



UNIVERSITY
OF WYOMING

College of Arts and Sciences
Department of Botany

The Shoemaker lab is accepting applications for a Ph.D. student who is interested in testing the ability of elevational corridors to mitigate vegetative climate change impacts. The project will combine field experiments with mathematical modeling to examine novel community assemblages as species move and adapt to changing climates.

We are looking for a student to begin in fall 2020 (or potentially January 2020, if interested) at the University of Wyoming in the Program in Ecology and the Botany Department. Our lab's research broadly focuses on applying complex systems tools and ecological theory to understand spatial and temporal ecological community dynamics, including patterns in coexistence and species movement. We combine ecological theory and simulation modeling with experimental tests of underlying mechanisms that structure ecological populations and communities. We work across a variety of systems including microcosms and grasslands. Our research focuses on how spatial heterogeneity, dispersal, and stochasticity alter coexistence of competing species and underlying community composition. More information on our research can be found at <https://laurenshoemaker.weebly.com/>.

Qualified applicants should have previous research experience. Students with previous experience working on alpine meadow communities and/or with strong quantitative backgrounds in ecology, computer science, or mathematics are especially encouraged to apply. We recognize that the best science originates from diverse collaborations with people from varied backgrounds, and we encourage students from underrepresented groups to apply. Graduate students will be supported in part by a new 5-year, \$20 million NSF EPSCoR RII Track-1 grant to the University of Wyoming. Additional details can be found at <http://www.uwyo.edu/epscor/microbial-ecology/>.

To apply, contact Dr. Lauren Shoemaker at lshoema1@uwyo.edu with (1) a CV that includes relevant research or work experience and GPA, (2) an unofficial transcript, and (3) a brief description of your research background, future research ideas, and interest in joining the lab. This will allow us to discuss research interests and fit before submitting an official application. The application deadline is January 31, however applicants are encouraged to express interest as soon as possible.

The University of Wyoming has a total enrollment of 12,000 full-time students with active ecological research across multiple departments, including Botany, Zoology and Physiology, Ecosystem Science and Management, and the Program in Ecology. The university is located in Laramie, a mountain town with a relatively low cost of living that is close to multiple field sites, several mountain ranges, and within easy driving distance of Colorado's Front Range corridor (Fort Collins, Boulder, and Denver). The University of Wyoming is an Equal Employment Opportunity/Affirmative Action employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability or protected veteran status or any other characteristic protected by law and University policy. Please see www.uwyo.edu/diversity/fairness.