisor:**
J. Nalubega Ross

**Supervising Faculty:**
Dr. Monica Gaughan

**Contact Information:**
Dr. Monica Gaughan
School of Human Evolution and Social Change (SHESC)
Mail Code: 2402
Phone: 480-727-9973
Research Project or Internship Title:
Anthropology Research Collections Inventory & Database Development

Academic Discipline:
Archaeology
Bioarchaeology
Museums
Physical Anthropology
Sociocultural Anthropology

Project Description:
We are seeking students to assist with an ongoing inventory of the anthropology research collections and the related development of a research collections database. Data from inventories will be used in the continuing development of a data management system to facilitate curation and research. At present, this database includes more than 300,000 lines of cataloged materials. Most of the SHESC anthropology collections were acquired through archaeological investigations in the Southwest U.S., but there are also research collections pertaining to physical anthropology and sociocultural anthropology from all over the world. In addition to the inventory work, students may assist in the standardization and reorganization of existing data and the building of new data tables that will be integrated into the collections database. Through this project, students will be introduced to standard museum collections practices that are included in the more general collections apprenticeship, but student activities will focus on the ongoing systematic inventory and database development, using mainly Microsoft Access and Excel. Previous experience with this software is welcome, but not required. Through participation in this project students will be introduced to basic database design principles that are applicable to both museum management and research.

Student’s Duties:
Work that may be completed remotely:
1. Investigate and update existing collections data to ensure accuracy and completeness
2. Standardize and restructure existing data to improve the collections database functionality
3. Create new database tables through the investigation and collection of data from archives and other data sources

As work resumes on campus, students may participate in duties that include the handling, labeling, and recording of artifact collections through the following activities:
4. Collect data from collection boxes and specimen bags to fill out standardized forms
5. Investigate data collected using the anthropology collections database and other archival material to fill in missing data on the inventory forms
6. Use completed inventory forms to update the collections database
7. Stabilize collections by repackaging them with appropriate archival materials

Required Qualifications or Pre-requisites:
There are no pre-requisites for this internship. This internship is ideal for students looking for ways to gain more experience in the field of anthropology through experience with material culture collections.
We are looking for students with the following personal qualities: punctuality, ability to commit to and keep a regular schedule, attention to detail in record keeping, a sense of curiosity, and a desire to learn. Recommended qualifications: Strong writing and research skills, experience using Excel spreadsheets, and the ability to work with a team are highly recommended. If you have some skills in photography or previous experience in a museum or museum-like setting, or data entry, record keeping, be sure to mention that in your application.

**Project/Internship Location:**
Some aspects can be completed remotely. SHESC curates Anthropology collections in three different buildings. A variety of collections are curated at each location and internship opportunities provide experience with a variety of materials. Center for Archaeology and Society Repository (Alameda Building), 734 W. Alameda, Suite 120, Tempe, AZ 85282. Free parking available. Students may need to allow time in their schedules to get back and forth between CASR and campus for classes.

**Hours Per Week or Days and Times Needed:**
You can receive academic credit for this internship. If you can commit to 6 hours a week you will receive 2 credits; if you can commit to 9 hours a week you can receive 3 credits. You must commit to at least 6 hours a week to qualify. Acceptance of an applicant is also based on schedule coordination. Be sure to specify your days and hours of availability in your application. [M-F, 8-5. There are no evening or weekend hours available.]

**Project Supervisor:**
Dr. Krista L. Eschbach

**Supervising Faculty:**
Dr. Melissa S. Powell

**Contact Information:**
keschbac@asu.edu
Center for Archaeology and Society Repository
734 W. Alameda Drive, Suite 120
Tempe AZ 85282
Research Project or Internship Title:
Digital Mapping of Pueblo Settlements to Explore Pedestrian Movement

Academic Discipline:
Archaeology

Project Description:
This project is focused on exploring networks of pedestrian movement within historic pueblo settlements in the U.S. Southwest in order to study the potential structure of social interactions that occurred as people travelled across private and public spaces. Public space and its ability to integrate communities has been recognised by scholars as a common phenomenon within pueblo settlements of the American southwest. Despite this assumption, only minimal consideration has been given to the actual mechanisms that enabled public space to promote interaction and social integration. Using data from the pueblo of Arroyo Hondo, located near modern day Santa Fe, we are exploring how movement may have influenced social interactions using a combination of GIS, network analysis, and simulation methodologies. For spring 2021, the work will involve expanding the current research to Arroyo Hondo’s Component II period (1370-1425). This will include digitizing the component II period site plan, compiling and entering architectural details and finds data (e.g. pottery) from site publications, and potentially helping with some of the initial movement analyses of this period. All necessary tasks can be undertaken remotely using resources provided by ASU.

Student's Duties:
1) Digitize within ArcGIS the Component II period (1370–1425) site plan of Arroyo Hondo
2) Work with archaeological publications of architecture and finds relating to individual rooms and add relevant information into an ArcGIS database.
3) Assist with digitizing possible movement networks through the Component II period site
   Optional:
4) Assist with running some of the movement analyses

Required Qualifications or Pre-requisites:
Preferred applicants should have basic computer skills and an interest in archaeology. Experience with ArcGIS is considered a plus but not required. The student will be instructed in all necessary tasks.

Project/Internship Location:
Remotely

Hours Per Week or Days and Times Needed:
Approximately 3-4 hours per week or as needed. The student should be able to attend a short weekly meeting over zoom to discuss progress.

Project Supervisor:
Dr. Katherine A. Crawford

Supervising Faculty:
Dr. Matthew Peeples

Contact Information:
katherine.a.crawford@asu.edu
Research Project or Internship Title:  
Article Digital Archive Project

Academic Discipline:  
Evolutionary Anthropology

Project Description:  
Digitize printed journal articles to an online database system via scan and citation processes.

Student's Duties:  
Organize printed physical anthropology articles by subject type, scan and categorize articles to a searchable online database system, and reduce the number of printed article copies to 3 or less.

Required Qualifications or Pre-requisites:  
Familiar with Physical Anthropology subjects, must be detail-oriented, highly organized, trainable on the online digital database Bookends, and works well in a team atmosphere (collaborative, receptive to team suggestions, can communicate ongoing project objectives).

Project/Internship Location:  
Institute of Human Origins, SS103

Hours Per Week or Days and Times Needed:  
6 hours per week. A permanent schedule will be created and adhered to throughout the semester once student and project needs are addressed.

Project Supervisor:  
Dr. Bill Kimbel, IHO Director

Supervising Faculty:  
Dr. Bill Kimbel, IHO Director

Contact Information:  
Lindsay Mullen  
Email: llmullen@asu.edu
Research Project or Internship Title:
The evolutionary basis of moral motives: An analysis of warriors’ moral reasoning in Turkana raids

Academic Discipline:
Evolutionary Anthropology
Sociocultural Anthropology

Project Description:
This project analyzes the moral reasoning through data collected from the Turkana, a seminomadic pastoralist population in Kenya who frequently engage in warfare with neighboring groups to acquire cattle. Due to the high risk of death in battle for individual warriors, it is common to find free riders (non-cooperators) or cowards within raiding parties who minimize their personal risk even if it hinders the raiding group’s success. Data was collected through interviews with Turkana warriors to understand moral reasoning within warfare. Questions asked in the interviews include, warrior’s attitudes towards the free riders, such as whether their conduct was wrong, whether they criticize or gossip about the warrior, whether they think the warriors should be punished, and whether they will help or seek to interact with the warrior in other contexts. The response of participants captures people’s moral judgments and opinions towards free riders (non-cooperators).

This project aims to answer three questions: 1) What factors influence whether people perceive an act to be right or wrong; 2) What is the social scale of harm that induces moral punitive sentiments (i.e., does free riding hurt the individual, their family, or the community?) 3) What do subjects perceive to be the purpose of moral punishment or social ostracization?

Student’s Duties:
• Read and analyze interview transcripts to label/code the data according to pre-identified themes.
• Participate in bi-weekly project meetings and communicate with the project supervisor.
• When necessary, complete assigned readings to increase understanding of the project and research methods.

Required Qualifications or Pre-requisites:
Candidates must have basic computer skills, the ability to use Microsoft Office (Word, PowerPoint, and Excel) or equivalent, and experience with Google Drive or Dropbox. Candidates will need access to a computer and internet to complete the project. It is highly suggested that the candidate will have passed ASM 104 (or an equivalent evolutionary anthropology course) – negotiable. Preferred applicants will have experience with spreadsheets, data entry, managing data, qualitative data coding, or prior research involvement. Also, knowledge of cultural anthropology, evolution, and cooperation science is preferred. However, candidates lacking these skills/knowledge should not be discouraged from applying. Students will be trained on the evolution of cooperation and will be trained in qualitative coding. We will provide access to the coding software. We ask candidates to state if they have experience with analytic software such as R, Python, SPSS, MAXQDA, or UCINET.
**Project/Internship Location:**
Remote (Fully Online)

**Hours Per Week or Days and Times Needed:**
Flexible, but 3 to 6 hours per week is preferred.

**Project Supervisor:**
Liam Gleason

**Supervising Faculty:**
Prof. Sarah Mathew

**Contact Information:**
Liam Gleason at LGleaso6@asu.edu
Research Project or Internship Title:
Pro-environmental Behaviors Amongst Botanical Garden Members

Academic Discipline:
Environmental Social Science

Project Description:
The purpose of the research project is to better understand the factors related to individuals’ engagement in pro-environmental behaviors. The project uses data from two surveys of members of a conservatory and botanical garden, conducted in 2018 and 2020. Within the project, we examine several different research questions including how self-reported engagement in pro-environmental behaviors (e.g. taking shorter showers, recycling) changes over time and in response to the COVID-19 pandemic and associated lockdown policies. We also examine how switching to renewable energy affects engagement in other pro-environmental behaviors. Students will aid the researchers in conducting literature reviews to identify and summarize academic papers related to this research project. Prior experience with reading academic papers is ideal but not required; students will receive any needed training. Students will also aid the researchers in collecting and entering data about COVID-19 lockdown policies from local and state government websites.

In addition to this main project, students may also be asked to assist with other research projects on an as-needed basis. These additional projects focus on the role of scientific understanding in shaping science-related decision-making. Additional tasks may include coding qualitative data and identifying experimental stimuli (such as news articles or press releases) for future experiments.

Student’s Duties:
• Conducting literature reviews identifying and summarizing academic papers
• Collecting and entering data from online sources
• Participate in short bi-weekly research meetings
• Potential for additional tasks including coding qualitative data and collecting stimuli for future research

Required Qualifications or Pre-requisites:
Familiarity with reading academic papers, using Google Drive, and coding qualitative data is ideal, but not required. Students will receive any needed training.

Project/Internship Location:
The project can be done fully remotely, online.

Hours Per Week or Days and Times Needed:
Flexible. Students can work on their own schedule. An average of 3 hours per week is expected, but may vary.

Project Supervisor:
Caitlin Drummond

Supervising Faculty:
Caitlin Drummond

Contact Information:
Caitlin.Drummond@asu.edu
Research Project or Internship Title: Salado Ceramics in the Phoenix Basin

Academic Discipline:
Archaeology
Museums

Project Description:
I am seeking student researchers to assist with a study of ceramics from several Hohokam sites in the Phoenix Basin. After ca. 1300 CE, a new and distinctive pottery type, Salado polychrome, appeared in the Phoenix Basin and became part of the late Classic period Hohokam ceramic assemblage. Numerous models have been proposed to account for the causes, meanings, and implications of the adoption of this pottery, but a lack of empirical data has precluded rigorous testing of these models for the Phoenix Basin. This study aims to build an understanding of Salado ceramic production and distribution, vessel form, attributes, and assemblages, and change through time, in order to establish the data necessary to evaluate previous ideas and propose new explanatory models for the Salado pattern in the Phoenix Basin. This study works with archival data, documents, and museum collections. For Spring 2021, the work will involve digitizing vessel profiles from archival records, compiling and entering data from multiple site excavations, and creating digital maps. All necessary tasks for Spring 2021 can be done remotely, using open source software and/or resources provided by ASU.

Preferred applicants should possess basic computer skills and an interest in archaeology and archaeological data. Experience with ceramic materials, spreadsheets, databases, data entry, Inkscape, and working with a GIS would be a plus, though students lacking this experience should not be discouraged. Students will be trained in all necessary tasks. Students would also have the opportunity to use project data for research (term paper, thesis, or conference presentations) alone or in collaboration with the project supervisors.

Student’s Duties:
1) Digitize vessel profiles from sites across the Phoenix Basin
2) Work from archival records to build and check a database of archaeological ceramics from Phoenix Basin Hohokam site excavations. (Data entry, data management)
3) Work from archival records to digitize site features in a GIS. (scanning maps, digitizing features)

Required Qualifications or Pre-requisites:
Preferred applicants should possess basic computer skills and an interest in archaeology and archaeological data. Experience with ceramic materials, spreadsheets, databases, data entry, Inkscape software, and working with a GIS would be a plus, though students lacking this experience should not be discouraged. Students will be trained in all necessary tasks. All necessary work for Spring 2021 can be done remotely.

Project/Internship Location:
Remote

Hours Per Week or Days and Times Needed:
3-6 hours/week, negotiable

Project Supervisor:
Caitlin A. Wichlacz

Supervising Faculty:
Matthew Peeples

Contact Information:
caitlin.wichlacz@asu.edu
**Research Project or Internship Title:**
**Doing Science in the Time of COVID-19**

**Academic Discipline:**
Sociocultural Anthropology
Social Sciences

**Project Description:**
The purpose of the project is to understand the adaptations professors are making to their research programs in light of COVID-19. We are particularly interested in how the COVID-19 crisis will impact STEM researchers who are in the early stages of their career, who have greater caretaking responsibilities, and/or whose work is dependent on accessing specialized research facilities. The results of the study will improve understanding of how COVID-19 is affecting the conduct of academic scientific research, including its impacts on academic careers.

**Student’s Duties:**
- Collect and enter data about faculty members from university websites and academic curricula vitae.
- Assist the graduate research associate with transcribing and coding recorded faculty interviews about the effects of COVID-19 on their scientific research and academic careers.
- Assist the graduate research associate in building a national online questionnaire and organize and clean the resultant data.
- Participate in biweekly lab meetings to discuss research design, develop protocols, and ensure project goals are being met.

**Required Qualifications or Pre-requisites:**
- Familiarity with Google Drive and Microsoft Suite (e.g., Word and Excel)
- Ability to work independently
- No research experience necessary; all students are welcome!

**Project/Internship Location:**
**Fully Remote (Online)**

**Hours Per Week or Days and Times Needed:**
Flexible; most work can occur on your own time.

**Project Supervisor:**
Aliya Hoff

**Supervising Faculty:**
Dr. Monica Gaughan

**Contact Information:**
Contact Aliya at aliya.hoff@asu.edu or Professor Gaughan at monica.gaughan@asu.edu
Research Project or Internship Title:  
*Global Inequalities and Health*

Academic Discipline:  
Global Health  
Sociocultural Anthropology

Project Description:  
This project explores how various forms of social and economic inequality around the world shape health risks and create health disparities. A major focus of the project in recent years has been to characterize ethnic and caste disparities across a range of low-income countries and analyzing the consequences of such disparities for health and well-being in diverse contexts.

Student's Duties:  
1) Researching, coding, and writing about social inequalities in diverse countries worldwide  
2) Participating in weekly lab meetings

Required Qualifications or Pre-requisites:  
None specified

Project/Internship Location:  
*Remote*, Matthews Center 203M

Hours Per Week or Days and Times Needed:  
3-4 hours per week including weekly lab meeting

Project Supervisor:  
Dr. Daniel Hruschka

Supervising Faculty:  
Dr. Daniel Hruschka

Contact Information:  
dhruschk@asu.edu
Research Project or Internship Title:  
**Tephra Database Project**

Academic Discipline:  
Archaeology  
Geology

Project Description:  
This project will focus on compiling geochemical data from various volcanic eruptions around the world, expanding on an important database used for sourcing tephra deposits. Tephra are anything that is erupted from a volcano and includes everything from large molten rocks to microscopic ash. A large part of volcanic studies involves determining what volcanic eruption the tephra deposits originated from. In order to do this, geochemical data of the deposit is needed so the tephra can be linked with the volcano it came from. This allows researchers to better understand the distribution of eruptions which can be important for risk assessment of future eruptions. This is also important for using the deposits as a chronological marker. In order to source deposits accurately, it is critical to keep the tephra database organized and up to date. This position is a very important role in our lab and will allow the student to gain valuable experience managing, updating, and organizing a database. This skill is helpful in almost any field given.

Student’s Duties:  
The student will be responsible for gathering geochemical data from published literature or various other online archives. The supervisor will direct the student to what types of online archives are best. Background readings will be assigned in the beginning of this position.

Required Qualifications or Pre-requisites:  
There are no pre-reqs for this position. Past experience compiling data is preferred, however, not required.

Project/Internship Location:  
**Online**

Hours Per Week or Days and Times Needed:  
6-10

Project Supervisor:  
Jayde Hirniak

Supervising Faculty:  
Curtis Marean

Contact Information:  
jaydehirniak@gmail.com
**Research Project or Internship Title:**
An experimental use-wear study of ostrich eggshell (OES) water canteens

**Academic Discipline:**
Archaeology
Evolutionary Anthropology

**Project Description:**
Fragments of ostrich eggshells (OES) are found in the Middle and Later Stone Age of South Africa. Some of these fragments are decorated with engravings and others were used to manufacture beads. Engraved OES and OES beads are thought to be early material evidence for symbolic behavior. In addition to be used for symbolic purposes, ethnographic data suggests that OES were also used as storage containers or functioned as water canteens. However, we currently do not have the ability to identify whether OES fragments were used for these utilitarian purposes. The majority of OES research has focused on the symbolic nature of this material despite much of the record being filled with blank, broken fragments. This research aims to develop a methodology for identifying whether an OES fragment was once part of an eggshell used as a water canteen through experimental archaeology and use-wear analysis. Experimental methods involve walking with an OES canteen and recording the use-wear. After walking a total of ~50-75km with a water-filled OES (in increments of 1-5 km at a time), we will be using a Keyence VR-3200 3D macroscope and a Dino-Lite digital microscope to analyze the inside surface of the egg to determine whether there are recognizable changes that can be indicative of use as a canteen.

**Student's Duties:**
- Walk with OES water canteen to produce use-wear.
- Analyze ostrich eggshell with digital and 3D microscope.
- Maintain an organized spreadsheet.

**Required Qualifications or Pre-requisites:**
None - all skills will be taught in the lab

**Project/Internship Location:**
SHESC Building/ASU Tempe Campus

**Hours Per Week or Days and Times Needed:**
Minimum of 3 hours per week.

**Project Supervisor:**
John Murray
Jayde Hirniak

**Supervising Faculty:**
Curtis Marean

**Contact Information:**
johnkurtmurray@asu.edu
Research Project or Internship Title:
Heat treatment strategies in the production of stone tools

Academic Discipline:
Archaeology
Evolutionary Anthropology

Project Description:
The heat treatment of stone to enhance flaking attributes was an important advance in the adaptive toolkit of humans and a major step in pyrotechnology. The earliest evidence for this is the heat treatment of silcrete ~164 ka at the Middle Stone Age site, Pinnacle Point 13B in South Africa. Recently, our research team has developed a new method to identify heat treated stone tools using 3D microscopy and silicon peels that record roughness measurements from the surface of artifacts. Currently, the origin and complexity of heat treatment technology is debated and its role in the production of specific stone tool technologies is little understood. This research focuses on determining which stone tool technologies are being heat treated prior to production and how this technological strategy varies over the MIS 5 to MIS 4 transition in South Africa. In order to accomplish this, we will be applying our new method to a range of stone tool technologies that includes cores, flakes, backed pieces, and microblades. We will utilize a Keyence VR3200 to scan silicon peels taken from the surface of artifacts from the site of Pinnacle Point 5-6. Our results will have implications for hominin technological strategies during the MIS 5/4 transition and the role heat treatment may have played in the production of formal toolkits.

Student's Duties:
- Utilize a 3D microscope to scan replica stone tool surfaces
- Maintain an organized spreadsheet

Required Qualifications or Pre-requisites:
None, all skills will be taught in lab.

Project/Internship Location:
SHESC Building/ASU Tempe Campus

Hours Per Week or Days and Times Needed:
3 hours per week minimum. Schedule is flexible.

Project Supervisor:
John Murray

Supervising Faculty:
Curtis Marean

Contact Information:
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Research Project or Internship Title:
Expanding and Doing Research on a Hominid Pliocene Database

Academic Discipline:
Archaeology
Evolutionary Anthropology
Physical Anthropology

Project Description:
The Reed Paleoecology Lab is working on a range of projects aimed at understanding the past environments in which our fossil ancestors evolved. We are currently expanding on a database of fossil sites and animals by adding information on species’ diets, ancient environments, and site formation processes. We use these data to answer questions about human evolution.

Student’s Duties:
Undergraduate researchers will primarily assist with data collection from the literature including gathering species lists from fossil sites, published microwear and isotope data from living and fossil specimens (for dietary reconstruction), and geological information on site ages and past environments. (Note: students may request to work on a specific sub-project based on their interests.) In addition to training on using a reference manager to organize articles and performing database management in Microsoft Excel, students will also be given the option of learning about how to design a research project and use R statistical software to perform analyses.

Required Qualifications or Pre-requisites:
An interest in learning to do research and in databases.

Project/Internship Location:
Remote with lab meetings on ZOOM

Hours Per Week or Days and Times Needed:
6-9 hours plus a lab meeting once a week which accommodates all schedules

Project Supervisor:
Maryse Biernat
Eunice Lalunio
Irene Smail
Kate Winslow

Supervising Faculty:
Kaye Reed

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