Post-Doctoral Position – Ecohydrological Partitioning in the Critical Zone

We have an immediate opening for a post-doctoral scientist to work with a team of scientists on the NSF-funded Jemez River Basin and Santa Catalina Mountains (JRB-SCM) Critical Zone Observatory (CZO). The initial appointment will be for one year, with the expectation that the successful candidate will be reappointed for a second year. The JRB-SCM is designed to examine the impacts of space-time variability in energy and water flux on coupled critical zone (CZ) processes along two climate gradients; the first is on rhyolitic parent material in the JRB of northern New Mexico and the second is on granite and schist bedrock within the SCM in southern Arizona. At sites that vary in parent rock, elevation, aspect, slope, soil development, and vegetation, the JRB-SCM CZO team uses a combination of measurement, modeling, and experimentation to address the following questions: (1) How does variability in energy input and related mass flux influence CZ structure and function? (2) How do feedbacks between landscape evolution and the cycling of water and carbon alter short- and long-term CZ development?

The ecohydrology and hydrologic partitioning (EHP) theme area of the JRB-SCM CZO is organized to capture linkages between vegetation, hydrology and CZ evolution. To help coordinate these efforts, we seek a highly motivated and enthusiastic individual with a recent PhD in ecohydrology, terrestrial hydrology, biometeorology, physiological ecology or other related field. The applicant should have experience in field methods related to ecohydrological partitioning of water, carbon, and energy fluxes, including familiarity with data, measurements and instrumentation associated with micro-meteorology, snow depth, sap flow, leaf level photosynthesis, and soil respiration. Additionally, experience working with (Light Detection And Ranging) LiDAR data and spatial analysis methods is desired. Research productivity and an interest in interdisciplinary research must be evident in the application. Because the post-doc will coordinate field campaigns with CZO students and faculty, demonstration of strong leadership and organizational skills are also important.

Information on the JRB-SCM CZO can be found at http://www.czo.arizona.edu. Questions and inquiries should be sent to Shirley (Kurc) Papuga (papuga@email.arizona.edu), School of Natural Resources and the Environment, University of Arizona, PO Box 210043, Tucson, AZ 85721 USA. Applications should be submitted electronically for Job Number 46706 at https://www.uacareertrack.com. We will begin evaluating applications on 15 December 2010 and will remain open until filled. Applications must include a CV, a statement of research interests and expertise, and names, phone numbers, and e-mail addresses of three references. As an equal opportunity and affirmative action employer, the University of Arizona recognizes the power of a diverse community and encourages applications from individuals with varied experiences and backgrounds.