

THE COOPERATIVE INSTITUTE FOR LIMNOLOGY AND ECOSYSTEMS RESEARCH

Who We Are

Founded in 1989, CILER is hosted by the University of Michigan's School of Natural Resources and Environment. As a Cooperative Institute, CILER aims to connect the National Oceanic and Atmospheric Association (NOAA), NOAA's Great Lakes Environmental Research Laboratory (GLERL) and university partners together to encourage collaborative research that benefits the Great Lakes and its communities. The institute also trains upcoming researchers through undergraduate, graduate and postdoctoral fellowships.

What We Do

CILER aims to enhance the quality of the Great Lakes, and its related ecosystem services, through our partnerships. To accomplish this, CILER research focues on five topics that aim to improve scientific understanding and the prediction of key physical, chemical and biological processes in order to facilitate the restoration, protection and management of Great

Lakes natural resources.

Great Lakes Observing and Forecasting

Improve the forecasting of the physical and ecological processes in the region. Improve access to historical and real-time climatic, meteorological, chemical, biological and geological data about the Great Lakes ecosystem.



Protection and Restoration of Ecosystem Services: Linking to Human Dimensions

Promote and improve the conservation and preservation of Great Lakes natural, cultural, aesthetic and social resources by performing integrated and collaborative research that determines such measures as ecological tipping points, encourages sustainability, and helps resource managers and communities determine and develop adaptive management plans.

Invasive Species

Monitor, manage and predict the impacts of established and potential Great Lakes invasive species.

Our Partners

CILER has supported more than 100 research projects with more than \$17 million. Collaborators from around the Great Lakes include government, academic, private and non-profit partners. Our university consortium partners include:

University of Michigan Michigan State University University of Toledo Ohio State University University of Wisconsin Penn State University University of Illinois - Urbana-Champaign University of Minnesota-Duluth University of New York-Stonybrook

Ecological Risk Assessment

Document the causes and consequences of emerging physical, chemical and biological stressors in the Great Lakes basin that stem from industrial, domestic and municipal sources. Evaluate short and long-term effects that multiple stressors have or could have on Great Lakes ecosystems.

Education and Outreach

Disseminate research data to the general public, highlight research initiatives and provide education and training opportunities for students and teachers.

Turn over this page to find out more about our educational and outreach programs!

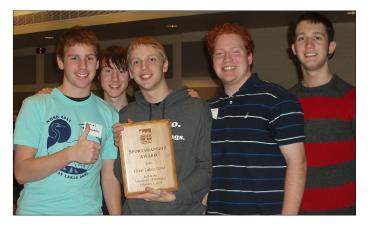


CILER Outreach Programs

CILER hosts various activities and educational opportunities to teach the general public, students, upcoming researchers, resource managers, stakeholders, our partners and others about the Great Lakes ecosystem. Here's a list of educational programs that CILER participates in:

Great Lakes Ocean Sciences Bowl

The National Ocean Sciences Bowl (NOSB) is a nationwide academic competition among high school student teams. The bowl tests students' math and science skills as it relates to the ocean and the Great Lakes. For the past 13 years, CILER, NOAA-GLERL and Michigan Sea Grant have hosted the Great Lakes Bowl, a regional competition of the NOSB. Students involved with the NOSB program are eligible for scholarships and internships.



Postdoctoral Research Fellowships

CILER funds one or two year-long postdoctoral research fellowships for motivated individuals who are interested in conducting work in one of CILER's research areas (see previous page). For more information please visit CILER online.

For more information: http://ciler.snre.umich.edu/education

Social Media Twitter: @CILER_UM Facebook: http://www.facebook.com/pages/Cooperative-Institutefor-Limnology-and-Ecosystems-Research/108081629287646

Undergraduate & Graduate Fellowships

Since 1999, CILER has hosted undergraduate and graduate students from about 50 national and international colleges and



universities. These students participate in research projects with CILER, NOAA-GLERL and other academic and federal scientists from around the Great Lakes. This highly competitive program provides an academic venue for students to work and train with prominent Great Lakes research scientists.

Partners for Excellence Program

CILER, NOAA and NOAA-GLERL partner with the science department of Ann Arbor public schools to sponsor summer high school sophomore and junior interns. These students work under a mentor and receive invaluable science research experience.

Seminar Series

CILER partners with NOAA-GLERL to sponsor a yearround seminar series about the Great Lakes that attracts regional, national and international speakers. Can't make it to Ann Arbor? Don't worry. All of the seminars are available online as webinars. Don't miss out!



