

PostDoctoral Fellow In Fisheries Bioinformatics

How to Apply

Applications are welcomed and encouraged from all qualified individuals regardless of background and identity. To apply, please complete the application on the U-M Careers site. A one page cover letter is required for consideration for this position and should be attached as the first page of your resume. The cover letter should address your specific interest in the position and outline experience that is directly related to this position.

Applicants should submit the following materials with their application:

1. Cover letter describing your specific interest in the position, research accomplishments, and qualifications related to the position
2. Curriculum vitae
3. Contact information for three professional references
4. Representative publications, if available

Applications that do not contain items 1-3 listed above will not be reviewed. Please email Mary Ogdahl (ogdahlm@umich.edu) any application materials that are too large to upload.

The hiring committee will begin reviewing applications on 10/16/24, and this posting will remain open until filled.

Job Summary

A postdoctoral fellowship is available for a highly qualified individual to join the Cooperative Institute for Great Lakes Research (CIGLR: <https://ciglr.seas.umich.edu/>). The successful candidate will work with a dynamic team of scientists at CIGLR, the University of Michigan School for Environment and Sustainability ([SEAS](#)), and the U.S. Geological Survey Great Lakes Science Center to advance understanding of species relationships of Great Lakes prey fish (coregonines) and support the conservation and restoration of native fish populations. Specifically, this project will help build bioinformatics capacity and determine baselines of historical and contemporary fish diversity across the Great Lakes.

The primary focus of this project is to examine the role of selection, plasticity, and hybridization in the species relationships of Great Lakes coregonines. The candidate will be welcome to explore any additional research questions that arise from analyzing the genomic data. The postdoc will be expected to maintain a strong record of scholarly publication and presentations at scientific conferences and public meetings. This position offers mentoring for scientific and professional development.

Note: This position will be a one (1) full-time term limited appointment with the possibility of renewal.

Who We Are

The appointment will be with [CIGLR](#), which is part of the University of Michigan's School for Environment and Sustainability (SEAS) located in Ann Arbor, Michigan. CIGLR is a collaboration between the University of Michigan and NOAA that brings together experts from academia and government research labs to work on pressing problems facing the Great Lakes region. You will spend the majority of your time at the U.S. Geological Survey (USGS) Great Lakes Science Center in Ann Arbor and will collaborate closely with colleagues at CIGLR, SEAS, USGS, and other Great Lakes partners.

Mission Statement

The School for Environment and Sustainability (<https://seas.umich.edu/>) is a collaborative and interdisciplinary school. Our mission includes contributing to the protection of environmental resources and the achievement of a sustainable society. We accomplish this by generating and sharing knowledge, contributing to policy and engaging managers and stakeholders. The University of Michigan is a top-ranked public university with excellence in research and teaching. Ann Arbor, home to the University of Michigan, is a town known for arts, culture, parks and restaurants.

SEAS is committed to creating and maintaining an inclusive and equitable environment that respects diverse experiences, promotes generous listening and communications, and discourages and restoratively responds to acts of discrimination, harassment, or injustice. Our commitment to diversity, equity and inclusion is deeply rooted in our values for a sustainable and just society.

Why Work at Michigan?

In addition to a career filled with purpose and opportunity, The University of Michigan offers a competitive salary and comprehensive benefits package to help you stay well, protect yourself and your family and plan for a secure future. Benefits include:

- Generous time off
- Many choices for comprehensive health insurance
- Life insurance
- Long-term disability coverage
- Flexible spending accounts for healthcare and dependent care expenses

Responsibilities*

- Evaluate spatial and temporal diversity in wild parent stocks of coregonines used for restoration with Restriction-site Associated DNA sequencing (RADseq) data from wild populations supporting hatchery stocks.
- Identify genomic regions under divergent selection to support new tools for the rapid identification of stocks and sex, and for evaluating the success of hybridization among species, using low-coverage whole genome sequencing (lcWGS) data.
- Use high-coverage WGS data to determine the role of selection and hybridization in historical and contemporary diversity within the Great Lakes cisco species complex, shedding light on how it has adapted to rapid environmental changes and how hybridization has impacted genetic diversity and species integrity.
- Collaborate with technicians preparing genomic libraries in the Molecular Ecology Laboratory at the USGS Great Lakes Science Center.
- Lead at least one manuscript based on research findings for submission to a peer-reviewed journal and present results at a conference(s). A manuscript is expected to be initiated within 6-12 months from the start date.

Required Qualifications*

- A Ph.D. in biology, bioinformatics, oceanography, or environmental science, or a similar field, with a strong background in bioinformatics
- Experience analyzing large and complex genomic datasets derived from field and/or laboratory samples
- Experience with high-performance computing, Linux command line, scripting languages (Perl, Python, R and/or Bash), and databases (e.g., SQL), various bioinformatic software, and statistical approaches to `omics data
- Demonstrated ability to work independently in a research setting, as well as collaboratively as a team member
- Strong communication skills and a demonstrated ability to lead the development of manuscripts for refereed journal publication are needed

Modes of Work

For this position, flexible work agreements may be made to support partial off-site work at a remote location.

Positions that are eligible for hybrid or mobile/remote work mode are at the discretion of the hiring department. Work agreements are reviewed annually at a minimum and are subject to change at any time, and for any reason, throughout the course of employment. Learn more about the [work modes](#).

Additional Information

The candidate for this position will be required to pass a federal background check for access to USGS facilities and computing resources.

The position is expected to start during late Fall 2024 or early Winter 2025.

Application Deadline

Job openings are posted for a minimum of seven calendar days. This job may be removed from posting boards and filled any time after the minimum posting period has ended.

U-M EEO/AA Statement

The University of Michigan is an equal opportunity/affirmative action employer.