



2018 Summer Student Internship Program

Illinois-Indiana Sea Grant announces the following positions for the 2018 Summer Student Internship Program. Successful applicants will spend 12 weeks working closely with a Sea Grant specialist on issues affecting the Great Lakes. The paid internships can include research, communications and outreach components. Applicants may have the opportunity to participate in activities outside of their specific internship duties. For more information on the internship program and position descriptions, please visit:

<http://www.iiseagrant.org/internship.php>

Internships are available in the following areas:

- **Aquaculture Product Development**
- **Great Lakes Revitalization**
- **Lake Michigan Fisheries Genomics**
- **Pollution Prevention**
- **Sustainable Communities**

Interns will be paid \$12/hour for 37.5 hours per week. Interns will be student employees of Purdue University or University of Illinois. Some travel and/or weekend work may be expected. Interns are responsible for the cost of housing plus transportation to and from their work place. Work-related travel will be funded by the Sea Grant host. **Application packets are due on March 26, 2018.** Successful applications will be notified of their acceptance by mid-April. Internships are expected to start May 2018 and end August 2018.

Eligibility

- Undergraduates currently enrolled in a U.S. institution of higher learning, or graduated December 2017 or after.
- Graduate students are not eligible.
- Applicants should be U.S. citizens, permanent residents or have an active F-1 visa.
- Previous IISG interns who have participated in the Summer Internship program are not eligible.

Application

Send all application materials via email to Angela Archer, amcbride@purdue.edu, and include "2018 IISG Summer Internship" in the subject line. All questions should be directed to Ms. Archer via email or 765-496-3722. **Save the following documents in a single PDF file:**

- Curriculum vitae detailing education and work experiences (2 pages maximum)
- Goal statement emphasizing your interest in the Great Lakes and the internship program. (500 words or less)
- Ranked preference of the internship positions
- Copy of unofficial transcript(s)
- One letter of recommendation, include in your application or can be sent directly to amcbride@purdue.edu on your behalf

End of employment, interns will be required to:

- Write a final report describing their work. A template will be provided to the intern.
- Summarize the report into a news story that will be featured in the IISG Newsroom. Assistance will be provided.
- Plans are in the works for a poster session to be held at the end of August or beginning of September. Details will be forthcoming.

Summer Student Program Position Descriptions

Aquaculture Product Development

Supervisor: Kwamena Quagrainie, Aquaculture Specialist & Associate Professor in Agricultural Economics

Local food systems are predominantly handling specialty crops – vegetables, fruits, nuts, herbs, and flowers. Some producers of local foods utilize shared-use and commercial kitchens for prepping up their products for the local food system such as direct-to-consumer outlets – CSA's, farmers' market, food hubs; grocers & retailers; restaurants & foodservice providers; and institutions – schools (farm to school), universities & hospitals. Shared-use and commercial kitchens are licensed and inspected food processing facilities that rent out space & equipment to small-scale value-added food production entrepreneurs, farmers, and caterers. Such facilities can save producers and food entrepreneurs from investing in costly food processing equipment, and enable them to prepare products to meet the demand for locally produced food. These facilities support regional food systems and help small farms and local ventures to be profitable and viable. Utilizing commercial kitchens is a logical step for the aquaculture industry especially for farmers who have identified clients to supply processed seafood.

This project will study the viability of utilizing commercial kitchens for processing fish from aquaculture. Specifically, the study will assess operations and business models of shared-use and commercial kitchens for fish processing. We need to understand the factors that could incentivize the supply of local seafood through shared-use and commercial kitchens.

Tasks:

1. Study the environment in which small-scale shared-use/commercial kitchens operate.
2. Explore business models for processing seafood in shared-use/commercial kitchens in an attempt to find the economically viable models that would best meet the needs of the aquaculture industry.
3. Chart out strategies where the aquaculture industry can supply seafood products through utilizing shared-use/commercial kitchens.

Great Lakes Revitalization

Supervisor: Caitie Nigrelli, Environmental Social Scientist, U.S. EPA, Great Lake National Program Office

The intern will help the specialist design and develop research to understand perceptions of community revitalization in places undergoing sediment remediation and habitat restoration through the Great Lakes Legacy Act. The intern will learn about various methods from the social sciences. The intern will also help develop outreach and education materials based on community needs and existing human dimensions research findings. This is a great opportunity to gain professional experience conducting field research in the social sciences. The position will provide excellent networking opportunities, as interns will interact with individuals from USEPA, state natural resource agencies, and environmental NGOs.

The position is based at the University of Illinois Urbana-Champaign campus, with approximately 35-40 hours/week.

Qualifications: Trained in environmental social science courses (e.g., human dimensions of natural resources, environmental psychology, environmental sociology, natural resource economics, natural resource policy, natural resource management, human-environment interactions). Trained in social science research methods (preferred). Able to think creatively and work independently. Strong oral and written communication skills. Able to visit USEPA Great Lakes National Program Office at 77 W Jackson Blvd in Chicago, 4-6 times during the course of the internship. Able to make extended visits with the specialist to Great Lakes Legacy Act sites, such as

Cleveland, OH or Milwaukee, WI, to conduct outreach and research. All travel costs from Urbana-Champaign will be covered by Illinois-Indiana Sea Grant.

Lake Michigan Fisheries Genomics Intern

Supervisor: Leslie Dorworth, Aquatic Ecology Specialist at Purdue University Northwest

The intern will be responsible for developing a database of Lake Michigan fish species via DNA extraction, PCR techniques, and use of eDNA and by surveying existing DNA databases, as well as developing outreach materials that convey the results of their internship. The intern will work closely with Sea Grant's specialist at Purdue University Northwest as well as with scientists at the United States Geological Survey (USGS) in Chesterton, IN.

The successful applicant will be an employee of Purdue University Northwest, Hammond Campus, Gyte Building, 2200 169th Street, Hammond, IN 46323. The intern will split their time between the campus and the USGS Lake Michigan Ecological Research Station, 1574 Kemil Road N 300 E, Chesterton, IN 46304.

Qualification: Good understanding of ecology (preferably the Great Lakes), laboratory and field experience, strong writing skills, an interest in conveying scientific concepts to the general citizen, good organizational skills and the ability to work independently.

Pollution Prevention

IISG Supervisor: Sarah Zack, Pollution Prevention Specialist, Loyola University Chicago

Description: The successful intern will be responsible for development of outreach materials related to pollution prevention in aquatic ecosystems. Specifically, the internship will focus on two areas: proper medicine disposal and natural lawn care. The intern will work closely with Illinois-Indiana Sea Grant specialists located in Chicago to evaluate outreach needs and will then work with Sea Grant staff, the Illinois Sustainable Technology Center, local and state decisionmakers, and nonprofit organizations to collaboratively develop and/or edit outreach and extension materials (e.g., web pages, guidebooks, factsheets, brochures, videos) that meet those needs. The successful intern will gain valuable experience working towards shared pollution prevention goals in a collaborative environment.

The successful applicant will be an employee of University of Illinois at Urbana-Champaign, but will work in the Department of Biology, Loyola University Chicago, 1032 W. Sheridan Road, Chicago, IL 60660.

Qualifications: Candidates should have an interest in science outreach, and a background in biology, natural resources sciences, social science, or a related field. Strong verbal and written communication skills, demonstrated ability to work independently and multitask, and a valid driver's license are required. Video creation and editing experience is preferred, but not required. Some overnight travel and irregular work hours may also be required.

Sustainable Communities Extension Intern

IISG Supervisor: Kara Salazar, Sustainable Communities Specialist

The student intern will support state-wide sustainable communities extension programming efforts (<https://ag.purdue.edu/extension/scep>) for Purdue Extension and the Illinois Indiana Sea Grant (IISG) college program. Working with the Sustainable Communities Extension Specialist and the Community Planning Specialist, the intern will collaboratively develop extension education and training materials (case studies, fact sheets, excerpts of guide books, web pages) related to public spaces, rain gardens, and watershed management topics. Internship experiences will also include interactions with community groups and program partners

through meetings and supporting the delivery of extension and training programs with campus specialists. Opportunities for professional development activities will be offered as available.

The successful applicant will be an employee of Purdue University, and will be working in the Department of Forestry and Natural Resources, Purdue University, 195 Marsteller Street, West Lafayette, IN 47907.

Qualifications: Candidates should have an interest in natural resources management, community development, and developing and delivering education and outreach programs to diverse stakeholder groups. A background in natural resource sciences, social science, environmental planning or policy or a related field with strong verbal and written communication skills is desired.