

## Post-Doc in Plant Physiological Ecology

Funding is available from the University of Wyoming Research Office on an annual basis with opportunities for renewal for a post-doc to implement and improve plant physiological ecology process models and test them against existing and new data. The successful applicant will have access to rich existing and ongoing datasets including the role of plant mortality on fluxes of mass and energy measured in controlled and natural environments at the scale of organs to watersheds, impact of landscape evolution on plant controls over the water cycle, land use impacts on soil and plant hydraulic interactions in the tropics and cell to whole plant connections between plant productivity and RNAseq, metabolites and organ physiology.

Opportunities exist to collect additional data that will improve interpretation of these datasets and fill gaps identified by process modeling including metabolite profiles, nucleic acid sequencing, and field measurements of organ to landscape scale fluxes of water and carbon dioxide from controlled and natural settings.

Process modeling work will be facilitated by the Advanced Research Computing Center (<https://arcc.uwyo.edu/>) and access to NCAR's Yellowstone Supercomputer (<https://www2.cisl.ucar.edu/resources/yellowstone>).

The successful applicant will be able to collaborate with computer scientists on coding changes to optimize their work on these resources. Minimum qualifications include PhD in relevant field within past five years, knowledge of measurement tools relevant to at least one of the projects listed above, working knowledge of program R or equivalent statistical package and basic knowledge of at least one programming language (e.g. Java, C, C#, C++). Preferred qualifications include expert knowledge of program R and at least one programming language, knowledge of Bayesian statistics and interest in synthesizing across the datasets listed above. Applicants should send a cv and a brief letter stating specific research interests, research accomplishments, and future research objectives as well as the names and contact information for three professional references as a single pdf file to Prof. Brent Ewers ([beewers@uwyo.edu](mailto:beewers@uwyo.edu)).

Review of applications will begin Oct. 1st and continue until suitable candidates are identified.