

Subject: Graduate assistantships in Soil Microbial Ecology & Biogeochemistry at USU

Two PhD and one MS graduate student assistantships are available in the Ecology Center and the Department of Biology at Utah State University, Logan, UT, beginning summer or fall 2016, as part of a USDA-AFRI project examining how soil microbial growth efficiencies

(MGE) are influenced by drought in rangeland and agro-ecosystems.

Soil microbial growth

efficiency (aka carbon-use efficiency) is a key variable regulating greenhouse gas emissions from soil, as well as rates of carbon and nutrient sequestration and release. Biogeochemical models are extremely sensitive to variation in MGE, yet we have a poor understanding of how environmental variables influence MGE. This project will utilize stable isotope techniques to examine how variation in soil moisture regulates MGE in sagebrush steppe, irrigated pasture, and conventional and organic cropland ecosystems.

The ideal applicant will have: background in soil science, microbial or plant ecology, biogeochemistry, or a related area; good chemistry and quantitative skills; excellent written and oral communication skills; and the ability to work closely with others and independently at field sites. Interested individuals should send a CV to John Stark (john.stark@usu.edu), Department of Biology, Utah State University, Logan, UT.