Postdoctoral Fellow – Modeling High-Latitude Soil Carbon Cycling Natural Resource Ecology Laboratory Colorado State University





The Natural Resource Ecology Laboratory at Colorado State University (CSU) seek candidates for a postdoctoral fellow position focusing on developing, testing, and applying numerical models of microbial ecology and high-latitude soil carbon cycling processes in land models. An important goal of the analysis will be incorporating these processes into the Community Land Model (CLM) and Community Earth System Model (CESM) to study their impact on predictions of future high-latitude climate feedbacks over the 21st century. The work will be done in close collaboration with experimentalists at CSU studying how soil organic matter priming and formation are affected by plant input chemistry and climate. The modeling component of the project is led by Bill Riley and Jinyun Tang at Lawrence Berkeley National Laboratory, and the overall project is led by Matthew Wallenstein at CSU. The postdoctoral fellow will be based in Berkeley, CA but will have regular interactions with the experimentalists at CSU.

The postdoctoral fellow will be expected to generate original research questions related to the project. These may include methods to integrate field and lab measurements into model formulations, creative methods to represent the complex competitive soil environment in climate models, spatial and temporal scaling issues, or methods to calculate feedbacks between the studied processes and the atmosphere.

<u>Required Qualifications:</u> The postdoctoral fellow must have earned a Ph.D. prior to June 2014. Strong mathematical skills and prior experience with numerical modeling of ecosystem processes are required.

Desired Qualifications:

Candidates should demonstrate experience and expertise in soil carbon cycling and/or soil microbial processes, and have a broad perspective of ecosystem processes. Candidates should exhibit a strong ability to collaborate with an interdisciplinary team and possess ability to develop novel research. Strong organizational and communication skills (both oral and written), and a high level of productivity should be demonstrated.

Salary: \$60,000. The initial appointment will be for a one-year period, and will be renewed for up to two years, contingent on satisfactory progress and sufficient funding.

A full description of benefits is available at <u>http://www.hrs.colostate.edu/benefits/</u>. To apply, submit cover letter, resume, and names and contact information for three references to: <u>http://warnercnr.colostate.edu/employment-opportunities.html</u>. References will not be contacted without prior approval. For full consideration, apply by 5:00 p.m. on Wednesday, October 25, 2013.

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