

Post-Doctoral Scholar (Forest Hydrology, Water Quality, Aquatic Ecology) Dept. of Forest Engineering, Resources, and Management Oregon State University, Corvallis, OR

Position: Postdoctoral Scholar

Location(s): Corvallis, Oregon State University

Job Description: The Department of Forest Engineering, Resources, and Management (FERM) in the College of Forestry at Oregon State University has a funded position available for a Postdoctoral Scholar (1.0 FTE, up to 24 months), to begin in September 2021 or once a suitable candidate is found. The opportunity will support a Postdoctoral Scholar to address research questions about the water quality and stream ecology response in headwater streams to forest management activities. Specifically, the Postdoctoral Scholar will collaboratively assess the influence of different riparian treatments on canopy closure, solar radiation, near-stream air temperature, stream longitudinal thermal regimes, and stream primary productivity. As part of this opportunity, the Scholar will help maintain current data collection infrastructure across 18 watersheds in Northern California, analyze data, participate in mentoring of graduate and undergraduate students, present results at conferences and professional meetings, and publish in peer reviewed journals. The research will improve understanding of how forest harvesting activities affect water quantity, quality, and stream ecology to facilitate future policy and land management decisions.

The Post-Doctoral Scholar will work collaboratively with the Forest Ecohydrology and Watershed Science (FEWS) Lab (http://fews.forestry.oregonstate.edu/) and the Watershed Processes Lab (http://people.forestry.oregonstate.edu/catalina-segura/index.html) in the FERM department at Oregon State University (http://ferm.forestry.oregonstate.edu/). The two groups work primarily in the US West and internationally to study issues related to land use and natural disturbance (e.g., wildfire and mass wasting) impacts on hydrology, water quality, sediment transport, and aquatic ecosystem health from the hillslope to regional scale. Our two lab groups are deeply committed to creating a diverse, equitable, and inclusive environment. The position will also contribute to the mission of both the College of Forestry and Oregon State University by (a) conducting distinctive problem-solving research, (b) supporting a continuous search for new knowledge and solutions, (c) educating and engaging practitioners and users of the world's forest resources, and (d) maintaining a rigorous focus on academic excellence.

Application procedure: We encourage all interested applicants to apply for this position by sending all application materials to Dr. Kevin Bladon (kevin.bladon@oregonstate.edu) and Dr. Catalina Segura (segurac@oregonstate.edu) by March 30, 2021. Interested applicants should submit: (a) a CV that includes the names of at least three professional references, their e-mail addresses, and telephone contact numbers and (b) a cover letter or email describing their interests and experiences in the topic area, goals, and how they meet the required position qualifications outlined below.

Required qualifications:

- The Scholar must possess a PhD in a relevant field to the research from an accredited university by the date of the interview and received it within less than five years.
- Demonstrated excellence in written and oral communication
- Field and laboratory research experience or work experience related to forest hydrology, aquatic ecology, water quality, or related fields
- Spatial and statistical analyses in R, MATLAB, Python, ArcGis, QGIS, or similar
- Ability to fit linear and non-linear mixed-effects models
- Desire to lead and collaborate on producing peer-reviewed publications and other derived products
- Interest in collaboration in a conscientious and inclusive way

Preferred qualifications:

- Experience with stream temperature data
- Experience with stream metabolism modeling
- Experience with multiple regression, logistic regression, machine learning, hierarchical species distribution models, and other statistical modeling approaches as applied to spatial inference
- Evidence of successful multidisciplinary collaborations
- A demonstrable commitment to promoting and enhancing diversity