



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

Climate change is leading to drastic changes in aquatic environments, yet there are many open questions related to ecosystem responses. The Vick-Majors lab at Michigan Technological University is recruiting 2 PhD students interested in topics related to organic carbon biogeochemistry and microbial ecological processes and communities, focused on lakes ranging from the Laurentian Great Lakes to small lakes in the Northern hemisphere. Potential projects emphasize hypotheses related to how the ecological structure and function of lakes vary during the winter along gradients of productivity and water color, or the response of large lakes to increasing atmospheric carbon dioxide concentrations and potential mitigation by microbial activities.

Both positions are part of federally-funded research, 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 including stipend, tuition/fee coverage, and health coverage.

#### How to Apply:

The preferred start date is Fall 2024, with some flexibility for qualified candidates. The position will remain open until filled, but priority will be given to applications received by 15 June 2024. Interested candidates should contact Dr. Trista Vick-Majors (tjvickma@mtu.edu) with the subject line, "Lakes 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>.