

PhD POSITION IN GLOBAL CHANGE ECOLOGY SHOEMAKER ECOLOGY LAB



The [Shoemaker lab](#) in the Botany Department and Program in Ecology and Evolution at the University of Wyoming is recruiting a PhD student to begin summer or fall 2026. The successful candidate will be supported by a recently awarded [NSF Career grant](#) examining the joint effects of environmental conditions and species interactions on species persistence and diversity under global change.

Position Overview: The proposed project will examine how environmental conditions and plant-plant interactions jointly impact species' ability to expand their ranges under shifting environmental conditions. The work will combine field experiments with demographic modeling. Transplant experiments will be used to simulate range expansion of subalpine plants into the alpine, quantifying if interactions between transplanted plants, the alpine community, and alpine willows help or hinder the potential for range expansion. Field work will be based at [Niwot Ridge](#), Colorado, and the successful candidate is expected to contribute to the vibrant Niwot Ridge LTER community. Multiyear field measurements will be coupled with statistical and demographic models to understand long term predictions of range expansion. The successful candidate will be encouraged to develop their own research directions, participate in collaborative lab manuscripts, and/or partake in science communication and outreach opportunities.

The position includes 5 years of guaranteed academic support, including an annual stipend of a minimum of \$29,016, coverage of student health insurance (\$3,468/year), and coverage of all tuition and academic fees (\$10,023/year). The position will be supported by a mix of both research assistantships and teaching assistantships.

Lab Overview: Our lab's research broadly focuses on integrating theory and experiments to understand the processes that structure ecological communities under current conditions and under future global change. We work across systems and approaches from field experiments in the alpine tundra and mixed grass prairies to lab experiments with protist microcosms to the development of novel theory and statistical approaches. Our lab is dedicated to creating a

collaborative, supportive, and productive working environment where all members are actively engaged and support one another's research.

The successful candidate would join the University of Wyoming's interdisciplinary Program in Ecology and Evolution and the Botany department. The University of Wyoming is located in Laramie, Wyoming a community that is nestled between the Laramie and Snowy Mountain ranges, which offer ample opportunity for skiing, climbing, hiking, and mountain biking. Laramie has a relatively low cost of living and is within easy driving distance of Colorado's Front Range corridor (Fort Collins, Boulder, and Denver). The University of Wyoming is an Affirmative Action/Equal Opportunity Educator and Employer.

Qualifications: Minimum qualifications include a bachelor's degree in ecology, biology, mathematics or a related field with a GPA of 3.0 or higher. Additional preferred qualifications include previous research experience (e.g., undergraduate research experiences, Master's thesis), a strong quantitative background, and familiarity with academic publishing and scientific communication.

To Apply: Please send the below information to Lauren Shoemaker at lshoema1@uwyo.edu. All applications received by November 12th 2025 will receive full consideration.

- Current CV
- A 1 or 2 page statement written without the aid of AI describing (a) how your educational and professional background aligns with the lab and the proposed project and (b) your motivation for pursuing a PhD
- Unofficial transcripts
- Contact information for 3 professional references

Please reach out to Lauren at lshoema1@uwyo.edu with any questions.

