



Graduate Student Position Announcement - Utah State University

Position title: Graduate Research Assistantship (GRA), Mountains as disease refugia for moose in a changing world

Position description: The GRA will study parasite distributions and animal strategies to adapt to warming climates and increased parasite exposure. Research will focus on moose and their parasites (winter ticks, arterial worms) in the Wasatch Mountains, Utah. Key aims include 1) estimating tick and arterial worm exposure across elevations used by moose; 2) determining how environmental factors influence parasite survival; and 3) developing parasite distribution models to inform moose management.

The GRA will conduct field work to survey tick and tabanid fly populations along elevation and habitat gradients in the Wasatch Mountains. Parasites will be identified using microscopy and molecular approaches. The GRA will also conduct experiments to assess how environmental conditions (i.e., moisture, temperature, snowfall) effect tick survival. The GRA may also assist with monitoring ungulate movement and investigating mortality sites. Results from surveys and experiments will be used to determine how climate and habitat factors relate to tick density to help inform moose management. Research will be done in collaboration with agency scientists, managers at the Utah Division of Wildlife Resources, and another GRA studying moose movement ecology.

Supervisors: Dr. Sara Weinstein, Department of Biology, Utah State University; Dr. T.J. Clark-Wolf, Department of Wildland Resources and Ecology Center

Stipend/Salary: \$25K plus benefits and tuition/fees waiver

Start date: Flexible, January 2025 preferred

Minimum qualifications:

1. BS or BA in wildlife biology, biology, ecology or related field
2. Experience conducting field research
3. Experience in at least one of the following areas: 1) Molecular work (e.g., DNA extractions, PCR, sequencing); 2) Parasitology (e.g., dissections, identification); or 3) Entomology (e.g. collections, identification)
4. Excellent written and personal communication skills
5. Ability to work both independently and collaboratively with agency scientists and wildlife technicians
6. Experience analyzing, presenting, and publishing scientific results

Desired qualifications:

1. Proficiency in R or other programming languages and geospatial software (GIS)

How to Apply: Please submit a *single PDF* to Sara.Weinstein@usu.edu titled "GRAPosition_Moose_ApplicantLastName_ApplicantFirstName". This PDF should include:

1. A one-page cover letter that describes your motivations, qualifications and how this position advances your career goals.
2. A CV/resume that includes contact information (phone and email) for two references.
3. Unofficial transcripts from undergraduate and (if applicable) graduate education.
4. Scientific writing sample (academic paper or report written primarily by the applicant).

We will review applications as they are received and the position will remain open until filled.

Utah State University is a Research I (Extensive Doctoral) land-grant institution with a student body of over 24,000, 8 academic colleges, a school of Graduate Studies, and diverse research programs. The main campus is located in Logan, a community of 100,000 people. Logan is 85 miles north of Salt Lake City in scenic Cache Valley, a semi-rural mountain basin with nearby ski resorts, lakes, rivers, and mountains providing many recreational opportunities. The area has a low cost of living and provides a high quality of life. [Learn more](#) about Logan, UT. Utah State is committed to cultivating a [diverse, equitable, and inclusive community](#) where different perspectives, values, cultures, and identities are acknowledged, welcomed, and valued. We seek to recruit, hire, and retain people from all walks of life who will champion excellence in education, research, discovery, outreach, and service. We believe that promoting a strong sense of community and belonging empowers and engages all members of USU to thrive and be successful. [Learn more](#) about USU. Applicants who are members of racial or ethnic minorities, first generation college students, from a low-income background, or identifying as women or LGBTQIA+ are strongly encouraged to apply.