Graduate Student Position Available in Soil Biogeochemistry
Starting Fall 2025 or Spring or Summer 2026
University of Toledo, Toledo, Ohio USA

For questions or more information contact:
Professor Michael N. Weintraub, michael.weintraub@utoledo.edu

The Ecosystem and Soil Ecology Laboratory at The University of Toledo, led by Professor Michael N. Weintraub, invites highly motivated applicants for a PhD position to study Soil Biogeochemistry, focusing on how flooding affects microbial activity, carbon and nutrient cycling in soils at the terrestrial-aquatic interface. This full-time position will be in Toledo, Ohio USA, and can start in August 2025, January or May 2026.

Our laboratory conducts research dedicated to developing a mechanistic understanding of key soil processes, to learn how terrestrial ecosystems function, and to predict how they will respond to disturbances. We employ a range of biogeochemical, microbial, and environmental chemistry analyses to better understand the biotic and abiotic drivers of ecosystem responses to climate change and other disturbances. More details on our current and past projects are available at http://www.eeescience.utoledo.edu/Faculty/weintraub/Projects.htm.

This position is part of the DOE funded project – Coastal Observation, Mechanism, and Predictions Across Systems and Scales - Field Measurements and Experiments (COMPASS-FME). This large project is led by the Pacific Northwest National Laboratory in collaboration with multiple partners, including the U. of Toledo. The COMPASS - FME project aims to understand the coupled interactions of plants, microbes, soils/sediments, and hydrology within coastal systems to inform multi- scale, integrated models from reaction scales to the coastal interface. The project's research emphasis is primarily on terrestrial and wetland processes that are influenced by coastal waters, such as the fluxes and transformations of carbon, nutrients, and redox elements through these systems. This project includes several national labs, and research institutions in the W. Basin of Lake Erie and Chesapeake Bay, affording the successful candidate the opportunity for exciting and diverse collaborations. There will be opportunities for close collaboration with project partners and scientists at PNNL, LNLL, Ohio State University and The University of Toledo. More details about COMPASS-FME can be found here https://compass.pnnl.gov/FME/COMPASSFME.

Students will have the opportunity to become proficient in biogeochemical and ecological approaches to study the controls on decomposition and nutrient cycling in field and laboratory systems. Successful applicants will be expected to develop projects combining field research with lab and data analysis approaches, and to collaborate with research partners from other academic institutions. Projects include the potential for both lab and fieldwork and opportunities for professional trainings and presenting at national and international conferences.

Applicants should have relevant research experience and a Master's degree or equivalent in ecology, soil science, environmental science, or a closed related field. Potential students will need to apply to the Department of Environmental Sciences at The University of Toledo. The University of Toledo is part of Ohio's State University System and is the third largest public university in Ohio. The university is a prominent center for environmental education and research in Ohio and the Great Lakes region. Information about the graduate program can be found at

http://www.utoledo.edu/nsm/envsciences/grad/ and funding information can be found at http://www.utoledo.edu/nsm/envsciences/grad/financial.html.

The University of Toledo has strict admission standards, including a minimum grade point average of 3.0 in ecology, soil science, environmental science, or a closed related field. We are preferably recruiting students for Fall 2025 but may also consider exceptional applicants for Spring admission.Applicants need not be from the USA, but fluency in written and spoken English, and the ability to function independently, and likely travel, in environments where only English is spoken are required. Further information about these positions can be obtained from Dr. Weintraub (michael.weintraub@utoledo.edu). Inclusion of a letter of interest and CV will help further our conversation.

For more information about Professor Weintraub and The Ecosystem and Soil Ecology Laboratory, please see: http://www.utoledo.edu/nsm/envsciences/faculty/weintraub.html

The University is an equal opportunity institution, consistent with its obligations as a federal contractor. It encourages diversity and provides equal opportunity in education, employment, all of its programs, and the use of its facilities. It is committed to protecting the constitutional and statutory civil rights of persons connected with the University..