



Postdoctoral position in Plant Population Ecology

Department of Plant and Microbial Biology
North Carolina State University

The [Sheth plant evolutionary ecology lab](#) in the Department of Plant and Microbial Biology at North Carolina State University (Raleigh, NC; USA) and the [Angert Lab](#) in the Departments of Botany and Zoology at the University of British Columbia (Vancouver, BC; Canada) are currently seeking a highly motivated postdoctoral associate to participate in an NSF-funded study of range-wide demography in the riparian plant, scarlet monkeyflower. The project aims to understand how plant population dynamics vary along spatial and climatic gradients; how populations recover from extreme climatic events; and how rapid evolution increases population persistence under climate change. We strive to foster an environment where people from all backgrounds are respected.

Position summary: The successful candidate will contribute to studies of population dynamics across the geographic range of the scarlet monkeyflower, *Mimulus cardinalis*, a perennial herb that grows in riparian habitats in western North America. The postdoctoral scholar's primary responsibilities involve:

- Migrating the existing demographic database to a format that can be queried directly in R and accessed remotely
- Conducting demographic analyses using cutting-edge statistical methods including but not limited to integral projection models, life table response experiments, Bayesian mixed effects models, and demographic simulations
- Contributing to demographic data collection and training technicians in the field
- Training and managing personnel
- Leading the dissemination of results through manuscripts and presentations
- Participating in outreach activities

The position is based out of NCSU and requires travel to California and Oregon in August/September each year to train field technicians and help collect data during demographic surveys. The postdoctoral scholar will also have opportunities to analyze existing datasets, develop additional research programs related to the overall objectives of the project, and gain experience mentoring undergraduate and graduate students. The postdoc will be co-mentored by Dr. Amy Angert at the University of British Columbia.

Qualifications: Before beginning the postdoc position, candidates must have a Ph.D. in Ecology, Evolutionary Biology, Botany, or a related discipline, and experience with demographic modeling (e.g., integral projection models, life table response experiments, climate-driven models of vital rates) and demographic simulations in R. Candidates are also expected to have a background in statistical methods, a strong work ethic, and excellent problem-solving, interpersonal, communication, and time management skills. A clear track record of publications, independent research experience, and a commitment to mentoring post-bacs and undergraduates is also required. The candidate must have a valid US driver's license at the time of hire and be available to work away from home at field sites for a



minimum of two weeks per year. Experience conducting field work with plants, along with knowledge of database management, are strongly desired.

Salary and appointment term: \$62,000 per year with [benefits](#). At present, we anticipate this position to be initially for 1 year, with possible extension for an additional year. Start date is flexible, but ideally between January and June of 2026.

Commitment to wellbeing and career development: The Sheth and Angert Labs are committed to fostering an environment where people from all backgrounds are respected. In addition, Drs. Sheth and Angert will develop a mentoring and professional development plan with the postdoc to identify priorities and needs that would help the postdoc achieve their professional goals. We are open to providing other accommodations (e.g., if there are barriers to participation in field work) as needed.

Commitment to field safety: We are committed to providing a safe field work experience for all members of the collaborative team. In the context of this position, safety measures we have in place include always having a second person along during all field work, pre-planned schedules and routes with work sites in protected areas whenever possible, a clear plan for daily check-ins and a mode of continuous communication while in the field, a checklist to ensure that appropriate personal protective equipment are included on each trip, and an agreed upon emergency plan. We are happy to discuss and address any other safety-related concerns you have.

About NC State and the Raleigh area: NC State's Department of Plant and Microbial Biology offers a highly-rated research environment and is situated in a collaborative and scientifically stimulating atmosphere in the Research Triangle, with both UNC Chapel Hill and Duke University nearby. There is a vibrant and growing community of ecologists and evolutionary biologists spread across multiple departments on campus, including Applied Ecology, Biological Sciences, Entomology and Plant Pathology, Forestry and Environmental Resources, Soil and Crop Sciences, and Biochemistry, among others, many of whom participate in a weekly Evolutionary Genetics meeting. Raleigh is a lively yet affordable city with a high standard of living, and its surroundings offer numerous recreational activities.

To apply: Please submit the following materials to <https://jobs.ncsu.edu/postings/224542>. Applications submitted via e-mail will not be considered.

1. a cover letter describing your previous research experience and qualifications for this position (including your experience with integral projection models, Bayesian mixed effects models, demographic simulations, and database management), along with your current and future research interests (1-2 pages)
2. current CV
3. contact information for 3 references

Application deadline: Review of applications will begin on **December 10** and continue until the position is filled. Due to the large volume of applicants, we will not be able to respond to individual emails about this position or meet with applicants prior to submission of application materials. Drs. Sheth and Angert will co-review all application materials.