

**Ph.D. Assistantships in Disease Dynamics at the Pennsylvania State University  
and University of Vermont**

**Project:** The [Wildlife Ecology Research Lab](#) at The University of Vermont (UVM) and the [Applied Population Ecology Lab](#) and [Bletz Lab](#) at Pennsylvania State University (PSU) are each seeking one Ph.D. student to address questions related to temperature-sensitive disease dynamics in an amphibian-pathogen system.

The students will join a team of researchers from UVM, PSU, UMass – Amherst, and the US Geological Survey to address research questions related to how temperature influences host behavior, host immune function, and pathogen growth. The positions are available beginning in late August 2024 and include four years of funding (stipend, tuition waiver, and health insurance). The UVM position will be supervised by Dr. Brittany Mosher, and the PSU position will be supervised by Drs. Molly Bletz and David Miller.

**Project description:** The students will be funded as part of a recent award from the National Science Foundation's Ecology and Evolution of Infectious Diseases (EEID) program. Our project focuses on using a combination of field studies, laboratory studies, and models to understand how temperature interacts with pathogen growth, host immune function, and host behavior to result in temperature-sensitive disease dynamics. The findings from these project components will come together to parameterize models that predict the timing and magnitude of seasonal infection outbreaks.

The position at PSU will focus on how host immune function varies with temperature to influence infection dynamics, with additional work based on the student's interests.

The position at UVM will focus on how host behavior varies with temperature to influence infection dynamics, with additional work based on the student's interests.

Both positions will include a combination of laboratory and field research.

**Qualifications:** Bachelor's degree (MS preferred) in ecology, biology, natural resources, environmental sciences, or a closely related field. The qualifications listed below capture the breadth of skills that would help applicants succeed in these positions, however, we do not expect individual applicants to possess all of these skills.

- Interest in wildlife disease ecology and/or amphibian ecology
- Experience or interest in communicating and collaborating with a team of scientists
- A strong work ethic and commitment to achieving goals
- Comfort with both independent and collaborative work
- Interest and/or ability in scientific writing
- Experience working in the field and/or leading a field crew
- Interest or experience in data analysis
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**Application:** We strongly encourage applicants from underrepresented groups in science to apply for this position. GRE scores are not required. Interested applicants should submit their applications using the Google Form listed here: <https://forms.gle/X113FJwo5Uaeix8g8>. On the form, you will be asked to answer three short questions (each 150 words or less) and to submit 1) a cover letter expressing your interest, experience, and qualifications and 2) a CV with contact information for three references. **The PSU position is more time-sensitive and all applications will be reviewed as received and should be submitted no later than November 17<sup>th</sup> for full consideration. Applications for the Vermont position should be received by December 15, 2023.**

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