Fall 2020
Undergraduate Research Apprenticeship Positions

-Areas/Concentrations for Research-

Archaeology
Bioarchaeology
Environmental Social Science
Evolutionary Anthropology
Global Health
Museum Studies
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:
Anthropology Collections Research Apprenticeship

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.

Most of the anthropological collections at ASU are curated by the Center for Archaeology and Society Repository and include material 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.

Parts of the internship may need to be accomplished remotely and will involve collections inventories, assistance with management of databases and spreadsheets, and distance learning activities related to collections management.

Student's Duties:
Students will be working closely 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 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 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, 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 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:**
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 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:**
Melissa Powell, Curator of SHESC Collections

**Supervising Faculty:**
Melissa S. Powell

**Contact Information:**
melissa.powell@asu.edu
480-965-6957
Center for Archaeology and Society Repository
734 W. Alameda Drive, Suite 120
Tempe AZ 85282
Research Project or Internship Title:
Arizona Youth Project

Academic Discipline:
Sociocultural Anthropology

Project Description:
This project will examine how U.S.-born Latinx, Native American and White young adults perceive their identity and status as Americans in the context of rapidly changing economic, demographic, and political conditions. This project will further our understanding of ethnic and racial minority integration into U.S. society—particularly among U.S.-born young adults. This research advances the health and welfare of marginalized and vulnerable groups by understanding how the socio-political local context affect their sense of national identity and belonging. This study will also identify ways to promote political participation among young adults from different ethnic/racial groups.

This is a multi-method qualitative study using two research strategies: in-depth interviews, and Photovoice. The sample will consist of U.S.-born Latinx, Native American and White young adults between the ages of 18-25 living in five sites in Arizona. We will recruit 60 participants in each of the five sites —20 Latinx, 20 Native Americans and 20 whites—for a total of 300 participants. Participants will be interviewed two times: once before the 2020 elections and once after the 2020 elections. They will also be asked to participate in a Photovoice project by taking photographs reflecting what they define as American. Interview transcripts, photographs and fieldnotes will be downloaded to a qualitative data analysis software that supports continuous data inputting and analysis, and undergo a three-step coding process. Initial open coding will identify major themes, as well as locality, key political actors, and events.

Student's Duties:
1. Student will attend a qualitative research training for 3-4 weeks.
2. Student will conduct a minimum of 4 interviews independently.
3. Student will learn to code interviews using MAXQDA coding software.
4. Student will write up a research memo (1-2 pages) for each interview they conduct.
5. Student will have the option of writing a journal article with the research team for publication.
6. Student will attend team coding meetings on Friday from 9-10 as needed with Estrada's group and/or with the research team of other Principal Investigators.

Required Qualifications or Pre-requisites:
1. Undergraduate, M.A. and Ph.D. students are welcome to apply
2. We prefer that student has experience with qualitative research methods or if the student has taken a qualitative methods class.
4. Spanish language skills are not needed, but valuable for this project.
5. Ability to travel to the research site to conduct interviews (Most interviews will be in Tempe, Mesa and the Phoenix area).
6. Team player
7. Coachable
Project/Internship Location:
SHESC Building / Tempe Campus

Hours Per Week or Days and Times Needed:
3 hours per week / Fridays from 9:00-12:00/ in person (or zoom depending on Covid-19 updates)

Project Supervisor:
Emir Estrada

Supervising Faculty:
Emir Estrada

Contact Information:
emir.estrada@asu.edu
**Research Project or Internship Title:**
Article Digital Archive Project

**Academic Discipline:**
Physical 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

Back up supervisors:
Lindsay Mullen, Program Manager
Julie Russ, Assistant Director

**Supervising Faculty:**
Dr. Bill Kimbel

**Contact Information:**
Lindsay Mullen
Email: llmullen@asu.edu
Research Project or Internship Title:

**ASU ADVANCE: Equity among faculty**

Academic Discipline:
Global Health
Sociocultural Anthropology

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 within ASU's interdisciplinary context.

Student's Duties:
• Assisting research associate with transcribing recorded faculty interviews on the interaction of interdisciplinarity and intersectionality in their careers.
• Assisting with the coding of already transcribed faculty interviews.
• Attending and contributing to research design and protocol meetings to ensure program goals are being met
• Attending bi-weekly meetings to assess the program progress and troubleshoot any issues that arise.

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

Project/Internship Location:
Matthews Center, 203WF, flexible

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: 
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, UCI net) 
** Please indicate if you are a returning intern on your application.

Project/Internship Location: 
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

Contact Information: 
cfmitche@asu.edu
Research Project or Internship Title:
Differential Access and Socio-Economic Inequality at Teotihuacan

Academic Discipline:
Archaeology
Urban Planning

Project Description:
I am investigating patterns of social and spatial inequality at Teotihuacan, Mexico. 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. Teotihuacan is an urban center located in central Mexico that was inhabited from approximately 300 BCE to 600 CE. The city was surveyed by the Teotihuacan Mapping Project in the 1960s and a map of the entire city was produced. Using this map, I am going to measure differential access at Teotihuacan by simulating movement pathways from residential structures to the great compound and the plazas of the sun, moon, and the feathered serpent pyramids. I aim to discover whether differential access to ceremonial spaces contributed to creating and maintaining social inequality at Teotihuacan.

Student’s Duties:
For my project, I want to recreate the spatial layout of Teotihuacan as closely as possible. Therefore we would spend time searching for published maps of excavated parts of the city and then translating these paper maps into digital copies in a Geographic Information System (GIS). This process is known as georeferencing and digitization. This is the main duty that will be asked of you. Additionally, you would be involved in the creation of a street network for the city and running tests of movement along this network.

Required Qualifications or Pre-requisites:
Preferred that you have some experience in archaeology and/or GIS programs like ArcMap or QGIS.

Project/Internship Location:
SHESC 104 - Mesoamerican Archaeology Lab

Hours Per Week or Days and Times Needed:
At least 4 hours per week Monday through Friday.

Project Supervisor:
Anne Sherfield

Supervising Faculty:
Michael E. Smith

Contact Information:
asherfie@asu.edu
Research Project or Internship Title:
Expanding a Database of Fossil Hominin Sites and Extinct Mammal Species

Academic Discipline:
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.

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.) Students will also be trained in using a reference manager to organize articles.

Required Qualifications or Pre-requisites:
There are no course pre-requisites, although preference will be given to students who have taken ASM 104 or other relevant anthropology, biology, geology, or chemistry courses. Students applying for an online position are required to have access to a computer and reliable internet and be available for a weekly lab meeting video chat (via Zoom). The ideal applicant will be detail-oriented, highly organized, and self-motivated to work remotely, with good communication skills to keep us informed of their progress and/or request assistance as necessary.

Project/Internship Location:
Online or In-Person (Tempe campus)

Hours Per Week or Days and Times Needed:
Total hours to be worked will be determined by how many credits are requested. Students will work with the project supervisor to develop an appropriate schedule based on their availability and project needs.

Project Supervisor:
Irene E. Smail

Supervising Faculty:
Kaye Reed

Contact Information:
iesmail@asu.edu
Research Project or Internship Title:
Genetic structure of human dental variation

Academic Discipline:
Archaeology
Bioarchaeology
Evolutionary Anthropology

Project Description:
This project uses images and 3D scans of casted individuals combined with matched genealogical records to assess quantitative genetic signatures in the human dentition. The goal is to better inform the use of teeth as genetic proxies in bioarchaeology and paleoanthropology.

Student’s Duties:
Imaging, scanning, database management, website development, cusp tip marking, primary data acquisition.

Required Qualifications or Pre-requisites:
Some knowledge of human osteology preferred but not necessary. Preference given to those who have taken Dental Anthropology.

Project/Internship Location:
SHESC 302, some online/remote possibilities

Hours Per Week or Days and Times Needed:
variable

Project Supervisor:
Andrew Seidel

Supervising Faculty:
Chris Stojanowski

Contact Information:
cstojano@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:**
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:
**Infectious disease at Tlatelolco, a Mesoamerican urban center**

Academic Discipline:
Bioarchaeology

Project Description:
The Late Postclassic period in the Basin of Mexico (1300 – 1521 CE) was characterized by an influx of people into densely populated and ethnically diverse urban centers, an expansion of long distance trade networks, and a consolidation of political power. During this period, a group of Nahuatl-speaking polities, collectively known as the Aztec, formed the Triple Alliance. The imperial capital, Tenochtitlan, and its contiguous sister-city, Tlatelolco, were constructed within Lake Texcoco during the 14th century CE and rapidly became multi-ethnic urban centers with hundreds of thousands of residents.

In less than a century, the Tlatelolco market became the largest in Mesoamerica; at its peak, the city’s marketplace accommodated an estimated 60,000 daily visitors and was twice as large as the market of the Spanish city Salamanca. Long distance trade to the market was facilitated by pochteca merchants, who traveled hundreds of miles outside of imperial boundaries to bring foreign goods into the Basin of Mexico.

Much information about the daily life of Tlatelolco inhabitants was lost as a result of European conquest. To understand better disease ecology in this pre-contact city, we seek to identify (1) The infectious diseases present at Tlatelolco and (2) Any associations between infectious disease and nutritional deficiency in skeletal remains.

Student’s Duties:
- Transcribing and coding osteological and paleopathological data into spreadsheets
- Creating differential diagnoses for nutritional deficiencies (scurvy, anemias, growth stunting, etc) and infectious diseases (tuberculosis, treponemal, etc) observable on skeletal remains
- Organizing photographs based on pathological changes

Required Qualifications or Pre-requisites:
ASM 341 Human Osteology (required)
ASM 450 Bioarchaeology (suggested)
ASM 497 Paleopathology (suggested)

Project/Internship Location:
Tempe Campus OR through Zoom meetings and remote work.

Hours Per Week or Days and Times Needed:
5 hours per week, Days and times are flexible

Project Supervisor:
Kelly Blevins

Supervising Faculty:
Anne Stone

Contact Information:
kelly.blevins@asu.edu
Research Project or Internship Title: Mediterranean and African Volcanic Database Project

Academic Discipline:
Archaeology
Geology

Project Description:
This project will focus on compiling geochemical data from volcanic eruptions throughout the Mediterranean and Africa, expanding on an important database used for sourcing tephra deposits. A large part of volcanic studies involves determining what volcanic eruption the deposits originated from. In order to do this, geochemical data is needed so the tephra deposits can be linked with the volcano it came from. This is important for building temporal frameworks across vast regions. Additionally, some volcanic deposits (i.e. cryptotephra) are too small to directly date and need to be sourced to an independently dated volcanic eruption. Therefore, generating a database that can be used to compare the geochemistry of different deposits is essential.

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 not pre-reqs required for this position. A background in archaeology or geology is preferred.

Project/Internship Location:
Anywhere - If we are on campus, the student can come to SHESC 155. If we are not on campus, the student can complete this position remotely.

Hours Per Week or Days and Times Needed:
5-20 hours (flexible)

Project Supervisor:
Jayde Hirniak

Supervising Faculty:
Curtis Marean

Contact Information:
jaydehirniak@gmail.com
Research Project or Internship Title:
Neanderthal Animal Exploitation in the Paleolithic

Academic Discipline:
Archaeology
Evolutionary Anthropology

Project Description:
This project is part of the archaeological analysis of Kobeh Cave, Iran, focusing on analyzing the animal remains. The faunal remains were excavated from Mousterian deposits and contain information about Neanderthal diet and behavior in this understudied region.

Student's Duties:
Students will aid in the completion of the zooarchaeological analysis of archaeofaunas. The faunal specimens from Kobeh Cave have been organized and the majority have been analyzed. 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 taphonomic fragmentation data. Additionally, students will learn comparative mammalian osteology and will be exposed to a workflow for analyzing and curating archaeological materials.

Required Qualifications or Pre-requisites:
Preference or familiarity with osteology, but not required (students without osteology experience will learn through RAP work).

Project/Internship Location:
SHESC

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:**
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 examples 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 Human Osteology with a grade of B or better.

**Project/Internship Location:**
SHESC 341

**Hours Per Week or Days and Times Needed:**
Approximately 5 hours per week, days/times TBD.

**Project Supervisor:**
Dr. Brenda Baker

**Supervising Faculty:**
Dr. Brenda Baker

**Contact Information:**
Dr. Brenda Baker
Email: BrendaJ.Baker@asu.edu.
Research Project or Internship Title:
Qualitative Data Analysis

Academic Discipline:
Global Health
Sociocultural Anthropology
Related disciplines using qualitative analysis

Project Description:
To code qualitative interview and focus group discussion transcripts from studies that fall into three categories, (1) international development related to health, environment, gender, social norms, (2) maternal and child health, including experiences with preeclampsia or feeding young children, or (3) social support among resettled refugees.

Student's Duties:
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. 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:**
Research on Teotihuacan as an Ancient City

**Academic Discipline:**
Archaeology
Museums

**Project Description:**
Teotihuacan was one of the largest ancient cities in the New World, and there is a long tradition of ASU research there (including an on-site lab holding collections from over 40 field projects). One of the initial projects in the 1960s, the Teotihuacan Mapping Project, recorded the locations of thousands of structures and made systematic collections of artifacts from each one. For whatever reason, this project left many of the analyses unfinished. We are completing data entry for several types of data that were recorded on paper forms but never entered into a computer format (including ground stone analyses, figurines and jewelry production), updating GIS files, and creating literature reviews of past work on particular artifact types. These studies are revealing important new information about life at the ancient city of Teotihuacan.

**Student's Duties:**
Students will do both general data entry and data-checking, and background research on a related topic. Students will be expected to complete data entry into computer databases, and to scan paper forms to pdf. Students may also perform basic analyses of the artifact categories that they are most interested in, such as GIS mapping the spatial distributions of artifact classes, and checking whether artifact classes are correlated with ceramics from specific time periods, or with particular types of buildings. Once familiar with the site and datasets, students may develop individual research projects.

**Required Qualifications or Pre-requisites:**
Completion of or current enrollment in ASB 222 or 223 (or a higher-level archaeology class) required. Previous experience with Access or other database programs, experience with GIS programs, computer graphics, completion of ASB 337, and the ability to read Spanish are not required. However, they are considered pluses and should be noted on your application.

**Project/Internship Location:**
SHESC 104 - Mesoamerican Archaeology Lab or remote/online

**Hours Per Week or Days and Times Needed:**
3-9 hours/week, days and time flexible

**Project Supervisor:**
Dr. Michael E. Smith

**Supervising Faculty:**
Dr. Michael E. Smith

**Contact Information:**
mesmith9@asu.edu
Research Project or Internship Title:
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. This process involves wet-sieving of samples as well as heavy-liquid separation methods to target the specific glass shard densities. Samples will also be prepped in an epoxy round that can be used for geochemical analyses. Jayde will train the student in the entire process and assign readings, if necessary.

Required Qualifications or Pre-requisites:
There are no pre-reqs for this position. Past experience working in a laboratory environment is preferred, however, not required. If the student has no experience, he or she will have to complete additional online training (it is brief, but necessary).

Project/Internship Location:
Ceramic and Sediment Preparation Laboratory, SHESC 350A

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

Project Supervisor:
Jayde Hirniak

Supervising Faculty:
Chris Campisano, Curtis Marean

Contact Information:
jaydehirniak@gmail.com
**Research Project or Internship Title:**
*Understanding Differences in Opioid Morbidity and Mortality Rates in the United States: A Systematic Review and Meta-Analysis*

**Academic Discipline:**
Global Health

**Project Description:**
Systematic reviews and meta-analyses synthesize research that is already published on a given topic by summarizing all empirical evidence. This project looks to take this analytical approach to study the opioid epidemic in the United States. The opioid epidemic has been considered a national emergency since 2017, with roughly 115 people in the United States dying from an opioid-related overdose every day. When looking at publicly available national statistics, some demographic groups have higher rates of opioid-related morbidity and mortality- Whites, Indigenous, and men. However, minimal research explores the extent of demographically focused research on the opioid epidemic. Overall, our goals are to 1) examine which demographic groups are most often written about in opioid-related research; 2) compare the effect size (morbidity and mortality rates) of records to see how they compare to national level statistics found in large scale surveillance systems; 3) Note any hypotheses listed as factors contributing to differences in opioid morbidity and mortality in the United States.

**Student's Duties:**
Identifying relevant literature for the analysis, testing inter-rater reliability for coding articles, coding articles based on developed protocol, and helping to synthesize findings. Research apprentices will meet with the project supervisor weekly to discuss new findings, challenges, and next steps.

**Required Qualifications or Pre-requisites:**
Student researchers will be instructed on how to complete the systematic review/ meta-analysis process during the project and do not need to already have experience conducting this type of research analysis. They will be expected to be motivated and driven to learn how to conduct this type of research.

**Project/Internship Location:**
ASU Tempe Campus but meetings can also be done virtually. ASU online student can work remotely but must be available for a Zoom meeting sometime Monday-Friday during the 9am-5pm MST.

**Hours Per Week or Days and Times Needed:**
Will meet weekly for one hour. Estimated 10 hours of work per week.

**Project Supervisor:**
Alexandria Drake

**Supervising Faculty:**
Daniel Hruschka

**Contact Information:**
Ajdrake1@asu.edu
**Research Project or Internship Title:**
Urban sustainability in the deep past: How long did cities and neighborhoods survive?

**Academic Discipline:**
Archaeology
History

**Project Description:**
This project is the initial stage of a longer transdisciplinary project that will consider, “Why did some cities and neighborhoods persist for long periods, while others did not?” We will assemble archaeological and historical data on premodern and modern urban trajectories around the world, and try to determine what factors favored long-term survival or persistence. In spring 2020, we will focus on two databases on past settlements: one from the Basin of Mexico and one from the Roman Empire. This project will contribute to scientific research on urban sustainability and resilience, using systematic, quantitative data from archaeology and history.

**Student’s Duties:**
- Help us locate archaeological and historical cases for analysis.
- Help us assemble conceptual and methodological works.
- Enter data into project databases.
- Contribute to exploratory data analysis.

**Required Qualifications or Pre-requisites:**
- Classwork or fieldwork experience in archaeology, history, sustainability or a related field.
- GPA > 3.0
- Experience working with archaeological or historical data and projects.
- Experience with computer graphics (e.g., Photoshop, scanning, Illustrator); or GIS.
- Knowledge of elementary statistics.

**Project/Internship Location:**
SHESC 104 - Mesoamerican Archaeology Lab or remote/online

**Hours Per Week or Days and Times Needed:**
6 to 9 hours per week. Times depend on the schedules of other project members.

**Project Supervisor:**
Dr. Michael E. Smith

**Supervising Faculty:**
Dr. Michael E. Smith

**Contact Information:**
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