# Postdoctoral Fellow in Ecosystem Modeling, Boise State University

## **Position Summary**

Professors Alejandro (Lejo) Flores and Nancy Glenn in the Geosciences Department at Boise State University, are seeking a qualified and enthusiastic scientist-colleague for a postdoctoral position in dynamic ecosystem modeling of sagebrush-steppe ecosystems. The position is funded through grants from the NASA Terrestrial Ecology and EPSCoR programs and the Joint Fire Science Program.

Core activities of this postdoctoral position include:

- (1) Using existing field, lidar, and hyperspectral datasets at a number of study areas in the Great Basin of the Western US to parameterize, initialize, calibrate, and verify the Ecosystem Demography (ED) model, and
- (2) Parameterizing and exploring the impacts of fire mitigation strategies (e.g., mowing, green strips) on the long-term distribution, abundance, and coexistence of grasses, forbs, and shrubs in these ecosystems.

The successful candidate is expected to work collaboratively with and benefit from the expertise of a number of research scientists, postdocs, and graduate students with expertise in land modeling, remote sensing of terrestrial ecosystems and hydrology, and land management and restoration ecology. These potential colleagues are currently housed within the Lab for Ecohydrology and Alternative Futuring (LEAF), the Boise Center Aerospace Laboratory (BCAL), and the USGS Forest and Rangeland Ecosystem Science Center (FRESC).

Co-advisors Glenn and Flores are enthusiastic about and committed to providing mentorship and training to support the professional development of the successful candidate. We particularly welcome applications from colleagues interested in leveraging the science products developed during the postdoc to advance their independent research agenda and pursue collaborative research in collaboration with the research advisors.

### **Minimum Qualifications**

- PhD in Earth System Science, Ecology, Applied Math, Physics or related disciplines
- Strong quantitative background and experience in modeling and statistics
- · Demonstrated ability to design, conduct, and publish research related to ecosystem modeling
- Excellent written and oral communication skills
- Demonstrated communication and interpersonal skills necessary for working in a multidisciplinary research team
- Programming experience

### **Preferred Qualifications**

- Experience with ED or other vegetation dynamics or land models
- · Experience with lidar and hyperspectral remote sensing
- Expertise with scientific programming languages for data analysis such as MATLAB, Python, or R

### Application

Applications are now being accepted and the position will close when filled. The position is a yearly appointment with potential funding and renewal for up to 2-3 years. Applicants should send as one compiled document: 1) CV; 2) one-page statement of research interests; 3) up to three publications and 4) contact information for three references. Please send materials to BOTH Lejo Flores (lejoflores@boisestate.edu) AND Nancy Glenn, nancyglenn@boisestate.edu.

### **Additional Information**

University: <u>http://www.boisestate.edu/</u> City of Boise: <u>http://www.boisechamber.org/</u> LEAF: http://leaf.boisestate.edu/ BCAL: http://bcal.boisestate.edu/ USGS FRESC: http://fresc.usgs.gov/