



## CIGLR Graduate Research Fellowships 2018 Request for Proposals

<u>Description</u>: The Cooperative Institute for Great Lakes Research (CIGLR) is soliciting proposals from Regional Consortium University Partners for two (2) **Graduate Research Fellowships** sponsored by NOAA's Great Lakes Environmental Research Lab (GLERL). The goals of these fellowships are: 1) to provide training and educational opportunities for students who will become the next generation of Great Lakes researchers, 2) enhance collaborations between CIGLR's University Partners and PIs at NOAA GLERL, and 3) increase student retention within the freshwater aquatic sciences. We also seek to use these fellowships to increase diversity in STEM disciplines (science, technology, engineering and math), and thus, strongly encourage proposals that support students from groups which have been traditionally underrepresented in government and academic workforces.

<u>Funding:</u> Research fellowships will provide graduate students (MS or PhD) with \$25,000 of funding for 12 months. These funds can be used for student salary, tuition, supplies and travel. Priority will be given to projects that foster interaction with CIGLR's Private Sector Partners, collaborating NOAA programs, or Supporting Initiatives. See <u>ciglr.seas.umich.edu/about/ciglr-organization/</u> for more information.

<u>Eligibility</u>. Graduate Research Fellowships may be used to support any graduate student working with a tenure-track faculty member from a CIGLR University Partner institution. Proposals may be submitted by either the graduate student or faculty member. Prior fellowship awardees are eligible to re-apply.

<u>Requirements:</u> Graduate Research Fellowships require direct involvement with both a university lead mentor and a NOAA Great Lakes Environmental Research Laboratory (GLERL) or CIGLR co-mentor. There are two possible models for co-mentorship:

- The student spends the 9-mo. academic year at a CIGLR University Partner institution with a three-month summer component at a NOAA facility, either GLERL in Ann Arbor, MI, or the Lake Michigan Field Station in Muskegon, MI. This model requires split mentoring roles, with an on-site university scientist as the lead mentor, and a NOAA GLERL or CIGLR scientist as the primary summer mentor during research.
- Twelve months at a CIGLR University Partner institution, with dual mentoring by the on-site university scientist as the lead mentor, and a NOAA GLERL or CIGLR scientist as a co-mentor. Students choosing this model must demonstrate in their proposal a plan for regular interaction with the co-mentor, including face-to-face meetings.

Fellowship projects must address at least one CIGLR's research themes. Please visit the CIGLR website for research theme descriptions: ciglr.seas.umich.edu/research-themes/

Theme I: Observing Systems & Advanced Technology

Theme II: Invasive Species & Food Web Ecology

Theme III: Hydrometeorological & Ecosystem Forecasting

Theme IV: Protection & Restoration of Resources

Students who receive fellowships are required to attend CIGLR's Annual Partner Meeting (September) to give a poster on their work, and to submit a final report to CIGLR at completion of the fellowship.

## Application Process: Proposals should include the following sections:

- 1. Cover sheet (template attached)
- 2. Main body (4 pages max)
  - a. <u>Introduction</u>: Provide background information on the research topic, ending with the research question(s) to be addressed.
  - b. <u>Hypothesis(es)</u>: State testable hypotheses and the corresponding predictions for those hypothesis. Explain the corresponding rationale for the hypotheses and predictions. Proposals lacking testable hypotheses and clear predictions will not be funded.
  - c. <u>Methods</u>: Describe the study approach(es) and general methodologies to be used in sufficient detail that they can be evaluated by a general expert.
  - d. <u>Significance</u>: The main body of the proposal should end with a section describing the anticipated results, their relevance to CIGLR's research themes, and their importance to society.
- 3. Co-mentoring plan (0.5 to 1 page) Identify the university lead mentor and a NOAA GLERL or CIGLR co-mentor. Describe plans to ensure active collaboration between the fellow, faculty mentor, and the GLERL or CIGLR co-mentor. Applicants are encouraged to contact potential GLERL or CIGLR co-mentors to discuss proposed research before applying. For assistance identifying an appropriate CIGLR or GLERL co-mentor, please send a brief description of your research topic to Mary Ogdahl, CIGLR Program Manager (ogdahlm@umich.edu).
- 4. Budget (1 page) Submissions should provide a budget and budget justification. The budget should total \$25,000 for 12 months, and can include student salary, tuition, supplies and travel. Universities must abide by their MOUs with CIGLR that agree to a reduced IDC of 10% to take advantage of these fellowships.

Proposals should be submitted as a single Adobe pdf file by 5 pm ET on December 1, 2017. Please send your proposals and inquiries to Mary Ogdahl (ogdahlm@umich.edu).

<u>Review process</u>. Proposals will be reviewed and ranked by members of the CIGLR Council of Fellows (not collaborating on submitted proposals) for final award selection. Proposals will be judged on: 1) the quality of the science, 2) potential for the research to make a societal impact, 3) consistency with CIGLR and NOAA GLERL's research mission and themes, 4) level of commitment to the dual mentorship of the student and student training, 5) potential to foster interaction between NOAA GLERL and CIGLR's Private Sector Partners, collaborating NOAA programs, or Supporting Initiatives.

CIGLR will announce the **final decisions by January 31, 2018**. Funding for the fellowships will be sub-awarded by the University of Michigan to the host universities of the selected faculty members. The sub-awards will be established to allow activities to start in the summer of 2018, or to facilitate recruitment of a graduate student for Fall 2018.

II.	HYPOTHESES
III.	METHODS
IV.	SIGNIFICANCE
V.	CO-MENTORING PLAN
VI.	BUDGET (\$25,000) with JUSTIFICATION

I. INTRODUCTION