



Graduate Assistantship in Cryomicrobiology and Environmental Biotechnology
Michigan Technological University

A Ph.D. student position is available in the Department of Biological Sciences at Michigan Technological University in the lab of Dr. Trista Vick-Majors. 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.

The successful applicant will conduct research aimed at the cultivation and isolation of novel microorganisms from cryospheric environments and the identification and characterization of ice-modulating compounds. This is part of a larger project examining bacteria from cryospheric systems to identify biologically produced compounds that aid in controlling ice formation. The candidate would work as part of a transdisciplinary team of microbial ecologists, biochemists, and materials scientists to identify and engineer ice controlling proteins. Opportunities to develop ideas associated with the larger project would be encouraged as part of the Ph.D. program.

A M.S. degree in microbiology, molecular biology, 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 with microbial cultivation and isolation in addition to at least one the following is desired: bioinformatics, protein engineering, microbial physiology, characterization of psychrophilic microorganisms. Experience with fieldwork is preferred, but not required. The ability to work independently as well as with a diverse research group and the ability to meet deadlines are necessary. The ideal candidate should communicate effectively, be reliable, well-organized, and respectful of others. The preferred start date is the fall semester 2023.

Interested candidates should contact Dr. Trista Vick-Majors (tjvickma@mtu.edu) with the subject line, "Cryo PhD Application" and the following items compiled into a single pdf: (1) a one-page cover letter describing your experience and interest in the position, (2) a resume or CV, (3) contact information for at 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. Candidates would be expected to gain acceptance into the Biological Sciences Ph.D. program (<http://www.mtu.edu/biological/graduate/bio-sci/>). Dr. Vick-Majors will be present at the upcoming ASLO meeting in Palma de Mallorca, where meetings may be possible. Learn more about the Vick-Majors Lab here: <http://www.wherverthereswater.org>.