

DECEMBER 2022 – REQUEST FOR PREPROPOSALS

Illinois-Indiana Sea Grant College Program Two-Year Research Grants

The Illinois-Indiana Sea Grant College Program (IISG) anticipates having \$800,000 to invest in promising research projects relevant to southern Lake Michigan and surrounding communities in northeast Illinois and northwest Indiana. Work is to be completed in the 2024–25 biennium. Work can be conducted outside of the geographic area outlined above provided applicants make a compelling case for why their work is relevant to southern Lake Michigan and surrounding coastal communities, or otherwise supports the priorities identified in this document. Funding is competitively awarded following procedures outlined below.

For the 2024–25 cycle, IISG will prioritize funding projects with outcomes that demonstrate potential to benefit underserved* communities in the southern Lake Michigan region.

Benefits may include but are not limited to improved quality of life, job training and student opportunities, and increased access to beneficial services or information.

Project Details: Projects should propose to answer a clear research question or set of related questions, and should demonstrate fit with the 2024–27 IISG strategic plan. For the 2024–25 funding cycle, IISG has five areas of special interest:

- Improving water safety, with a goal of reducing the number of drownings in Lake Michigan.
- Adapting to changing lake levels in the southern Lake Michigan region in support of healthy coastal ecosystems and resilient communities and economies.
- Better understanding contaminant levels in fish or shellfish that are or can be used for food. These may include Lake Michigan or tributary fish caught for subsistence fishing or Illinois- or Indiana-farm raised fish and shellfish. Contaminants to explore include but are not limited to legacy contaminants, contaminants of emerging concern, and toxic cyanobacteria from algal blooms (e.g., in nearshore regions; in ponds where fish or shellfish are raised).
- Addressing environmental justice concerns associated with restoration of degraded southern Lake Michigan coastal sites (e.g., decommissioned power plants, industrial parks).
- Exploring economic or legal barriers to production of Illinois- and/or Indiana-grown fish or shellfish (e.g., processing of organisms to be sold at restaurants, permitting or acquisition of resources to expand facilities, access to skilled laborers).

Additional topic areas of interest include broader aquaculture research, aquatic invasive species, community climate readiness, fisheries, healthy waters and pollution prevention, recreation and tourism, stormwater and green infrastructure, shoreline erosion, sustainable community planning, and water supply. All research projects should fit at least one of these topic areas. While IISG will prioritize projects that address the areas of special interest, projects in any of the above topic areas are eligible for funding. IISG encourages researchers interested in developing technologies to address Lake Michigan coastal concerns, e.g., reducing pollution or marine debris in Lake Michigan, improving drinking water quality and supply for Lake Michigan coastal communities,

improving feeding of Illinois- or Indiana-raised fish or shellfish; however, prospective principal investigators (PIs) who are considering technology development are also encouraged to explore opportunities offered through the National Sea Grant Office and the Illinois-Indiana Sea Grant Scholars Program.

Types of Research: For this RFP, IISG anticipates funding projects that use a variety of experimental techniques, including but not limited to social science assessments (e.g., of attitudes or perceptions related to behavior change), economic cost-benefit analyses, legal or policy analyses, field or laboratory studies, and modeling efforts. PIs can find examples of previously funded research projects at <https://iiseagrant.org/research/research-projects/>.

Research funded by IISG serves as a strong basis for education, outreach, or extension programs; thus, applicants are strongly encouraged to identify clear end users or otherwise demonstrate connections to user groups who will benefit from their research. PIs may be able to discuss their project ideas with IISG extension and education staff members to review the potential for proposed research to have maximal societal impact and/or identify potential user groups.

The 2024–27 IISG Strategic Plan will be available in early 2023. Preproposal documents do not need to specifically reference the new strategic plan, but full proposal documents should. To gain an appreciation for IISG’s work, applicants are encouraged to review the program’s most recent strategic plans here: https://iiseagrant.org/resources/publications-products/results/?_sft_focus=administrative&_sft_publication-type=program-report&_sf_s=strategic%20plan.

Funding Amounts: Projects can request up to \$100,000 per year for two years (maximum \$200,000 total). IISG anticipates funding 4–5 projects via this call.

All applicants must demonstrate at least 50% in non-federal match (1 non-federal dollar for every 2 federal dollars requested) for the overall project. Match can be slightly higher than 50% in year 1 and lower in subsequent years so long as the project is matched at least 50% overall (i.e., if the PI requests \$90,000 in year 1, they must provide at least \$45,000 in match for a total of \$135,000 put toward the project in year 1). Examples of what can be used as match include academic year salary and volunteer time, but specifics of what can be claimed varies by institution. **PIs should work closely with the fiscal or business office at their home institution to determine what is allowable as match.**

Funding will be provided for up to two years beginning February 1, 2024, or the date of the award, and projects should be completed by January 31, 2026. While IISG does not anticipate delays in project start dates, at times, federal budgeting activities delay receipt of funds by IISG and subsequent flow of funds to the successful PIs. Any anticipated delay in funds will be communicated by IISG to successful PIs so that workflows can be adjusted accordingly.

PI Eligibility: We encourage individuals from all disciplines to apply to this RFP. IISG is committed to supporting justice, diversity, equity, and inclusion efforts. The full IISG values statement can be found at <https://iiseagrant.org/about/about-us/#value>.

Investigators from educational or research institutions including universities, museums, and NGOs, are eligible to serve as PI for these funds. Priority will be given to Illinois- and Indiana-

based researchers. Researchers from other states are welcome to apply but proposed work must demonstrate how it will benefit the mission of IISG and/or meet research priorities as described above. IISG staff members are not eligible for funding and should not be listed as co-investigators. Consulting companies can serve as co-investigators or project partners but should not receive more than 50% of the project funds.

IISG encourages submissions by early career scientists and/or persons who have partnered with, or plan to mentor, early career scientists. IISG also encourages all applicants to make research plans such that their work will effectively center on underrepresented racial and ethnic groups, people with disabilities, and/or people from economically or educationally disadvantaged backgrounds that have limited their ability to pursue a career in STEM. This could include recruitment of students or personnel from these underrepresented groups.

Preproposal Submission Process: Prospective PIs must submit a preproposal to be considered for funding. Preproposals should contain the following components:

1. Cover page that includes the Project Title, Principal Investigator and Affiliation, Associate Investigator(s) and Affiliation(s) (if applicable), Anticipated Partners, Topic Area(s) for your project, and Preliminary Budget Request.
2. Two-page project summary that outlines the Objectives, Methodology, and Rationale for your proposed project. Identify user groups that could apply outputs from the proposed work, the expected impact(s) that may be achieved, and how project partners will engage these users in applying results.
3. One-page preliminary budget. Provide a brief breakdown of anticipated costs. Preproposals do not need a fully executed budget. Match (cost share) does not need to be detailed in the preproposal budget, however, upon submission of a full proposal, PIs will need to demonstrate a 1:2 non-federal to federal dollar match. PIs should also plan to budget for the negotiated federal indirect costs rates for their home institutions.
4. Two-page CVs for PI and main project partners. PIs from educational or research institutions are eligible for these funds. Subcontracts to associate investigator institutions are possible.

The preproposal submission process will also include a voluntary demographics questionnaire, which IISG is required to administer on behalf of the National Oceanic and Atmospheric Administration (NOAA, home to the Sea Grant program). NOAA is interested in learning more about who applies to their funding opportunities. Questionnaire answers will not be included in materials provided to reviewers or otherwise influence the current competition. Additional details are included in the eSeaGrant submission portal for this opportunity. Questions can be directed to Carolyn Foley (cfoley@purdue.edu).

Preproposal Review and Feedback:

Preproposals will be reviewed by external-to-IISG (but potentially still in Illinois or Indiana) subject experts using the following criteria.

Based on the entire application package, please rate the following on a scale of 1 to 5, 5 being best:

- Does the work fit within the scope of the thematic areas of the RFP?
- Is the work scientifically significant?
- Will the work fill important knowledge and data gaps?
- Will anticipated results lead to positive societal impacts?

Subject expert reviewers will be required to declare any conflicts of interest. After subject experts have returned their reviews, the IISG leadership team (which includes the director, associate director, assistant director, and assistant director for outreach; see <https://iiseagrant.org/about/our-team/>) plus the IISG research coordinator and any relevant IISG specialists (e.g., aquaculture specialists for aquaculture projects; pollution prevention specialists for contaminant-related projects) will review preproposals and provide additional written feedback to applicants. The goal of this feedback will be to improve relevancy or fit with the IISG strategic plan and program goals.

Any applicant who submits a preproposal on time is eligible to submit a full proposal. Applicants will receive an email encouraging or not encouraging full proposal submission. Decisions to encourage or not encourage a full proposal are made based on external subject expert review scores. Comments from the screening process will be sent to all applicants who submitted a preproposal.

IISG recognizes that developing full proposal applications can be a significant time investment on the part of the prospective PI. Decisions to encourage or not encourage are based on expected funding levels, and are designed to minimize extra work for applicants. IISG typically encourages preproposal applicants such that we will ultimately have a 1-in-3 or 1-in-4 success rate at the full proposal stage (i.e., if IISG expects to fund three projects, we encourage up to 12 full proposals). Preproposals that are not encouraged typically have a low probability of success at the full proposal stage.

Preproposal Submission Deadline: Applicants should submit materials via <https://esg.iiseagrant.org/> by 11:59 p.m. Central time on February 6, 2023. Applications should be submitted to the "IL-IN SG 2023 2-Year Research Competition". Late applications will not be accepted unless the applicant has contacted IISG staff members before the deadline to make them aware of potential issues, (e.g., computer, power, or internet issues). IISG reserves the right to refuse late applications if the program determines that individual circumstances do not warrant an extension. IISG staff members will only be available to answer questions until 5:00 pm Central time on February 6, 2023.

Full Proposal Submission Process: Regardless of whether or not an applicant was encouraged to submit a full proposal, prospective PIs are strongly recommended to consider and address any comments as they craft their full proposal application. Full instructions for full proposal submission, including full proposal evaluation criteria, will be provided along with preproposal feedback.

Funding recommendations are based on external review, but are ultimately made at the discretion of the IISG director. Provided that enough proposals are of sufficient quality and scientific rigor, priority will be given to projects that address one or more areas of special interest, as described above, and projects with outcomes that demonstrate potential to benefit underserved* communities in the southern Lake Michigan region. Following this, if there remain enough proposals of sufficient quality and scientific rigor, IISG will also prioritize funding research at different institutions, with a preference for Illinois- or Indiana-based PIs and spreading funds across the two states as is possible.

Proposal Review Timeline:

February 6, 2023	Preproposals due in program office (with preliminary budgets)
Mid-March, 2023	Encouragement to submit full proposals
May 15, 2023	Full proposals due in program office
September 1, 2023	Notification of funding, accompanied by panel and peer reviews
September 15, 2023	Final adjusted proposals due in program office
February 1, 2024	Project initiation (subject to the availability of funds)

Questions regarding eligibility or submission requirements may be directed to Carolyn Foley at cfoley@purdue.edu or 765-494-3601.

*A community may be underserved because of geographic location, racial and ethnic status, and/or other special needs (such as language barriers, disabilities, citizenship status or age). To achieve the highest score during the review process, prospective PIs should plan to describe meaningful engagement of community members from the beginning of the project and/or suggest how project results will be shared in support of underserved community members, for example: by seeking out key partners at organizations that support underserved community members; or by working with NGO, industry, or agency partners to implement research findings in ways that would most benefit underserved communities/community members. Prospective PIs, particularly those who have not previously conducted research in the southern Lake Michigan region, are highly encouraged to engage with partners who are trusted by the populations the PIs hope to serve.