

Graduate Assistantship in Molecular Genetics and Genomics

Michigan Technological University

A graduate position is available in Molecular Genetics and Genomics in the Goetsch lab in the Department of Biological Sciences at Michigan Technological University to start as soon as possible. Our work focuses on basic research in the Caenorhabditis elegans model system, addressing fundamental questions in developmental biology and cancer biology. The graduate student will help coordinate teaching and research activities that support the Goetsch lab's NSF CAREER grant entitled, "Priming CUREs to dissect how the DREAM complex protects cell identity."

Qualifications: B.S. degree in microbiology, biological sciences, biochemistry, computational biology, or closely related field, with evidence of research success being strongly preferred. Experience and interest in techniques such as bacterial isolation and molecular cloning are highly desired. Other experience and interests in bioinformatics and genetic techniques are also of interest. Interest in coordinating teaching assistants in implementing Course-based Undergraduate Research Experiences (CUREs) in BL2210 Genetics lab is necessary. The ability to work independently and respectfully in a diverse research group and an interest in mentoring undergraduate researchers in the lab is also necessary. Finally, the ideal candidate will communicate effectively, work a reliable and predictable schedule, be well organized, be respectful of others, and interested in actively pursuing a guided career and personal development plan.

Key Expectations: The position requires contributing to the teaching of BL2210 Genetics lab in the implementation of Course-based Undergraduate Research Experiences (CUREs). CURE activities will have a direct impact on this position's research project. The student will be expected to be interdisciplinary in their research approach, including learning *Caenorhabditis elegans* genetic techniques and husbandry, microbiological isolation and characterization, molecular cloning, and designing an expansive evolutionary biology bioinformatic project *and* curriculum. Each activity will include working with teams of undergraduate researchers in class or in the lab. Finally, if eligible, students will be expected to apply for the NSF Graduate Research Fellowship Program and/or the NIH F31 fellowship. Candidates will be expected to enroll in the Biological Sciences graduate program (http://www.mtu.edu/biological/graduate/bio-sci/).

How to apply: The preferred start date is Spring 2025. If the candidate is available before that date, then a preliminary position may be made available so that the candidate may start immediately following acceptance. The position will remain open until filled, but priority will be given to applications received by October 15th, 2024. Interested candidates are encouraged to contact Dr. Paul Goetsch (pdgoetsc@mtu.edu) with the subject line "MTU CURE PhD Application," and (1) a one-page cover letter describing your experience, interest, and availability, and addressing the position qualifications, (2) a resume or CV, (3) contact information of at least 2 professional references, and (4) your most recent academic transcript (unofficial). The Goetsch lab is committed to creating a diverse and engaging environment; all qualified applicants will receive consideration, however, only candidates selected for interviews will be contacted.