



PhD Student Positions in Microbial Ecology/Winter Limnology/Organic Matter Biogeochemistry

Climate change is leading to drastic changes in wintertime conditions in aquatic environments, yet there are many open questions related to ecosystem responses. The Vick-Majors lab at Michigan Technological University is recruiting 1-2 PhD students to join collaborative projects on winter ecology of the Laurentian Great Lakes, and/or an NSF-funded project on the winter limnology of seasonally-freezing lakes, which includes a multi-institution collaboration with researchers from the University of Minnesota (Dr. Ted Ozersky), University of Wisconsin Madison (Dr. Hilary Dugan), Carnegie Institution for Science (Dr. Stephanie Hampton), and University of California Davis (Dr. Steven Sadro). The student(s) will be based in the Department of Biological Sciences and Great Lakes Research Center at Michigan Technological University in the lab of Dr. Trista Vick-Majors.

Projects will include microbial ecology and organic matter biogeochemistry as related to the operation of lake ecosystems across the full annual cycle and over gradients of trophic status and winter severity, with specific research focus depending on the interests of the successful candidate(s). Both projects may include fieldwork across the US and/or on the Laurentian Great Lakes and will include opportunities to collaborate with diverse groups of researchers.

Qualifications:

M.S. degree in ecology, biology, environmental science, microbiology, or a closely related field, with evidence of research success in the form of a thesis and/or publications is strongly preferred; demonstrated research excellence and experience may substitute for the M.S. degree.

Experience and interest in ecological and/or microbial molecular techniques in addition to at least one the following is desired: data/statistical analysis in R, bioinformatics, flow cytometry, microbial growth assays, optical analysis of dissolved organic matter.

Experience with fieldwork preferred; interest in fieldwork is necessary.

The ability to work independently as well as with a diverse research group and the ability to organize individual as well as team tasks is necessary.

The ideal candidate should communicate effectively, be reliable, independent, well-organized, respectful of others, and interested in contributing to a cohesive lab environment.

Benefits:

Successful candidates will be supported through a combination of research and teaching assistantships. Compensation includes a stipend, tuition/fee coverage, and health coverage.

How to Apply:

The preferred start date is Summer 2024, with some flexibility for qualified candidates. The position will remain open until filled. Interested candidates should contact Dr. Trista Vick-Majors (tjvickma@mtu.edu) with the subject line, "Winter Eco PhD Application" and the following items compiled into a single pdf:

(1) a one-page cover letter that describes your experience and interests and addresses the required/desired position qualifications as well as your availability,

- (2) a resume or CV,
- (3) contact information for three professional references, and
- (4) most recent academic transcript (unofficial or official).

The Vick-Majors Lab is committed to creating a diverse environment; all qualified applicants will receive consideration, however, only candidates selected for interviews will be contacted.

Candidates would be expected to gain acceptance into the Biological Sciences Ph.D. program (<http://www.mtu.edu/biological/graduate/bio-sci/>).

About Us:

Michigan Technological University is a research-intensive university located in Michigan's beautiful Upper Peninsula, near the shore of Lake Superior, with many excellent recreational opportunities. Housed in the Great Lakes Research Center at Michigan Tech, the Vick-Majors Lab studies microbial life in the cryosphere and aquatic systems. We use a combination of field and lab-based approaches to understand reciprocal relationships between microorganisms and the environment. Visit our lab webpage for more information on us: <http://www.whereverthereswater.org>.