UNIVERSITY OF WYOMING | College of Arts and Sciences Department of Botany

The Shoemaker Lab in the Botany Department at the University of Wyoming is seeking applications for a postdoctoral research associate in quantitative community ecology. The position will link patterns in community composition to underlying mechanisms that maintain coexistence, including species interactions, spatio-temporal variability, stochasticity, dormancy, and dispersal. 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, dispersal, and synchrony. The position is 100% research with a flexible start date. The successful candidate should have experience in mathematical modeling (theoretical community ecology and/or Bayesian statistics) and a passion for advancing community theory.

The lab utilizes a wide variety of methods to study these topics, and the successful applicant will have the opportunity to shape their own project in collaboration with lab members. Possible projects include:

1. developing sparse models for plant community ecology with the aim of extending community theory to species-rich systems. This project would be jointly supervised by Topher Weiss-Lehman and build on recent method developments: https://www.biorxiv.org/content/10.1101/2021.07.23.453227v1.

2. developing a theoretical framework for predicting patterns in community synchrony and stability under global change.

3. extending tests of modern coexistence theory for restoration applications and/or incorporating trophic interactions.

Our lab is dedicated to creating an inclusive and equitable environment. We recognize that the best science originates from collaborations with people from diverse backgrounds, and we encourage applicants from underrepresented groups to apply. The successful candidate will be expected to contribute to an open and inclusive working environment.

This position will be a part of the NSF funded Modelscapes Consortium. Thus, the postdoc will join a large cohort of postdocs across the University of Wyoming, University of Nevada Reno, and University of Montana. Members of this consortium have wide ranging interests from population and community dynamics to ecosystem ecology and population genetics but are united by the desire to develop and improve methods for statistical inference from ecological and evolutionary data. Competitive candidates will have previous experience and/or a passion for working in highly collaborative settings. More information on the Modelscapes consortium can be found at: https://microcollaborative.atlassian.net/wiki/spaces/MP/overview.

To apply for the position, please submit a cover letter, CV, links to 1-2 recent first-authored publications, and names and contact information for three professional references at the following link:
https://eeik.fa.us2.oraclecloud.com/hcmUI/CandidateExperience/en/sites/CX_1/job/20003337/?utm_medium=jobshare

The link will take you to the application page for all our open positions through the Modelscapes Consortium at the University of Wyoming, so please indicate in your cover letter that you are applying for a position in the Shoemaker lab. Applications submitted by November 29th will receive full consideration. The position is for two years, with the possibility for extension, contingent upon performance. The position provides a competitive benefits package, including health insurance, contributions to a retirement account, $3,000 to cover moving expenses, and an annual salary of $53,000. Lab details can be found at https://laurenshoemaker.weebly.com/.

If you have questions about the position, please send an email to lshoema1@uwyo.edu.

ADDITIONAL INFORMATION:
The University of Wyoming has strong research programs in ecology and evolutionary biology across multiple departments, including Botany, Zoology and Physiology, Ecosystem Science and Management, Plant Sciences, and the Program in Ecology. The university is located in Laramie, 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, is close to field sites across a wide variety of vegetation types from mixed grass prairie to alpine tundra, rivers and lakes, 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. We are committed to a multicultural environment and strongly encourage applications from women, minorities, veterans, and persons with disabilities.