

PhD Position

A PhD position is available in the lab of Dr. Jennifer Fraterrigo in the Department of Natural Resources and Environmental Sciences at the University of Illinois, Urbana-Champaign (UIUC) starting in August 2024. The project will focus on plant trait distributions in areas of thawing and degrading permafrost across northern Alaska and is part of a larger, collaborative effort to determine the micro-scale mechanisms driving hot-spot and hot-moment carbon dynamics for improving predictions of macro-scale carbon balance in the Arctic. The position involves field work in northern Alaska, lab work and lab experiments for evaluating changes in leaf and root traits, and empirical modeling. The student will also have the opportunity to work closely with other scientists to detect plant traits with remote sensing, investigate how plant-soil-microbe interactions influence ecosystem and biogeochemical responses to abrupt permafrost degradation across time and space, characterize fine-scale heterogeneity in the environmental factors that govern carbon dynamics, and simulate vegetation dynamics in models.

Qualifications

Applicants should have a B.S. or M.S. in ecology, biology, environmental science or a closely related field and previous research experience, ideally in ecology. Applicants should be able to work independently, but also cooperatively with other researchers. Applicants should also have a strong work ethic, excellent communication skills, ability to problem solve, demonstrated writing and quantitative capabilities, and a record of leadership. Preference will be given to applicants who have experience with vegetation sampling, characterizing plant traits, or working in tundra ecosystems. The position will be supported through a combination of research and teaching assistantships (including stipend, tuition waiver, and health insurance).

If interested, please send a "pre-application" as a single pdf document to Dr. Jennifer Fraterrigo (jmf@illinois.edu) including: a short letter explaining your background and interests, a CV or resum , and contact information for least 3 references. Please enter "RA application [your surname]" in the subject field of the e-mail. I will review these upon receipt. In order to minimize expense and hassles for applicants, I will respond to pre-applications to encourage/discourage full a NRES Graduate Program application.

Our lab strives to maintain an inclusive and supportive environment and welcomes all applicants regardless of race, religion, ethnicity, sexual orientation, gender identity, physical ability, veteran status, or socio-economic status.