



**POSTDOCTORAL SCHOLAR - AGRICULTURAL & SOIL ECOLOGY**  
**DEPARTMENT OF ENVIRONMENTAL SCIENCE, POLICY & MANAGEMENT**

We seek a postdoctoral scholar for a one-year position to conduct research for a new project assessing how crop rotational diversity affects the rhizosphere microbiome and soil health, and in turn contributes to the stability and resilience of key ecosystem services, particularly crop yields. The postdoc will be based in the Bowles Agroecology/Sustainable Agriculture Lab at UC Berkeley; in addition to working with PI Timothy Bowles the successful candidate will work closely with Co-PIs Mary Firestone (UC Berkeley) and Stuart Grandy (University of New Hampshire). This project brings together collaborators from a large set of long-term experiments in the Central U.S., offering a unique opportunity for accessing long-term datasets and field sites across a wide climate gradient.

**Responsibilities**

- Works with PI and Co-PIs to plan and conduct research on how crop rotational diversity affects the soil and rhizosphere microbiomes, soil health and functions, and the extent to which such changes confer yield stability and resilience, using a set of long-term agricultural research experiments.
- Coordinates and conducts sampling at multiple long-term experiments in the Central U.S. with key personnel at each site.
- Analyzes soil microbiome (including bacteria, fungi, and AMF) from bulk and rhizosphere soil across from several long-term crop rotation experiments.
- Conducts experiment(s) focused on isolating how changes in soil microbes from crop rotational diversity affect plant performance and nitrogen cycling under stress.
- Designs and carries out statistical analysis relating historical yields and weather across a range of crop rotational diversity from many long-term experimental sites
- Elaborates on existing hypotheses and creates new research directions based on the candidate's interests and expertise
- Conducts quantitative analysis of collected data
- Supervise undergraduate and graduate students as appropriate
- Present results at regional and national conferences
- Publishes at least 2 papers per year widely-read journals

**Basic Qualifications** (by the time of application)

Candidates must have completed all degree requirements except the dissertation or be enrolled in an accredited PhD, MD or equivalent degree in Ecology, Soil Biogeochemistry, Microbial Ecology, or Natural Resources, or related field.

**Additional Qualifications** (by start date)

Candidates must have a PhD or equivalent degree in Ecology, Soil Biogeochemistry, Microbial Ecology, or Natural Resources, or related field.

**Preferred Qualifications** (by start date)

Demonstrated expertise in microbial ecology methods (especially experience working with high throughput sequencing) and experience with soil biogeochemistry. He/She should also have a demonstrated interest in agroecology and excellent quantitative skills, such as experience with multilevel regression modeling.

**Appointment**

The anticipated start date for this appointment is late Fall 2017. The initial appointment is for one year, with renewal for up to 2.5 years based on performance and funding. This is a full-time appointment.

**Salary and Benefits**

Salary will be commensurate with qualifications and experience and based on UC Berkeley Postdoc salary scale. The annual salary range for this position is \$48,216 to \$58,560. Generous benefits are included <http://vspa.berkeley.edu/postdocs>

**To Apply**

Visit: <https://aprecruit.berkeley.edu/apply/JPF01502>

Interested individuals should include a 1-2 page cover letter describing their research experience, along with a current CV and the names and contact information of three references. Letters of references may be requested for finalists. It is optional to include a statement addressing past and/or potential contributions to diversity through research, teaching, and/or service.

This position will remain open until filled.

Questions regarding this recruitment should be directed to Tim Bowles at [timothy.bowles@berkeley.edu](mailto:timothy.bowles@berkeley.edu)

All letters will be treated as confidential per University of California policy and California state law. Please refer potential referees, including when letters are provided via a third party (i.e. dossier service or career center) to the UC Berkeley Statement of Confidentiality <http://apo.berkeley.edu/evalltr.html> prior to submitting their letters.

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age or protected veteran status. For the complete University of California nondiscrimination and affirmative action policy see:

<http://policy.ucop.edu/doc/4000376/NondiscrimAffirmAct>

The Department is interested in candidates who will contribute to diversity and equal opportunity in higher education through their research or teaching.

The University of California, Berkeley has an excellent benefits package as well as a number of policies and programs in place to support employees as they balance work and family.