



THE UNIVERSITY OF MICHIGAN
Biological Station

REU
Research Experience
for Undergraduates

June 21-August 16, 2008



Biosphere-Atmosphere
Studies in a Changing
Global Environment

An NSF-funded program

The U of M Biological Station has been dedicated to education and research in Field Biology and Environmental Science since 1909.

The U of M Biological Station

is on Douglas Lake in Pellston in Northern Michigan. With 10,000 acres, the station property encompasses natural meadows, bogs, dunes, shorelines, lakes, streams and woodlands in the transition zone between coniferous and deciduous forests.



For More Information:

Phone: (734) 763-4461

E-Mail: umbs@umich.edu

Website: www.lsa.umich.edu/umbs
(Including **ONLINE Application**)

University of Michigan Biological Station
2541 Chemistry Building
930 North University Ave.
Ann Arbor, MI 48109-1055

REU runs for eight weeks (June 21-August 16, 2008) at the U of M Biological Station. Participation in the REU Program is intense and rewarding. Funded by the National Science Foundation, REU students receive the following compensation:

- **A stipend of \$4,250 each**
- **Travel and research supplies allowance**
- **Room and board expenses at UMBS for eight weeks**



College Credit: Students may receive up to 3 semester hours credit for an independent study project (Biology 400: Advanced Research in Biology) by advance arrangement with a mentor/professor and the UMBS Office. Tuition expenses will be the responsibility of the individual student.

M UNIVERSITY OF MICHIGAN

2007 Projects & Mentors



The **REU Program** at the University of Michigan Biological Station is a **truly interdisciplinary experience** in scientific research in biosphere-atmosphere studies in a changing global environment.

The program is designed to provide “hands-on” experience and training in field biology and atmospheric science with all phases of research, from hypothesis formulation through data gathering, to analysis, interpretation, and communication of scientific studies.

During this eight-week program, students will:

- Work closely with a selected mentor/professor as part of an on-going research project
- Design, conduct, analyze, and report on a research project of their own
- Participate in special workshops and group discussions designed to provide the philosophical bases and technical tools needed to carry out scientific research.

**Applications available ONLINE
beginning in November 2007**

Applications due February 15, 2008

Dr. Mary Anne Carroll, University of Michigan: Ozone and volatile organic compounds.

Dr. Peter Curtis & Dr. Chris Gough, Ohio State University; Dr. Chris Vogel, University of Michigan: Disturbance and forest carbon cycling and the implications for climate change.

Melanie Gunn, University of Michigan; Cindy Mom, Little Traverse Conservancy; Dr. Ted Anderson, McKendree College: Distribution and success of native and invasive phragmites australis in northern Michigan.

Dr. David Karowe, Western Michigan University: Rising carbon dioxide and plant defense against herbivores. Also insect-eating plants and their adaptations to low-nutrient environments.

Dr. Pat Kociolek, California Academy of Sciences: Freshwater Diatom Communities and Environmental Conditions.



Facilities

UMBS is one of the finest and best-equipped inland field stations in the world. REU students will benefit from the unique collection of scientists, facilities, and ongoing field projects dedicated to global change research. With a large array of wild animals and plants for study, personal interaction with professors and researchers, close associations with other students, easy communication with all and a daily life close to nature, the station offers a wealth of opportunity for the developing biologist.

UMBS has an excellent science support staff, and our facilities include a library, computing centers, well-equipped laboratories, special collections of plants and animals, the Soil Biotron, a research greenhouse, stream laboratory, and canopy access towers.

Dr. Troy Keller, Columbus State University: Barriers to crayfish migration and invasion. Also zebra mussel effects on streams and lakes.

Dr. Brian Lamb & Dr. Shelley Pressley, Washington State University: Isoprene flux measurements above a northern hardwood forest.

Dr. Allison Snow, Ohio State University: Hybridization and invasiveness in cattails. Also hybridization and weediness in wild radish.

Dr. Nancy Tuchman, Loyola University of Chicago: Impacts of invasive species on aquatic ecosystem structure and function.

Dr. Paul Webb, University of Michigan: Temporal and spatial fish distributions through storm events.



ELIGIBILITY: Please note that student participants must be at least of junior status at the start of the summer program and a permanent resident of the United States. Seniors with a graduation date before August are not eligible.