



Research Experience for Undergraduates
University of Nevada, Reno
Academy for the Environment and Great Basin Institute

“The Value of Snow”: Summer Research Experiences in Drought Resiliency and Natural Resources Issues in the Sierra Nevada and Great Basin Region

The Office of Undergraduate and Interdisciplinary Research, facilitating student involvement in environmental research and education at University of Nevada, Reno, and the Great Basin Institute, an environmental research, education and conservation organization, invite applications for the summer 2015 REU program. Students will explore the intersections of socioeconomic and natural sciences in relation to drought resiliency in the Tahoe, Sierra Nevada and Great Basin Regions, sponsored by the National Science Foundation.

Overview of Program: REU research teams will work in the Eastern Sierra Region of Nevada, specifically within the Lake Tahoe Basin and the surrounding northwestern Great Basin high desert. The program will encompass a wide range of interdisciplinary research, examining the various approaches to assessing, modeling, and managing water resources in the context of global climate change and diminishing snowpack. Participants will gain exposure to diverse scientific inquiries and technologies in order to glean how the socioeconomic and natural sciences inform land use policy and adaptive management of economic and natural resources. The program will take place during the ten consecutive weeks of 8 June through 14 August 2015. Students in the program will be provided a stipend of \$4750, plus housing. The application deadline is Monday, March 16th, 2015.

Research Topics Include:

- Water Policy Change for Climate Change
- Rephotography: Changing Landscapes in the Tahoe Basin
- Snowmelt Modeling: Regional Warming in Great Basin National Park
- Sage Grouse: Habitat Restoration in the Sierra Nevada
- Geospatial Mapping Optimal Groundwater Recharge in a Snow-Fed Arid Land River System
- Agricultural Drought Management and Decision-Making

Eligibility: Qualified undergraduates, who will have junior or senior status and will be a full-time student in the Fall 2015 term, with a combination of coursework in the following disciplines are invited to apply: environmental studies, natural resources, biology, ecology, hydrology, resource economics, and statistics. We especially encourage applications from students at primarily undergraduate and non-research institutions and from underrepresented groups. Participants must be citizens or permanent legal residents of the USA. Review of applications will begin on 16 March 2015. Applications received after this date will be considered on a space-available basis.

Contact: For further information, email ayoder@unr.edu, call 775-784-8262 or visit our website at <http://environment.unr.edu/undergraduateresearch/opportunities/reu.html> for application and mentor profiles.