

From: Jennie McLaren
Subject: 6 graduate positions available in Arctic Science at UTEP

The Department of Biological Sciences at the University of Texas at El Paso announces six graduate student training opportunities in arctic science for 2017. UTEP is one of the nation's leading PhD-granting institutions that has a minority-majority student population that reflects the future demographic majority of the U.S. Minority students are particularly encouraged to apply for the following positions in the McLaren and Tweedie research labs. More information about the Department of Biological Sciences and its graduate programs can be found at <http://science.utep.edu/biology/> and <http://science.utep.edu/eeb/>. Applications for graduate school are due Feb 1 but students are encouraged to contact the appropriate faculty member well in advance of that date.

1. The McLaren Lab at the University of Texas at El Paso (www.jenniemclaren.com) is looking for graduate students interested in working at the intersection of ecosystem and community ecology. Qualified candidates should have a B.S. or M.S. in Ecology, Biology, Environmental Science or related field, and show a strong interest in plant ecology, ecosystem ecology or biogeochemistry. Ideal candidates will have some previous research experience in field ecology, a strong work ethic, be able to work independently and with a field crew, and availability to begin in June 2017. Students are required for the following projects (contact Dr Jennie McLaren for more information at jrmclaren@utep.edu. Interested applicants should include a CV and short statement of research interests).
 - a. **PhD Student:** A position is available on an NSF-funded project examining the role of small mammals on carbon cycling in arctic tundra. This project will use a combination of field experiments with manipulations of mammal densities, measurements of plant and soil responses, and modeling and is a collaboration with faculty at Columbia University, Towson University, University of New Hampshire and the Marine Biological Laboratory. The project will involve summer field work in Alaska at Toolik Field Station, Barrow and Nome. The PhD student will assist with data collection for the larger project while developing his/her own dissertation project in conjunction with our research questions. The student will be supported through a combination of RAships and TAs.
 - b. **PhD or Masters Student:** We are looking for a PhD or Masters student to conduct field research at Kluane Lake Research Station, Yukon Territory. Possible topics include warming effects on alpine tundra vegetation and soils, effects of increasing shrubs on tundra ecosystem properties, and other topics that fall within the research expertise of our research group. The student will be responsible for maintaining the sampling program on a number of long-term research projects and will develop a project either alongside or independent from these projects. The student will be supported primarily through TAs.
2. The Systems Ecology Lab directed by Dr Craig Tweedie (ctweedie@utep.edu) is looking for students who are U.S. citizens to work on several federally funded research projects

examining arctic landscape and coastal change and the utility of several new and low-cost sensor systems to automate arctic change detection.

- a. **PhD or Masters Student:** A position is currently available on an NSF-funded Arctic Observing Network project that is exploring how plant and landscape phenology responds to climate variability and change. The project requires the student to be field-based from June-August and work out of Barrow, Atkasuk, and the Toolik Lake Field Station, Alaska. This project is a collaborative project with Florida International University, Grand Valley State University, and the University of Alaska at Anchorage. The student will be supported through mostly research assistantships and will be expected to enroll in either the Biological Science or Environmental Science Masters program or the Ecology and Evolutionary Biology or Environmental Science and Engineering Doctoral program.
- b. **PhD or Masters Student:** A position is currently available on NASA-ABOVE project that is led by Dr Fred Huemmrich at NASA's Goddard Space Flight Center and the University of Maryland Baltimore. The project will use a variety of remote sensing approaches to investigate the role of plant species and plant community change in the large-scale low resolution greening trends documented for the Arctic. The student will be supported through mostly research assistantships and is expected to enroll in either the Biological Science or Environmental Science Masters program or the Ecology and Evolutionary Biology or Environmental Science and Engineering Doctoral program.
- c. **PhD Student:** A position is open on a NOAA-funded project that is a collaboration with Dr Miguel Velez-Reyes in the Department of Electrical and Computer Engineering at UTEP and the NOAA-Cooperative Remote Sensing Science and Technology Center lead by CUNY. This project will explore and develop new surface to satellite remote sensing techniques suitable for documenting arctic coastal change and land-ocean connections. The successful applicant is expected to conduct field sampling in 2-week long field trips out of Barrow, Alaska several times per year. The position will be funded by a prestigious NOAA scholarship for two years. The applicant is expected to enroll in the Environmental Science and Engineering doctoral program at UTEP.
- d. **PhD or Masters Student:** A position is currently available on a Department of Homeland Security (DHS) – funded project partnered to the Arctic Domain Awareness Center (ADAC) led by the University of Alaska. The project will explore how our patent pending digital camera and image analysis software system can be used to enhance automated status reporting and environmental change detection along the coastline near Barrow, Alaska and how such information could enhance Coast Guard situational awareness and other needs within the DHS. Several short-duration field trips will be required each year for this project. The student will be supported through mostly research and teaching assistantships and is expected to enroll in either the Biological Science or Environmental Science Masters program or the Ecology and Evolutionary Biology or Environmental Science and Engineering Doctoral program. Several post-degree requirements need to be accepted by the successful applicant to this position and are available on request.

