



Postdoctoral Scholar –Modeling Vegetation Dynamics and Disturbance Across California Energy & Resources Group

The University of California, Berkeley invites applications for a Postdoctoral Scholar position starting Summer/Fall 2018. Climate, water balance, vegetation and fire are tightly interlinked across California's landscape and must be studied together to gain understanding of changes in each component. The candidate will play a central role in a project funded by the UC National Laboratory Fees Research Program to develop, test and apply a cutting-edge demographic, dynamic vegetation model of California's ecosystems as part of a high-resolution regional modeling system. Goals of the project include modeling the 2011–2015 drought and its effects on tree mortality and fire, modeling tree mortality and fire under future drought and climate change, and understanding effects of management on future vegetation and fire risk. The candidate will work in collaboration with Dr. Lara Kueppers of the Energy and Resources Group at UC Berkeley and Dr. Chonggang Xu at Los Alamos National Laboratory (LANL), as well as project collaborators at UCLA, Lawrence Berkeley National Laboratory, NCAR, UC Irvine, UC Davis, and UC Extension to utilize high-resolution regional atmospheric forcing and evaluate model vegetation output with historical field and remotely sensed observations. The modeling framework is the Functionally Assembled Terrestrial Ecosystem Simulator (FATES) (<https://github.com/NGEET/fates-release>), which is embedded within the CLM5 land surface model, and includes the SPITFIRE model of fire spread. The postdoc will be located at UC Berkeley but will have opportunities to also work at LANL.

Basic Qualifications

- Advanced degree or enrolled in advanced degree program at the time of application

Additional Qualifications

- PhD (or equivalent international degree) required by the start date

Preferred Qualifications (by start date)

- Demonstrated background in ecological theory and/or systems-based modeling approaches
- Expertise in disturbance ecology, wildland fire, forest dynamics, or landscape ecology
- Experience in quantitative modeling and analysis of large datasets, such as remotely sensed data products, eddy covariance time-series, forest inventory time-series
- Demonstrated coding experience, e.g., in R, Python, or Matlab, and analytical skills & coding experience in Fortran and R
- Demonstrated ability to produce scientific results and to publish papers in international peer-reviewed journals
- Demonstrated ability to work independently and collaboratively as part of a team

Appointment

The targeted start date for this position is August 2018. The initial appointment is for one year, with possibility of renewal based on performance and funding availability. This is a full-time appointment.

Salary and Benefits

The annual salary range for this position is \$49,188 to \$57,528. Salary will be commensurate with qualifications and experience level and based on UC Berkeley salary scales. Generous benefits are included:

<https://vspa.berkeley.edu/postdoc-health-insurance-and-benefits>

To Apply

Visit <https://aprecruit.berkeley.edu/apply/JPF01773>

Interested individuals should include a one-page cover letter, a one-page statement of research outlining your research interests along with a current CV and the names and contact information of three references. Letters of reference 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 recruitment will remain open until filled.

Questions regarding this recruitment can be directed to Lara M. Kueppers, lmkueppers@berkeley.edu or Chonggang Xu, cxu@lanl.gov

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.