

# Post-Baccalaureate Research and Training (PBRT)



## Ecosystem Biogeochemistry

23 June 2025 – 22 June 2026\*

**Project Summary:** Ecosystems in southern California are exposed to some of the highest levels of nitrogen (N) pollution in the world. Our research is evaluating when these ecosystems may exceed their capacity to assimilate N (i.e., to become saturated with N). Our work is integrating measurements of both hydrologic and gaseous N losses with cutting-edge isotopic approaches to determine how these ecosystems change as N inputs increase. This project will provide opportunities for conducting laboratory and field experiments and collaborate with graduate students and postdoctoral researchers.

**Position requirements:** This funding opportunity will support the research and training of post-baccalaureate students (post-baccs) who wish to engage in research or who want to pursue a career in science, technology, engineering and mathematics (STEM) but have faced barriers to participation in research experiences as an undergraduate student. **A post-bacc is defined as an individual who has a bachelor's degree (or will obtain one by Winter or Spring Quarter 2025) but is not currently enrolled in another degree program and is not the recipient of a graduate degree.** To be eligible, trainees must have received a baccalaureate college degree in a relevant field before the start of the training period, and ideally within four years prior to the start date. Individuals who have a graduate degree or who are accepted into, or already participating in, graduate programs are not eligible. Trainees must be a U.S. citizen, U.S. national, or a permanent resident of the United States. Applicants should feel comfortable visiting field sites, hiking, and working outdoors. The selected applicant would be expected to develop an independent project (with guidance from lab teammates) and participate in laboratory and field work 40 h/week for 1 year. A general understanding of soil science, environmental chemistry, and computers is highly desirable.

### Research areas

- Soil biogeochemistry
- Carbon cycling
- Nitrogen cycling
- Trace gas emissions
- Soil ecology

### Benefits include:

- \$35,000 stipend for one year

*\*Twelve months of funding available for use within project timeframe.*

# Ecosystem Biogeochemistry

## Post-Baccalaureate Research and Training

Application Deadline:  
**Mon Feb 10, 2025**

Send a copy of your resume, unofficial transcript, and a **one** page (single or double-spaced) statement of interest addressing the following areas:

1. Graduation date or expected graduation date
2. Address your interest in the position, what you would like us to know about you, what you expect to gain from this experience, and what are your long-term educational/professional goals.
3. Discuss your experience/interest in field research in general and soil science/biogeochemistry research more specifically
4. Dates of availability

Submit combined application materials as **ONE** pdf document with last name\_first name as filename. For example: "Reeves\_Sarah.pdf" using the title "PBRT position" to: [phomyak@ucr.edu](mailto:phomyak@ucr.edu)

Please refer any questions to :

Dr. Peter Homyak  
[phomyak@ucr.edu](mailto:phomyak@ucr.edu)