

Arizona State University

Spring 2022 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: 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 is 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. https://inclusivehuman.org/documenting-global-ethnic-disparities/

Student's Duties:

Weekly attendance at one-hour lab meetings. Completion of weekly lab activities and preparation for lab meetings (2-3 hours + 1 hour lab meeting). Activities include: (1) investigating and documenting different forms of privilege and discrimination experienced by ethnic groups worldwide, (2) analyzing qualitative data, (3) contributing to team discussions, and (4) writing up specific case studies of discrimination.

Required Qualifications or Pre-requisites:

We seek highly motivated students with a strong work ethic and attention to detail. Experience using Excel preferred.

Project/Internship Location: Matthews Center 203M and remote

Hours Per Week or Days and Times Needed: 4-5

Project Supervisor: Dr. Daniel Hruschka

Supervising Faculty: Dr. Daniel Hruschka

Contact Information: dhruschk@asu.edu

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: Dr. Alexandra Brewis Slade

Supervising Faculty: Dr. Alexandra Brewis Slade

Contact Information:

SHESC.undergrad@asu.edu

Research Project or Internship Title: (1) Qualitative Data Analysis or (2) Chart Abstraction

Academic Discipline:

Global Health Sociocultural Anthropology Related disciplines using qualitative analysis

Project Description:

1) To code qualitative interview and focus group discussion transcripts from studies that fall into three categories, (a) international development related to health, environment, gender, social norms, (b) maternal and child health, or (c) social support among resettled refugees.

(2) To complement surveys conducted with postpartum women on psychosocial effects of the COVID19 pandemic, work with partner health systems electronic medical records systems to identify series of outcomes and enter into database. Potential for quantitative analysis.

Student's Duties:

(1) Interns will be trained on qualitative data analysis methods and process for coding in teams. Interns will be expected to reach proficiency in coding and then go on to independently code transcripts of interviews and/or focus group discussions.

(2) Interns will become affiliated research assistants with partner health system. Interns will identify fields of interest through queries and searched in medical records. Opportunity for data cleaning and quantitative analysis of both the abstracted data and the already collected survey data. Other duties and projects may develop throughout the semester.

Required Qualifications or Pre-requisites:

Preferred: SSH/ASB 100: Introduction to Global Health or ASB 102: Introduction to Sociocultural Anthropology

- Please indicate if you are fluent in languages other than English on your application.
- Please indicate if you have worked in the Culture, Environment, and Health Lab or qualitative data analysis
- Please indicate if you have worked in medical records, or quantitative data entry or analysis in your application.

Project/Internship Location: Can be done remotely.

Hours Per Week or Days and Times Needed: 3-9 hours per week

Project Supervisor: Roseanne Schuster

Supervising Faculty: Roseanne Schuster

Contact Information: roseanne.schuster@asu.edu

Research Project or Internship Title: Deciphering differences between past rhyolitic eruptions

Academic Discipline: Archaeology Geology

Project Description:

This project will focus on compiling geochemical data from volcanic eruptions with rhyolitic compositions and determining whether differences between these events can be quantified. Rhyolitic eruptions are high in SiO2 (65-75 wt.%), K and Na, and low in Fe, Mg, Ca. Overall, due to the high silica content, eruptions with this composition tend to be more explosive and many distal deposits (>100 km from the source) in the archaeological record are rhyolitic. This is important because many archaeological sites rely on these volcanic deposits to correlate stratigraphic levels and date the archaeological material. However, to be used as a dating method, the volcanic deposits must be accurately sourced to a past eruption that has been independently dated. Sourcing rhyolitic deposits can be difficult and require obtaining major and trace elemental data. However, even with this data, some rhyolitic eruptions have very similar chemistries and can almost be impossible to decipher. These similarities are due to how rhyolitic magmas form, and it poses a serious issue for research in tephrochronology. Therefore, this project will compare the chemistry of rhyolitic eruptions from all over the world and quantitively demonstrate the similarities and differences between the compositions. This will be the first study to demonstrate the potential issues that can rise when sourcing rhyolitic eruptions. This is important for this field to move forward and to demonstrate the need for alternative tools when sourcing eruptions.

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. The student will also be required to complete basic statistical analyses (ANOVA, MANOVA) on the compiled data.

Required Qualifications or Pre-requisites:

The student is required to have taken an introductory level geology, volcanology or chemistry course or have some field geology experience. Past experience compiling data is preferred, however, not required.

Project/Internship Location: Remote

Hours Per Week or Days and Times Needed: 10 hours recommended

Project Supervisor: Jayde Hirniak

Supervising Faculty: Curtis Marean

Contact Information: jhirniak@asu.edu

Research Project or Internship Title: Volcanic 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 past 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:

The student is required to have taken an introductory level geology course, introductory level chemistry course, or have some field geology experience. Past experience compiling data is preferred, however, not required.

Project/Internship Location: Remote

Hours Per Week or Days and Times Needed: 10 hours recommended

Project Supervisor: Jayde Hirniak

Supervising Faculty: Curtis Marean

Contact Information: jhirniak@asu.edu

Research Project or Internship Title: The Teotihuacan Mapping Project

Academic Discipline: Archaeology Museums Public outreach

Project Description:

ASU runs an archaeological laboratory at Teotihuacan, one of the largest and most important ancient cities of the New World. Dr. Michael E. Smith is currently Director of the lab. We have groups of undergraduates carrying out a variety of tasks, here at ASU and in Mexico in the summer. Most activities center on the Teotihuacan Mapping Project, one of the major archaeological projects in Mexican archaeology. Once the map of Teotihuacan was completed (1973), much of the work of this project remained incomplete. We are organizing paper and electronic files, entering data, checking major artifact categories, working on GIS studies of the map, and making sure that key information is recorded

before uploading the data to tDAR to archive it permanently. We also have undergraduate research activities based on data from the Teo Mapping Project, including studies of burial offerings, research on housing, and work on craft production. We are also looking for help with communications, public outreach and social media. See our website: (https://teo.asu.edu/). See some of the videos about the ASU lab: https://asunow.asu.edu/20160826-discoveries-asu-teotihuacan-research-lab-mexico

Student's Duties:

(1) Teotihuacan Mapping Project data rescue and archiving:

Data entry into computer databases, and to scan paper forms to pdf. Perform basic analyses of artifact categories, such as mapping the spatial distributions of figurines, or tallying the traits of other artifact categories.

(2) Misc research projects:

Contribute to an ongoing project of analyzing the burials of Teotihuacan. See: <u>https://asunow.asu.edu/20171122-asu-students-learn-dead-teotihuacan</u>. Contribute to our GIS analyses of the Teotihuacan map.

(3) Communications & amp; outreach:

Help develop our social media activities on Twitter, Instagram, and other platforms. Organize publicity materials for the Teotihuacan website and work with the webmaster to update the current website. Research Mesoamerican and lab history to share with the public.

Once familiar with the site and datasets, students may develop individual research projects.

Required Qualifications or Pre-requisites:

Required: Classwork or fieldwork experience in archaeology, or a related field such as history GPA > 3.0 Recommended: Experience working with archaeological data, and/or museum outreach activity Good writing and editing skills; web design; computer graphics Reading knowledge of Spanish is a plus.

Project/Internship Location:

Mesoamerican Archaeology Laboratory, SHESC-104 or Remote

Hours Per Week or Days and Times Needed:

3 to 12 hours per week. Times depend on the schedules of other project members.

Project Supervisor: Dr. Michael E Smith and Anne Sherfield

Supervising Faculty: Dr. Michael E. Smith

Contact Information: mesmith9@asu.edu

Research Project or Internship Title: Mapping Teotihuacan

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Academic Discipline:

Archaeology GIS

Project Description:

Differential access to civic resources is a well-documented mechanism of socio-economic differentiation in historic cities and can be measured by analyzing movement within the built environment. I measure differential access at Teotihuacan, Mexico by simulating movement pathways from residential structures to public facilities within the city. This project shows the constraints that the urban environment placed on the movements of individuals within Teotihuacan and allows me to explore how differential access to public spaces may have contributed to the creation and maintenance of social inequality at Teotihuacan.

Student's Duties:

Researching and synthesizing excavation of structures at Teotihuacan. Digitizing the excavated structures of Teotihuacan. Managing spatial data and learning proper metadata procedures. Possible to participate in research project on standardization of households in the site.

Required Qualifications or Pre-requisites:

Classwork or fieldwork experience in archaeology, history, or a related field. Classwork in GIS or decent familiarity with the software and basic ability. GPA > 3.0

Project/Internship Location:

Mesoamerican Archaeology Laboratory, SHESC-104.

Hours Per Week or Days and Times Needed:

6 to 12 hours per week. Times are flexible.

Project Supervisor:

Anne Sherfield

Supervising Faculty: Dr Michael E Smith

Contact Information: asherfie@asu.edu

Research Project or Internship Title: Documenting cultural change in an interdisciplinary STEM department

Academic Discipline:

Sociocultural Anthropology Science and technology studies Higher education research Social Sciences

Project Description:

This project is part of Aliya Hoff's PhD dissertation research. The purpose of the project is to understand the experiences of students, faculty, and staff who are enrolled or employed at an interdisciplinary STEM department at ASU. The specific aims are to: 1) characterize department members' perceptions of their academic, scientific, and workplace cultures, 2) evaluate the efficacy of policies and initiatives currently in place to support members of the department, and 3) identify opportunities to promote diversity, equity, inclusion, and justice at ASU. I am particularly interested in how the COVID-19 pandemic and national movement for racial justice have affected attempts to make the department more inclusive.

Student's Duties:

- Collect and enter data about department members from university websites, academic curricula vitae, and social media.
- Assist Aliya with transcribing and coding recorded interviews from students, staff, and faculty.
- Assist Aliya while she conducts interviews and focus groups.
- Participate in biweekly lab meetings to discuss research design, develop protocols, and ensure project goals are being met.
- If desired, students may develop their own mini research project that aligns with their interests and career goals.

Required Qualifications or Pre-requisites:

- No research experience necessary. Anyone interested in equity in higher education and STEM and/or developing intersectional qualitative research skills are welcome to apply.
- Familiarity with Google Drive and Microsoft Suite (e.g., Word and Excel) and ability to work independently preferred, but all necessary training will be provided.

Project/Internship Location:

Fully Remote (Online) and In-Person options available (Tempe campus, location TBD)

Hours Per Week or Days and Times Needed:

Flexible; most work can occur on your own time. There are no required minimum hours—I am happy to have you engage with the project in whatever capacity works for you.

Project Supervisor: Aliya Hoff

Supervising Faculty: Monica Gaughan

Contact Information:

Aliya Hoff, M.A. aliya.hoff@asu.edu

Chronological trends in Neanderthal stone tool use at Tabun Cave, Israel

Academic Discipline:

Archaeology Evolutionary Anthropology

Project Description:

A major debate in paleoanthropology is centered on the similarities and differences between Neanderthals and Homo sapiens. In particular, why did Neanderthals go extinct and Homo sapiens inhabit most of the earth? Many arguments for their extinction have been made that include biological, behavioral, ecological, and cultural differences between these two hominins. One way archaeologists can better understand hominin behavior is through stone tool function. Stone tools are the primary way in which hominins interacted with the landscape for over 3 million years. The goal of this research is to investigate Neanderthal stone tool use over time at Tabun Cave, Israel using the edge damage distribution method (Schoville, 2010). This project will focus on analyzing Levallois points and blades from three technological facies: Tabun B, C, and D. Tabun Cave is an important archaeological site to address behavioral differences between Neanderthals and Homo sapiens because both of these hominins inhabited the Near East during similar time periods. Further, it has a long, diachronic archaeological and paleoanthropological sequence. The results of this research have implications for Neanderthal technological behavior and stone tool use over time. Additionally, it can shed light on the validity of the Tabun technological facies concept from a functional perspective.

Student's Duties:

- Utilize ArcMap to georeference images of Levallois points
- Create shapefiles of each Levallois point
- Maintain an organized spreadsheet

Required Qualifications or Pre-requisites:

None - but GIS would be useful.

Project/Internship Location:

SHESC VizLab

Hours Per Week or Days and Times Needed: 3

Project Supervisor: John Murray

Supervising Faculty: Curtis Marean

Contact Information: jkmurra5@asu.edu

Assessing the complexity of heat treatment technology and its implications for the evolution of human cognition

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. There are two primary ways in which stone can be heat treated: 1) above ground, directly in the fire and 2) the below ground, 'sand bath technique.' This research focuses on determining which technique(s) were utilized by Middle Stone Age (MSA) hunter-gatherers on the coast of South Africa to heat treat silcrete through experimental archaeology. This research has implications for the evolution of human cognition, social transmission, and modern human behavior.

Student's Duties:

- Utilize 3D microscope to scan experimentally generated stone tools
- Utilize hand-held colorimeter to measure color in stone tools
- Data management
- Potentially aid in analysis

Required Qualifications or Pre-requisites: None

Project/Internship Location: SHESC VizLab

Hours Per Week or Days and Times Needed: 3 minimum

Project Supervisor: John Murray

Supervising Faculty: Curtis Marean

Contact Information: jkmurra5@asu.edu

Research Project or Internship Title: Anthropology Research Collections Online Database Development

Academic Discipline: Archaeology Bioarchaeology Museums Physical Anthropology Sociocultural Anthropology

Project Description:

We are seeking students to assist with the ongoing development of the Anthropology Research Collections database. Data from inventories, archives, and other sources 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 these objects 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. Students will assist with the investigation, standardization, and reorganization of existing data and the building of new data tables that will be integrated into the collections database. Students will be introduced to standards for handling legacy data for archaeology and museum collections, using mainly Microsoft Access, Excel, and Google Sheets. Previous experience with this software is welcome, but not required. Through participation in this project, students will learn about relational database design and data management principles that are applicable to both research and collections management.

Student's Duties:

- 1. Data entry from standardized forms into Google Sheets and Microsoft Excel
- 2. Investigate and update existing collections data to ensure accuracy and completeness
- 3. Standardize and restructure existing data to improve the collections database functionality
- 4. Create new database tables through the investigation and collection of data from a variety of sources

Required Qualifications or Pre-requisites:

There are no pre-requisites. This internship is ideal for students looking for ways to gain more experience in the field of anthropology, while learning basic skills in database development and management for curation or research.

We are looking for students with the following personal qualities: professional, punctual, detail oriented, and a desire to learn.

Recommended qualifications: Strong research skills, experience using Microsoft Excel or Google Sheets, and the ability to work both independently and as a team. If you have some previous experience in archaeology, museums, data entry, or record keeping, be sure to mention that in your application.

Project/Internship Location: Remote

Hours Per Week or Days and Times Needed:

You must commit to at least 6 hours a week to qualify. 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. Be sure to specify your days and hours of availability in your application. Evening or weekend hours available for remote work, but some weekday availability is required for regular Zoom meetings.

Project Supervisor: Dr. Krista Eschbach

Supervising Faculty: Dr. Matthew Peeples

Contact Information: keschbac@asu.edu

Data Collection & Database Development for the Anthropology Research Collections

Academic Discipline:

Archaeology Bioarchaeology Museums Physical Anthropology Sociocultural Anthropology

Project Description:

We are seeking students to assist with the ongoing development of the Anthropology Research Collections database. Data from inventories, archives, and other sources 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 these objects 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.

Students will assist with the investigation, standardization, and reorganization of existing data and the building of new data tables that will be integrated into the collections database. Students will be introduced to standards for handling legacy data for archaeology and museum collections, using mainly Microsoft Access, Excel, and Google Sheets. Previous experience with this software is welcome, but not required. Through participation in this project, students will learn about relational database design and data management principles that are applicable to both research and collections management.

Student's Duties:

- 1. Inspect collection boxes and specimen bags to fill out standardized forms or to verify and update existing data
- 2. Investigate data using the existing anthropology research collections database, archival documents, and other data sources
- 3. Update collections data to ensure accuracy and completeness
- 4. Standardize and restructure existing data to improve the collections database functionality
- 5. Create new database tables through the investigation and collection of data from a variety of sources

Required Qualifications or Pre-requisites:

There are no pre-requisites. This internship is ideal for students looking for ways to gain more experience in the field of anthropology, while learning basic skills in database development and management for museum curation or research.

We are looking for students with the following personal qualities: professional, punctual, detail oriented, and a desire to learn.

Recommended qualifications: Strong research skills, experience using Microsoft Excel or Google Sheets, and the ability to work both independently and as a team. If you have some previous experience in archaeology, museums, data entry, or record keeping, be sure to mention that in your application.

Project/Internship Location:

SHESC curates anthropology collections in several different buildings. One of those buildings is on the main Tempe campus. Two other facilities are a couple miles from the main campus and have free parking. Please indicate if you are available to work at any of our facilities.

Hours Per Week or Days and Times Needed:

You must commit to at least 6 hours a week to qualify. You can commit up to 9 hours a week. Acceptance of an applicant is also based on schedule coordination. Be sure to specify your days and hours of availability in your application.

Project Supervisor:

Dr. Krista Eschbach

Supervising Faculty: Dr. Matthew Peeples

Contact Information: keschbac@asu.edu

Research Project or Internship Title: Archaeological Data Collection and Database Management

Academic Discipline:

Archaeology

Project Description:

We are seeking students to assist with the collection of Preclassic Maya ceramic data and database management. Data from field and lab reports, publications, and other sources will be used in the development of a Preclassic Maya ceramic database and for research on early Maya ceramic networks. Over 60 years of archaeological research in the western Maya lowlands has produced a large amount of ceramic data that have never been collated.

Students will assist with the investigation and organization of existing data and will help create and maintain a database. Students will be introduced to standards for handling legacy data for archaeology, using mainly Microsoft Excel and Google Sheets. Previous experience with this software is welcome, but not required. Through participation in this project, students will learn about ceramic data and data management principles that are applicable to both research and collections management.

Student's Duties:

- 1. Data entry from various reports and publications into Google Sheets and Microsoft Excel while ensuring accuracy and completeness
- 2. Locate and investigate published sources of ceramic data
- 3. Collate and organize published data to facilitate research
- 4. Create a new database through the investigation and collection of data from a variety of sources

Required Qualifications or Pre-requisites:

There are no pre-requisites. This internship is ideal for students looking for ways to gain more experience in the fields of archaeology and anthropology, while learning basic skills in database development and management for research. Additionally, students will become familiar with ceramic research methods

We are looking for students with the following personal qualities: professional, punctual, detail oriented, and a desire to learn.

Recommended qualifications: Strong research skills, experience using Microsoft Excel or Google Sheets, and the ability to work both independently and as a team. If you have some previous experience in archaeology, museums, data entry, or record keeping, be sure to mention that in your application.

Project/Internship Location:

Remote

Hours Per Week or Days and Times Needed:

You must commit to at least 6 hours a week to qualify. 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. Be sure to specify your days and hours of availability in your application. Evening or weekend hours available for remote work, but some weekday availability is required for regular Zoom meetings.

Project Supervisor: Britt Davis, M.A.

Supervising Faculty: Dr. Matthew Peeples

Contact Information: jbdavi18@asu.edu

Neanderthal Animal Exploitation in the Paleolithic

Academic Discipline:

Archaeology

Project Description:

This project is part of the archaeological analysis of Kobeh Cave, Iran, focusing on analyzing the animal remains. The fauna remains were excavated from Mousterian deposits and contain information about Neanderthal diet and behavior in this area. Zooarchaeological and taphonomic analysis will be conducted on the fossil specimens recovered from this site, with a focus on the identification of bone surface modifications (cut marks, tooth marks, etc.) and post-depositional processes. This analysis will help to reconstruct Neanderthal diet and the formation processes of the site.

Student's Duties:

Students will aid in the completion of the zooarchaeological analysis of archaeofaunas. Students will assist in recording attribute data for all the remaining specimens. This involves labeling fossil specimens, recording attribute data in a Microsoft Access database, and organizing the faunal collections. Students will learn the process of collecting data from faunal specimens with an emphasis on recording bone surface and taphonomic data. Additionally, students will learn comparative mammalian osteology and will be exposed to a workflow for analyzing and curating archaeological materials. Further, students can help test and troubleshoot a methods developed for this project that utilize the GIS program ArcMap to improve faunal analysis.

Required Qualifications or Pre-requisites: None, although osteological experience is preferred

Project/Internship Location: SHESC, Tempe, AZ

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

Project Supervisor: Patrick Fahey

Supervising Faculty: Curtis Marean

Contact Information: bpfahey@asu.edu

Research Project or Internship Title: Paleopathology assistant

Academic Discipline:

Archaeology Bioarchaeology Global Health Physical Anthropology

Project Description:

This project enables a student to gain first-hand experience with pathological skeletal remains while helping lay out and put away pathological individuals used for the graduate Paleopathology class (ASM 611) each week.

Student's Duties:

The graduate seminar in Paleopathology (ASM 611) requires setting out examples of pathological skeletal remains in advance of each class meeting and putting them away prior to the next meeting. An undergraduate may not take this course but may learn a great deal about paleopathology from working directly with Dr. Baker.

Required Qualifications or Pre-requisites:

ASM 341 with a grade of B or better or Anatomy/Physiology course. To qualify, a student must have some knowledge of skeletal anatomy in order to articulate the skeletons accurately.

Project/Internship Location:

SHESC 341

Hours Per Week or Days and Times Needed:

Approximately 5 hours per week on Tuesday afternoon and/or Thursday morning.

Project Supervisor: Dr. Brenda Baker

Supervising Faculty: Dr. Brenda Baker

Contact Information: BrendaJ.Baker@asu.edu.

Research Project or Internship Title: Hominin Ecology, Geology, and Climate: Collecting and Analyzing Data

Academic Discipline: Evolutionary Anthropology Physical Anthropology

Project Description:

The IHO 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, abundances of mammals, and site formation processes. Currently, the fossil and modern sites (that we use for comparisons) are all located in Africa.

Student's Duties:

Undergraduate researchers will primarily assist with data collection from the literature including gathering species lists from fossil sites, published microwear, hypsodonty indices, and isotope data from living and fossil specimens (for dietary reconstruction), as well as geological information on site ages and past depositional environments. (Note: students may request to work on a specific sub-project based on their interests.) Students will also be trained in using a reference manager to organize articles, and in Excel.

Required Qualifications or Pre-requisites:

An interest in hominin evolution

Project/Internship Location: This project can be done online and meetings are held weekly in online or hybrid mode.

Hours Per Week or Days and Times Needed:

At least 6 hours per week

Project Supervisor:

Maryse Biernat Eunice Lalunio Yemane Tsige

Supervising Faculty: Kaye Reed Denise Su

Contact Information:

Kaye Reed (kaye.reed@asu.edu)

The use of cryptotephra to more accurately date and link archaeological sites

Academic Discipline: Archaeology Geology

Project Description:

This project focuses on processing and analyzing cryptotephra collected from archaeological sites throughout Italy and South Africa. Cryptotephra are microscopic glass shards that are ejected from a volcanic eruption and can travel up to 9000 km from the source volcano. In archaeology, these glass shards have been used to date deposits (Smith et al., 2018) as well as correlate and link stratigraphic layers between sites (Hirniak et al., 2020). Because cryptotephra deposits tend to be far from the source volcano, shards present in a sediment sample can be extremely low abundance and need specialized methods for extraction and analysis. Therefore, the focus of this project will mainly be on sample preparation.

Student's Duties:

The student will learn how to extract cryptotephra from sediment samples and assist Jayde Hirniak in processing samples collected from various archaeological sites. The student will learn the beginning of the separation process (i.e., weighing out the sample, treating it with HCL) and how to prep epoxy rounds before geochemical analyses (i.e., cleaning, polishing, examining on microscope).

Required Qualifications or Pre-requisites:

Past experience working in a laboratory environment is preferred. Coursework in introductory geology or chemistry is preferred but not required.

Project/Internship Location:

SHESC 350A

Hours Per Week or Days and Times Needed: 10

Project Supervisor: Jayde Hirniak

Supervising Faculty: Chris Campisano

Contact Information: jhirniak@asu.edu

Research Project or Internship Title: Norm shift during COVID-19

Academic Discipline:

Evolutionary Anthropology

Project Description:

This project uses online surveys to document the subjects' behaviors and attitudes on mask wearing, greeting styles and interpersonal distance through the COVID-19 pandemic. The first round of survey started in August 2020. We followed up on the subjects once every 49 days to track changes in their behaviors and attitudes and their health outcomes. We will then use norm theory to explain how people make health related decisions.

Student's Duties:

The research assistants will handle communication with the subjects, participation record keeping, and compensation issuing.

Required Qualifications or Pre-requisites:

The research assistants will need to finish the CITI training for research involving human subjects. The training is required by the Institutional Review Boards. It is online and takes about 4 hours.

Project/Internship Location:

<mark>Online</mark>

Hours Per Week or Days and Times Needed:

4 or 8 hours (depending on credits registered) per week during the 6 weeks when the survey is active; 1 hour a week when the survey is not active to discuss papers.

Project Supervisor:

Julia Phelps

Supervising Faculty: Sarah Mathew

Contact Information:

jrphelp1@asu.edu Sarah.Mathew@asu.edu

Research Project or Internship Title: Translating Scientific Reports into Policy and Practice

Academic Discipline:

Environmental Social Science

Project Description:

The National Academies of Science, Engineering and Medicine (NASEM) produce consensus reports that summarize the scientific evidence on important science- and technology-related topics. These reports are then used by the Federal government and others to help guide their decision-making on these topics. This research project seeks to better understand what factors predict how helpful and impactful these reports are. What are the characteristics of reports that are highly influential for decision-making?

Student's Duties:

The research assistant's job will be to compile a dataset of published NASEM consensus reports. The research assistant will use the National Academies Press website to compile a list of reports, gather data on those reports, and enter that data into a spreadsheet. This job can be done online and remotely.

Required Qualifications or Pre-requisites:

No prior research experience is required. The Research Assistant will need a computer, reliable internet access, and to be able to use Google Drive.

Project/Internship Location: Online/remote

Hours Per Week or Days and Times Needed:

2-3 hours per week on average; RAP work can be done at any time, remotely and online

Project Supervisor: Caitlin Drummond Otten

Supervising Faculty: Caitlin Drummond Otten

Contact Information: Caitlin.Drummond@asu.edu

Research Project or Internship Title: How do people make normative decisions? A case study of cooperative farming division rules in Derung villages, Yunnan, China

Academic Discipline:

Evolutionary Anthropology

Project Description:

This project investigates how people in a small-scale subsistence society make normative decisions in the context of cooperative farming. Derung people, who live at the border of China and Myanmar, routinely farm cooperatively across households. In upstream villages, the tradition is to divide equally by household, while in downstream villages, the tradition is to divide equally by the number of laborers. Three research activities were conducted in 2 Derung villages from 2018 to 2020: 1) ultimatum game, 2) survey on farming practices, and 3) daily activity recording, to explain how people make normative decisions and how the decision making algorithm contributes to the maintenance of different norms. The recruited students will work with data from research activities 2) and 3).

Student's Duties:

The students are expected to read the interview scripts and extract information from them.

Required Qualifications or Pre-requisites:

After joining the research team, the students will need to finish the CITI training for research involving human subjects. This training is required by the Institutional Review Boards. It is online and takes about 4 hours.

Project/Internship Location: Online

Hours Per Week or Days and Times Needed: 5 hours per week

Project Supervisor: Minhua Yan

Supervising Faculty: Sarah Mathew

Contact Information: minhua.yan@asu.edu

Research Project or Internship Title: Pan-American Archaeological Ceramic Database

Academic Discipline:

Archaeology

Project Description:

The Pan-American Archaeological Ceramic Database is an open-access digital repository and tool for all aspects of ceramics, from clay selection to finished vessels, throughout the Americas, beginning with their initial appearance ca. 5500 BCE through the Historic Period. Our web application fosters synthetic research across borders by eliminating the complications of access to physical collections and paywalled publications, and it facilitates the inclusion of prehistoric material culture in educational resources. PAACD's analytical capabilities allow users to explore multiple facets of human societies and identify gaps in our knowledge that can be addressed with future research.

Student's Duties:

Students will be responsible for reading archaeological reports and monographs on ceramic studies from sites throughout the Americas. We are interested in collecting data on all aspects of ceramic production (i.e., vessel shapes, petro-fabrics, decorative styles, and technological attributes) that is currently available in the literature. Students will work with the Project Director to identify a site or region of interest and develop a bibliography of relevant reports/monographs/articles detailing ceramic analyses that have been conducted for the site or region. The remainder of the semester will involve uploading data into the PAACD web application using either a lab computer or their personal computer and providing feedback to the Project Director about the functionality of the web application. This work can be competed remotely by online students but requires maintaining regular contact with the Project Director, who will be traveling quite often so the ability to work independently is essential.

Required Qualifications or Pre-requisites:

Completion of introductory course in archaeology; preferred completion of course on archaeological ceramics, but not required.

Ability to work independently but maintain regular contact with the Project Director.

Project/Internship Location:

Matthews Center 207 / Online

Hours Per Week or Days and Times Needed: up to 10 hours/week; days and times are flexible

Project Supervisor: Andrea Torvinen

Supervising Faculty: Kostalena Michelaki-Schwartz

Contact Information: atorvine@asu.edu

Research Project or Internship Title: Salado Ceramics in the Phoenix Basin

Academic Discipline: Archaeology Museums

Project Description:

We are 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, 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. The broader study works with archival data, documents, and museum collections. For Spring 2022, the work will involve digitizing archival records, compiling and entering data from multiple site excavations, and creating/using digital maps. All necessary tasks 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.

Student's Duties:

- 1. Digitize ceramic vessel profiles from sites across the Phoenix Basin and the broader US Southwest region
- 2. Work from archival records to build and check a database of archaeological ceramics from Phoenix Basin Hohokam site excavations. (Scanning documents, data entry, database 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 can be done remotely.

Project/Internship Location: Remote

Hours Per Week or Days and Times Needed: 3-6 hours/week, negotiable, including a weekly meeting of the research team via Zoom.

Project Supervisor: Caitlin Wichlacz

Supervising Faculty: Dr. Matthew Peeples

Contact Information: caitlin.wichlacz@asu.edu

Research Project or Internship Title: Agricultural Origins in the Neotopics

Academic Discipline:

Archaeology Bioarchaeology Evolutionary Anthropology Physical Anthropology Sociocultural Anthropology

Project Description:

This project focuses on the analysis of archaeological samples of ancient plant remains to help reconstruct environmental adaption, subsistence, and the transition to agriculture. Two major projects will be studied. One is on the tropical lowland origin of or transition to agriculture. This project involves the analysis of archaeological plant samples from excavations in northern Belize. The other project focuses on the subsistence diversity and biodiversity of settled agrarian communities following the collapse of a major state-level society (Teotihuacan). This project involves the analysis of archaeological excavations in central highland Mexico.

Student's Duties:

Students will sort archaeological samples using stereomicroscopy. Once materials are sorted, the PI will work with them to identify the taxonomy of the plant remains. Students might also be involved with the imaging and tabulation of data. If time permits, training in micro-floral (i.e., pollen, starch, and phytoliths), might occur.

Required Qualifications or Pre-requisites:

Students will receive hands-on training in biological systematics, seed and wood biology, and microscopy. Previous background in biology or botany is helpful but not essential. The most important issue is a desire and interest in these topics and methods, as well as a dependable and enthusiastic attitude. Students will have to commit to a minimum of 2 hours a week, but more time (and credit) is possible and desired. Data from these projects or related projects in the lab could also serve as possible datasets for undergrad honors theses. This project requires in person lab work. However, if students are remote, modified project tasks are possible, such as the databasing of scientific articles in ethnobotany, the tabulation of data, or the collection of digital images of plant taxa for comparisons.

Project/Internship Location:

SHESC 110, Remote

Hours Per Week or Days and Times Needed:

Min of 2, but more effectively at least 4. Days and times are negotiable but given supervisory needs, must also mesh with PI's on-campus schedule.

Project Supervisor: Christopher Morehart

Supervising Faculty: Christopher Morehart

Contact Information: christopher.morehart@asu.edu

Anthropological Collections Internship

Academic Discipline:

Archaeology Bioarchaeology Sociocultural Anthropology Museum Studies History Cultural Resource Management

Project Description:

This hands-on internship is ideal for students who are interested in the possibility of working in museums or cultural resource management, and those who would like to gain experience with material culture collections (ethnographic, archaeological, bioarchaeological, and archival) and federal compliance for the Native American Graves Protection and Repatriation Act (NAGPRA). Interns will learn standard museum collections practices relating to the documentation, cataloguing, and care of anthropological items by working with the anthropology collections curated at ASU.

Most of the anthropological collections at ASU are curated by the Center for Archaeology & Society Repository and include material from the subdisciplines of archaeology, bioarchaeology, 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.

Student's Duties:

Student will be working closely with faculty, graduate, and advanced undergraduate supervisors in assisting with care, curation, and possible repatriation 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 the archaeological collections, they will gain experience with a variety of ceramic, lithic, groundstone, and ornaments 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 assisting with NAGPRA repatriation, they will gain experience with the documentation, proper care, and transfer of NAGPRA related collections. Students will assist with documenting and rehousing archaeological human remains and associated funerary objects. Students will familiarize themselves with the archaeological and cultural contexts by reading archival documents, including archaeological field notes, reports, and publications. Due to the sensitive nature of repatriation, students will be assigned to tasks according to their comfort level and experience. Bioarchaeological or osteological experience is preferred for some tasks.

3) If students are interested in working with the ethnographic, 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 re-housing historical and 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 in a team are highly recommended. If you have some skills in photography or previous experience in a museum or a museum-like setting, or data entry, record keeping, be sure to mention that in your application.

Project/Internship Location:

Center for Archaeology & Society Repository (Alameda Building) 734 W. Alameda, Suite 120, Tempe, AZ 85282 Free Parking available, city bus 62 on Hardy Dr. to west, Venus Orbit on Broadway/Roosevelt intersection.

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:

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 for this internship. 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 am – 4 pm, no evening hours, no weekend hours].

Project Supervisor:

Dr. Christopher Caseldine and Dr. Allisen Dahlstedt

Supervising Faculty: Dr. Christopher Caseldine and Dr. Allisen Dahlstedt

Contact Information:

Christopher.Caseldine@asu.edu Phone: (480) 965-6957 Center for Archaeology & Society Repository 734 W. Alameda Drive, Suite 120 Tempe, AZ 85282