USU awarded $2.7M NSF RT grant for graduate climate adaptation science program

Interdisciplinary team to initiate 'Grad-CAREER' training specialization

UTAH STATE UNIVERSITY

LOGAN, UTAH, USA - Utah State University is the recipient of a competitive $2.7 million National Science Foundation Research Traineeship award that will afford USU students in 20 STEM graduate degree programs the opportunity to pursue advanced interdisciplinary research training and a Climate Adaptation Science specialization.

Named “Graduate Climate Adaptation Research that Enhances Education and Responsiveness of Science at the Management-Policy Interface” - or Grad-CAREER for short, the project team anticipates training 80 master’s and doctoral students during the five-year grant period.

“This is a remarkable opportunity for graduate students to be involved in a dynamic, cross-disciplinary research environment,” says Nancy Huntly, professor in USU’s Department of Biology, director of the USU Ecology Center and principal investigator and project director for Grad-CAREER.

Huntly leads the project team, which includes USU faculty members and co-principal investigators Patrick Belmont, Department of Watershed Sciences; Courtney Flint, Department of Sociology, Social Work and Anthropology and the USU Ecology Center; David Rosenberg, Department of Civil and Environmental Engineering and the Utah Water Research Laboratory; Simon Wang, Department of Plants, Soils and Climate and the Utah Climate Center and core participants David Feldon, Department of Instructional Technology and Learning Sciences; Luis Gordillo, Department of Mathematics and Statistics; Peter Howe, Department of Environment and Society; James Lutz, Department of Wildland Resources and Sarah Null, Department of Watershed Sciences.

Grad-CAREER begins in January 2017 with an initial cohort of 10 students. Twenty additional students will join the project in fall 2017, with about 20 new students entering the program each year for the grant’s duration.

Participation will be offered to students majoring in natural, physical and social sciences, engineering and mathematics. Huntly says program participants, referred to as “trainees,” will receive “significant” research support and professional skills training. In addition, about 28 trainees will receive one-year fellowships.

“Grad-CAREER focuses on preparing trainees for research-based careers that will integrate science with management and policy to understand and adapt to a changing climate,” Huntly says. "The program includes interdisciplinary training in data management, informatics and
modeling, as well as communications, management and leadership skills."

Trainees will gain real-world experience through a novel, two-part internship with a government, industry or non-governmental organization partner that brackets a year-long research studio and "embeds trainees in a cycle of creating actionable science," she says.

Thanks, in part, to the efforts of iUTAH (innovative Urban Transitions and Aridregion Hydro-sustainability), another NSF-funded, USU-led research endeavor, Huntly says a statewide, community partnership is already in place to aid Grad-CAREER trainees in pursuing a wide range of internship pursuits. A broader regional network of internship opportunities is made available through collaborations with the USGS Southwest Biological Science Center in Moab, Utah; the USGS Southwest Climate Science Center in Arizona and the USDA Forest Service Rocky Mountain Research Station in Logan, Utah.

Yet, even with the added benefits and training, Grad-CAREER adds no credit requirements to existing degree programs.

"Grad-CAREER is designed to actually shorten the time to a degree, as it integrates research with training from the beginning of each student's program and uses short-courses to provide efficient and individualized training," Huntly says. "A key goal of NSF's Research Traineeship program is to improve the preparation of STEM graduates for a variety of future careers, including those outside of academia. We believe Grad-CAREER provides a supportive, collaborative learning structure that will support students in completing their degrees and enabling them for careers of the future."

Grad-CAREER is offering two upcoming informational forums to acquaint students and faculty with the new program. All are welcome to attend Monday, Oct. 17, 2017, from 4-5 p.m. or Thursday, Oct. 20, 2017, from 4:20-5:20 p.m. Both gatherings will be held in AGRS 141.

Huntly also invites Aggies to visit the program's website at climateadaptation.usu.edu and Twitter feed @USUClimatAdapt.

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