



Position: Conservation and Research Internship (Paid)

Organization: Memphis Zoo

Location: Memphis, TN, United States

Duration: Summer 2023

General Description:

Memphis Zoo's Department of Conservation & Research is offering an internship in conservation biology. The position is available for upper-level undergraduate students and students 1-2 year post-college. This internship offers a unique research experience in a zoo setting working with scientists conducting cutting edge and frontline projects to save wildlife, and will provide valuable training in laboratory techniques, experimental design, and data analysis for many professional careers in general biology, conservation, ecology, and veterinary sciences.

Specific Project & Internship Description:

Internship will be conducted under one of the three areas below. Please read the information below carefully. Applicants must specify in their cover letter which of the internship positions they are applying to, namely: (1) Reproductive Physiology Internship, (2) Amphibian Ecology and Conservation Internship, or (3) Physiology Internship (please pick one). Please note that applicants that do not specify which project they are applying to in their cover letter will not be considered.

Position 1: Reproductive Physiology Internship

Research Mentor: Beth Roberts (Senior Conservation Biologist, broberts@memphiszoo.org)

Project Description: Reproductive physiology intern will work with Senior Conservation Scientist, Beth Roberts, to study multiple aspects of reproductive physiology, health, and welfare of endangered species. Interns will be trained in a variety of general laboratory skills to assist with the investigation of biomarkers of reproductive health and the development of assisted reproductive technologies for mammals, snakes, and tarantula. Depending on project needs, interns may perform hormone extractions, enzyme immunoassays, semen analysis, and sperm cryopreservation as well as gain experience and knowledge in reproductive physiology, literature review, sample inventory, and data management, organization, and analysis. Previous research and laboratory experience is preferred but not required; however, willingness to learn to handle snakes (non-venomous) is imperative.

Position 2: Amphibian Ecology and Conservation Internship

Research Mentor: Dr. Sinlan Poo (Curator of Research, spoo@memphiszoo.org)

Project Description: The Amphibian Ecology and Conservation Intern will work under the supervision of Dr. Sinlan Poo. The intern will learn a variety of field and laboratory techniques, such as visual encounter surveys, field sampling, night surveys, amphibian husbandry, captive breeding, amphibian development, morphology assessments, and parasite identification. Interns will learn about research design and the scientific method, and will have the opportunity to interact with researchers and external collaborators from Arkansas State University. Please visit www.sheilapoo.com to learn more about the research in the Amphibian Lab. To apply for this position, a valid driver's license and the ability to bring your own vehicle (to travel to/from field sites) is required.

Position 3: Physiology Internship

Research Mentor: Dr. Melanie Richter (Research Scientist, mrichter@memphiszoo.org)

Project Description: The Physiology Intern will work with Research Scientist, Dr. Melanie Richter, to investigate the effects over-winter brumation temperatures have on spring reproductive development in the Endangered Louisiana pinesnake, as well as assisting with a variety of other projects. The intern will analyze temperature trace data, ultrasound data, and reproductive success. In addition to data analysis for that project, the intern will likely assist with husbandry, hormone extractions and assays, as well as learning about how research is conducted in a zoo environment. The intern will learn how to conduct literature reviews, manage and analyze data, how to keep a useful laboratory notebook, as well as how to trouble-shoot and cope with the problems that come up in conducting research.

Preferred Qualifications:

Preference will be given to applicants who have completed their bachelor's degrees in biology, zoology, ecology, animal behavior, or related fields. Applicants with previous research experience and an interest in pursuing attending graduate school or careers in ecology, physiology, and conservation are strongly preferred. Requirements for this position include the ability to work within a diverse and inclusive team of researchers, follow instruction, and exhibit excellent oral and written skills. The intern may need to travel with their research mentor to additional work sites outside the zoo and may be working unconventional hours and on weekends.

Ideal Candidate for Position:

Who should apply? Interns with the following will benefit most from this opportunity:

- Previous research experience in the biological sciences
- A strong interest in applied conservation biology
- Willingness to work long hours in the lab or field, depending on the project
- Ability to engage respectfully with a diverse team of collaborators
- Ability to work independently
- A general curiosity and interest in asking novel questions
- Excellent communication skills, attention to detail, and positive attitude

Additional experience is a plus, including:

- Experience with working on field research projects
- Experience with laboratory techniques
- Experience with data analysis and scientific writing

Women and underrepresented groups in STEM are encouraged to apply.

Support Provided:

1) \$12.10/hr stipend, and 2) Free housing will be provided in the Memphis Zoo's condominium located near the Zoo. The condominium has two bedrooms and houses up to four people per room. Interns may be required to share a bedroom with a same-sex roommate.

Duration:

This internship is full-time (40 hrs/week) for 12 weeks. Start date is dependent on the research project and should be discuss with the Research Mentor directly. In general, summer internships range from May-Aug in their duration.

Materials to Submit:

The application deadline is **February 3rd, 2023**. However, applications will be considered on a rolling basis and the submission window may be closed earlier if a candidate is found before that date. Please go to the link below to apply online. Please make sure to submit your application to the correct Research Mentor. Materials required in the online application are (1) a cover letter or letter of interest describing research interest, job-related skills and life experiences, (2) CV, (3) unofficial college transcript, and (4) a list of three professional or academic references. Submit these materials as a single PDF file to the respective Research Mentors via email directly. Applications with incomplete materials will not be considered.