

Postdoctoral Fellowship: *Application of Linked Ocean and Ecosystem Models to Lake Erie*
Cooperative Institute for Great Lakes Research
School for Environment and Sustainability
University of Michigan in Ann Arbor, Michigan

Job Summary

A postdoctoral fellowship is available for a highly qualified individual to join the Cooperative Institute for Great Lakes Research (CIGLR, <https://ciglр.seas.umich.edu/>) in the area of biophysical modeling. The position is funded for an initial period of 18 months, with opportunity for extension on the basis of satisfactory performance and availability of funds.

The successful candidate will join a multidisciplinary team working on development of models and scientific products to improve understanding and management of the Laurentian Great Lakes. The recently updated [Lake Erie Operational Forecasting System](#) (LEOFS) provides a high-resolution nowcast and forecast of temperature and currents in Lake Erie. Physical fields from the FVCOM-based LEOFS are used to provide ecological forecasts, including the [Lake Erie HAB-Tracker](#) and an experimental hypoxia forecast. The successful candidate will build upon these efforts by developing a biophysical model linked to LEOFS that simulates the processes of biogeochemistry and plankton dynamics that lead to HABs and hypoxia in Lake Erie.

In addition to model development, the postdoctoral fellow will take part in a professional development and mentorship plan that will include maintaining a strong record of scholarly publication, and presentation at scientific conferences and public meetings. The postdoc will also contribute to meeting project objectives, which may include field planning, experimental design, and the development and transition of research products to real-time application.

Qualifications

This position requires a Ph.D. in physical science, biological science, or engineering, a strong publication record, and excellent communication skills. Additional relevant experience includes use of numerical geophysical fluid dynamic models and ecological models, familiarity with Fortran, a Linux/unix parallel computing environment, and data analysis and visualization in a scripting environment (e.g., R, Python, IDL, or Matlab).

About

CIGLR is one of multiple centers affiliated with the School for Environment and Sustainability (SEAS) at the University of Michigan, and one of 16 Cooperative Institutes in the United States that represent partnerships between the National Oceanic and Atmospheric Administration (NOAA) and academic institutions. CIGLR's mission is to lead new research, train the next generation of scientists, and turn research into action for safe and healthy Great Lakes communities. SEAS' overarching mission is to contribute to the protection of the Earth's resources and achieve a sustainable society. Through research, education, and outreach, SEAS is devoted to generating

knowledge and developing policies, techniques, and skills to help practitioners manage and conserve environmental resources to meet the full range of human needs on a sustainable basis.

The postdoctoral fellowship offers a highly competitive salary with benefits, and the position will be physically located at the NOAA Great Lakes Environmental Research Laboratory (GLERL) (<https://www.glerl.noaa.gov/>) in Ann Arbor, MI, which is routinely ranked as one of the best places to live in the U.S. due to its affordability, natural beauty, preservation of wooded areas, vibrant arts program, and lively downtown landscape.

Apply

To apply, applicants should prepare the following materials:

- Cover letter describing your qualifications related to the position and research accomplishments
- Curriculum vitae
- Contact information for three professional references
- Two representative publications

Applications will be accepted until the position is filled.

Email your application to:

Mary Ogdahl
Program Manager, Cooperative Institute for Great Lakes Research
School for Environment and Sustainability
University of Michigan
ogdahlm@umich.edu

*The University of Michigan is a Non-Discriminatory/ Affirmative Action Employer.
Individuals from underrepresented groups are especially encouraged to apply.*