

The Watershed Biogeochemistry lab at the University at Buffalo is seeking to recruit a M.S. student to join us in fall 2022. The student's research will be focused on soil carbon and how storage of soil carbon may change with our changing climate. In particular, the student will work to understand how soil carbon reacts with minerals in the soil and how microbes mediate these interactions. We envision that the work will be primarily experimental (lab- and field-based) but it could contain a modelling component depending on the interests of the student. The student will work closely both with Dr. Marinos and a Ph.D. student who is pursuing similar lines of research.

More broadly, work in the lab focuses on understanding the ecological, geochemical and hydrologic controls on carbon and nutrient cycling in soils and the streams that drain them. Since all ecosystems bear the imprint of human activities, our work explicitly examines how these activities (e.g. land use change, acid deposition, climate change, artificial drainage) impact these elemental cycles. We currently focus on temperate forests, agroecosystems, and other human-impacted landscapes, but we will follow interesting questions wherever they lead us! The lab is part of the Water and the Environment research group within the Geology department at UB. This research group is an exciting, close-knit team of geochemists, physical hydrologists and biogeochemists who study all environmental topics connected to water quantity and quality.

The ideal candidate for the position has previous research experience (lab and/or field), is highly self-motivated, and has a broad interest in understanding environmental systems and the many roles of humans in these systems. Our work is interdisciplinary by nature, and the position will be well-suited for people with backgrounds across the natural sciences (e.g. geology, biology, environmental science, environmental engineering). I am committed to increasing representation of women and minorities in the geosciences, and such candidates are encouraged to apply. Candidates of all physical abilities are also encouraged to apply; physically-demanding fieldwork need not be a component of a successful research program.

The student will matriculate into the Geology department at UB. The position will be funded for two years through a teaching assistantship and potentially a research assistantship. The University at Buffalo is a Carnegie-recognized R1 university and the largest school in the SUNY system. Buffalo is a fun city with over a million people in the metro area and ample cultural opportunities, both highbrow and lowbrow. Lakes Erie and Ontario, as well as Iroquois National Wildlife Refuge, provide nearby outdoor recreation opportunities, and Allegany NF, the Finger Lakes, and various ski areas are a short drive away. The city offers excellent affordability for people on a graduate student stipend.

More information:

<http://www.richardmarinos.com>

<https://arts-sciences.buffalo.edu/geology.html>

How to apply:

If interested, please contact Dr. Richard Marinos (rmarinos@buffalo.edu) as soon as possible and no later than November 21. Please put "MS Opportunity" in the title of your email. (I will not respond to emails that do not have this in the title.) Please include the following: (1) A short cover letter describing your interest in environmental science broadly and what appeals to you specifically about the work in our lab (2) your resume/CV, including contact information for at least two professional references, and (3) unofficial transcripts OR a writing sample OR anything else (short please) that you believe demonstrates your potential as a researcher.

Applications to the University at Buffalo are accepted on a rolling basis.

