

LaSPACE & LSG

LA Space Grant and Sea Grant Graduate Interjurisdictional Research Award Fellowship (GIRAF) Program

Offered in Partnership by

Louisiana Space Grant (LaSPACE) & Louisiana Sea Grant (LSG)



Under the authority of the
NASA Space Grant Program & NOAA Sea Grant

Louisiana Space Grant Consortium (LaSPACE)
Louisiana State University, Baton Rouge, LA 70803
<https://laspace.lsu.edu/> | laspace@lsu.edu

Louisiana Sea Grant (LSG)
Louisiana State University, Baton Rouge, LA 70803
<https://www.laseagrant.org/>

LA Space Grant and Sea Grant Graduate Interjurisdictional Research Award Fellowship (GIRAF) Program Application Guidelines

About the GIRAF Program

The joint Louisiana Space Grant and Sea Grant Graduate Interjurisdictional Research Award Fellowship (GIRAF) Program invites interdisciplinary proposals from across the state. The fellowship requires the use of data from vast archives and remote-sensing capabilities available through the National Aeronautics and Space Agency (NASA) and the National Oceanic and Atmospheric Administration (NOAA) to address a high-priority research need within Louisiana's nearshore environs, coastal areas, wetlands, watersheds, and/or human activities in these areas (e.g. aquaculture). Successful proposals must adeptly utilize relevant measurement instruments and/or remote-sensing data sources from NASA, NOAA, and/or other sources that can include, but are not limited to, radiometers, spectroradiometers, satellite sensors, LIDAR, aerial imagery, and other data collected from airplanes, unmanned aerial vehicles, and/or unpowered submersibles in the execution of the proposed work.

We strongly encourage proposals from graduate students from traditionally underserved and underrepresented communities, from students enrolled at a Louisiana HBCU, as well as from graduate students who can demonstrate how their work and related outreach will benefit underserved and underrepresented communities.

This is a competitive fellowship program supported by Louisiana Space Grant in partnership with NASA and Louisiana Sea Grant in partnership with NOAA. Awards are based on scientific merit, adherence to the instructions of this RFP, availability of federal funds, and in recognition of applicants' high academic achievement and anticipated results.

2023-2024 Special Topics Focus: Ghost Forest Regional Research

Background: Coastal North Carolina and Louisiana are extremely vulnerable to the impacts of Sea Level Rise. One of the impacts of rising water levels and altered salinity regimes is conversion of coastal forest to wetlands and eventually open water. This process proceeds through a "ghost forest" stage characterized by still-standing dead trees surrounded by more water-tolerant species. The loss of forest has many implications from decreased carbon storage, increased greenhouse gas emissions, altered habitat availability, and lost economic value to the wood and pulp industries. This ghost forest stage is readily discernable through digital imagery interpretation. Tracking the loss of forest and the resulting effects is a sentinel tool in understanding and responding to how our coastal habitats are changing due to climate change.

Collaborative Approach: Louisiana Sea & Space Grant Programs and North Carolina Sea & Space Grant Programs wish to facilitate a regional partnership to jointly fund graduate students in both of our jurisdictions to concurrently study the ghost forest phenomenon. The topic of ghost forest expansion and the resultant impacts from this issue are ideal topics to base this regional collaboration around. We would like to provide a graduate student funding opportunity in both states, locally funded by both programs. Our aim is that NC Sea Grant, NC Space Grant, LA Space Grant, and LA Sea Grant each invest \$5,000 toward this new transregional graduate

student opportunity partnership resulting in a \$10,000 award for a single graduate student in each state. The students (and their faculty mentors), while working on their own independent project, are required to engage with each other as a cohort. The sponsoring agencies will help ensure that this collaboration occurs. This will allow for the transregional aspect of this effort to develop and provide unique professional development opportunities for each student (and their faculty mentors), as well as ensure that lessons learned in both states would be transferred broadly across each region represented.

2023-2024 GIRAF Call for Applications: Louisiana Space Grant and Sea Grant will accept applications for the 2023-2024 academic year for a twelve-month Graduate Research Fellowship. Applicants must be a full-time, enrolled graduate student at an accredited college or university within Louisiana, an affiliate of Louisiana Space Grant, and a citizen of the United States. The proposed research must be focused on the study of ghost forests and must be supervised by a faculty mentor. The research activity should continue for the duration of the fellowship period. The period of performance will be August 15, 2023 to August 14, 2024. All work must be completed by August 14, 2024. Fellows are expected to communicate regularly with their counterpart in North Carolina and to collaborate on at least one product resulting from their concurrent research. Fellows are required to present their research findings at a meeting, conference, or other formal gathering of professional organization(s), association(s), etc. among peer researchers, policymakers, or another relevant audience. Fellows should expect to present the results of their work at the annual Louisiana Space Grant (LaSPACE) meeting held each fall in the state.

About Louisiana Sea Grant and Space Grant Programs

Louisiana Sea Grant

The National Sea Grant College Program (Sea Grant) is authorized by P.L. 89-688, the National Sea Grant College Program Act of 1966, as amended (33 USC § 1121 et seq. Sea Grant). The Sea Grant College Program Act authorizes the awarding of grants and contracts to initiate and support programs at Sea Grant colleges and other institutions for research, education, and advisory services in any field related to the conservation and development of marine resources. A joint federal, state and local investment, Sea Grant provides solutions for the issues affecting our Nation's coastal communities (including the Great Lakes, Gulf of Mexico and communities on the Atlantic, Caribbean, and Pacific coasts), yielding quantifiable economic, social, and environmental benefits.

Sea Grant is a unique program within NOAA that sends 95% of its appropriated funds to coastal states through a competitive process to address issues that are identified as critical by public and private sector constituents and coastal communities throughout the United States. Sea Grant fosters cost-effective partnerships among state universities, state and local governments, NOAA, and coastal communities and businesses, leveraging nearly \$3 for every \$1 appropriated by Congress. Louisiana Sea Grant is one of these 34 university-based programs located in every coastal and Great Lakes state, Puerto Rico, and Guam. The network draws on the expertise of more than 3,000 scientists, engineers, public outreach experts, educators and students to help citizens better understand, conserve and utilize America's coastal resources.

Proposed work should be relatable to Louisiana Sea Grant's Strategic Plan and the research priorities found therein (<https://www.laseagrant.org/wp-content/uploads/LSG-Strategic-Plan-2018-23.pdf>), as well as the National Sea Grant Program's commitment to diversity, equity, and inclusion (<https://seagrant.noaa.gov/values>).

Louisiana Sea Grant (LASG) solicits research proposals in approaches that integrate across the following four focus areas:

- A. [Healthy Coastal Ecosystems](#)
- B. [Sustainable Fisheries and Aquaculture](#)
- C. [Resilient Communities and Economies](#)
- D. [Environmental Literacy and Workforce Development](#)

Louisiana Space Grant

The Louisiana Space Grant Consortium, part of the National Space Grant College and Fellowship Program and in partnership with the Louisiana Board of Regents, supports programs at affiliated academic institutions and other Louisiana organizations that address the NASA mission, federal CoSTEM goals, and state education and economic priorities. LaSPACE programs for Research, Higher Education, Workforce Development, K-12 Teacher Development, and Public Outreach, strengthen the Science, Technology, Engineering, and Math (STEM) education needed for a diverse technical workforce, and develops the research and economic infrastructure to boost Louisiana's contribution to the aerospace frontier.

Goals and Objectives

LaSPACE Goals and Objectives are directly aligned with NASA Office of STEM Engagement and National Program Emphases on Diversity, Workforce Development, Community Colleges, Pre-College teacher engagement, Competitiveness, NASA Research Relevance, Industry Relations, and State Government Involvement. The updated LaSPACE 2019 Strategic Plan describes a comprehensive program of Research, Education, and Service via 5 strategic goals, each in line with one or more NASA OSTEM objectives, to (1) Foster aerospace research and education (OSTEM 1.1, 1.2, 2.1, 2.2, 2.4, 3.2), (2) Foster and support hands-on experiential programs for higher education students (2.1, 2.2, 2.3, 2.4), (3) Contribute to pre-college STEM education excellence (1.2, 3.1), (4) Engage and educate the general public (3.1), and (5) Maintain an effective consortium of institutions involved in LaSPACE.

Major objectives for the achievement of these goals includes (1) Support for student and faculty research at consortium institutions, (2) Strengthening interactions between Louisiana aerospace industries, faculty, and students, (3) Increased participation in Space Grant programming with the state's HBCUs and Community & Technical Colleges, (4) Provide support to undergraduate and graduate students for research, design, and internship opportunities, (5) Engage students in experiential learning environments, (6) Support middle and high school educator training, and (7) Foster informal education and public outreach. Proposals to LaSPACE programs should explicitly support one or more of these seven objectives.

NASA 2018 Strategic Plan

NASA's 2018 strategic plan aligns the Agency's future activities along three strategic themes of Discover, Explore, and Develop, as well as a fourth theme focused on the activities that will enable the Agency's mission.

- DISCOVER references NASA's enduring purpose of scientific discovery.
- EXPLORE references NASA's push to expand the boundaries of human presence in space.
- DEVELOP references NASA's broad mandate to promote the technologies of tomorrow.
- ENABLE references the capabilities, workforce, and facilities that allow NASA to achieve its Mission.

The complete plan can be downloaded [here](#).

Graduate Interjurisdictional Research Award Fellowship (GIRAF)

Program Details

Fellowship Amount

\$10,000 per award

Number of Fellowships

Up to two fellowships are anticipated for 2023-2024, subject to sufficient funding and quality of the received applications.

Duration

The research activity should be continuous over the course of the fellowship. The start date is August 15, 2023. All work must be completed by August 14, 2024.

Eligibility

The Graduate Research Fellowship applicant must be:

- A United States citizen.
- Enrolled full time in an advanced graduate degree program of study at an accredited college or university in the State of Louisiana.
- Conducting a faculty-mentored research project relevant to this call for proposals.
- In good academic standing.

Interested students must complete an online application. Undergraduate students may not apply for funding, but research projects that include undergraduate participation are accepted. Please read all program guidelines, including applicant eligibility and reporting requirements, before submitting your application.

The application must be submitted online and all information must be complete or the application will not be reviewed. The key components of the application are discussed in more detail below.

Graduate Interjurisdictional Research Award Fellowship (GIRAF)

Application

Apply for the Graduate Interjurisdictional Research Award Fellowship (GIRAF) online at: [eSeaGrant](#)

To complete the required application forms, all eligible investigators must register through the [eSeaGrant link](#) and click “Add Proposal” to access all required forms and instructions for submission.

Proposals must describe the research project, with items 2 to 4 below totaling no more than four pages. Item 7 should be no more than two pages. The proposal should be in a standard font 11 or 12-point with 1-inch margins. Incomplete and/or late applications will not be accepted.

Application Format

1. Cover Page: Complete the provided cover page, which includes student name and contact information, academic institution, major, and faculty mentor contact information.
2. Description of Proposed Research Project: A statement written by the student in consultation with a faculty mentor should describe: (1) The key elements of the proposed research and plan of study, including stated research question/s and data instruments and/or sources to be used; (2) What the student intends to accomplish; and (3) Clear description of how the proposed work has applications of interest to NASA/LA Space Grant, NOAA/LA Sea Grant and the State of Louisiana.
3. Methods: Describe the proposed methods so that reviewers can make a determination of the appropriateness of the proposed approach, including statistical analyses and design approaches, for achieving the stated objectives.
4. Clearly defined Tasks and a Timeline to complete the tasks.
5. A Plan to Present Findings: (1) To present research methodology and/or research findings at a meeting, conference, or other formal gathering of professional organization(s), association(s), etc. among peer researchers, policymakers, or another relevant audience (presentation of research at the 2023 or 2024 La Space Grant Annual Meeting is excepted); and (2) For purposes of public outreach (e.g., a presentation at a maritime center or planetarium, or presentations to audiences that may include professionals, precollege students, etc.). The Plan to Present Findings does not count toward the four-page limit, described above.
6. Data Management Plan: In addition to the above application, to comply with NOAA’s data and publication sharing directive for grants and contracts, version 3.0 (<https://nosc.noaa.gov/EDMC/PD.DSP.php>), each applicant must develop and submit with their application a data management plan (DMP). The DMP does not count toward the four-page limit, described above. Guidance for developing data management plans is provided on the National Sea Grant Program website: <https://seagrants.noaa.gov/insideseagrant/Implementation>. Plans should be no more than two pages and should include: descriptions of the types of environmental data and information expected to be created during the course of the project; the tentative date by which data will be shared; the standards to be used for data/metadata format and content; methods for providing data access; approximate total volume of data to be collected; and prior experience in making such data accessible. If your project is not expected to develop any environmental data, then your DMP may simply include the declaration: “This proposal is not expected to generate environmental data. Therefore, a Data Management Plan is not required.”

7. Budget plan: This award will be distributed directly to the student in stipend installments after milestones have been met. It is the graduate student's responsibility to manage their budget and determine if any of the funds will be used to cover fieldwork expenses, conference travel, or materials & supplies. Please include a statement here as to how you intend to spend your \$10K, anticipating a \$2500 stipend 4 times over the course of the 12-month period of performance. Final details on the amounts and schedule of disbursements are to be determined in conjunction with LSU administrative offices.
8. Current student CV (limited to two pages)
9. Letter of support from the applicant's faculty mentor. Up to two additional letters of support from end-users and other appropriate parties may be included if they enhance the application.
10. Any additional forms: demographic forms, NEPA, media release, etc

The proposal can contain a Literature Cited section, if needed, which is NOT included in the page limits.

Deadline

Application period opens: Friday, April 28, 2023

Application materials must be received by 11:59 p.m. CT Friday, June 23, 2023.

The submission portal will automatically close the minute after the deadline (12:00 am June 23, 2023), so please plan to submit your application with time to deal with any technical issues.

Review Process

A proposal review panel will include the LA Sea and Space Grant Core Management Team and other experts. if needed. Proposals will be ranked based on their relevance to the identified focus areas, the quality of the proposed work, and adherence to the instructions provided in this request for proposals including the need for a data management plan.

GIRAF Evaluation

Each proposal will be evaluated using the following evaluation form.

GIRAF Evaluation Form

Institution	
Grad Student Name	
Project Title	
Funding Recommendation	

Proposal Formatting and Required Contents
All sections are present and in the right order

Relevance to & Alignment with NASA / NOAA Sea Grant
Clearly aligned to a NASA Mission / Louisiana Sea Grant strategic goals & priorities

Project Specific Requirements
relevance to ghost forest issue is clearly described

Overall Quality of Proposal
Clearly stated research question and objectives

Faculty Mentor Letter of Recommendation
Quality of the letter/s of support

Evidence of Likely Completion of the Project
Appropriate methods and timeline to meet objectives in one-year

Contribution to Public Outreach & DEIA
Thoroughness of plan to present findings

Additional Comments
Additional Comments

Award Funding

The successful applicant will be notified around **July 12, 2023** with projects beginning **August 14, 2023**.

The fellowship award will be distributed as a stipend, with funding dispersed in four installments over the course of the period of performance.

- ~September 1 (pending deliverables)
- ~December 1 (pending deliverables)
- ~April 1 (pending deliverables)
- ~September 1 (pending final report)

Awardee Deliverables

General Requirements:

Fellows are required to Formally Accept the award and submit the following: by **Monday July 17, 2023**:

- Complete required forms from Sea & Space Grant;
- Work with program administrators to set up account for payments;
- Provide a photo (professional style headshot + action shot) and professional biographical sketch upon selection; and
- Agree to abide by all reporting requests from LA Sea Grant and LA Space Grant.

Research Outcomes:

Fellows are required to:

- Mid-Year Progress Report; approved by Faculty mentor due by **February 1, 2024** (with a reflection on known results for the North Carolina participant)
- Submit a Final Research Report by **Tuesday, August 1, 2024** that shall include a detailed summary of research results and an award impact statement (with a reflection on known results for the North Carolina participant). This information will be shared for review and use within LA Space Grant and/or LA Sea Grant;
- Present their findings at a meeting, conference, or other formal gathering of professional organization(s), association(s), etc. among peer researchers, policy-makers, or another relevant audience. Present project plan at the annual LA Space Grant 2023 fall meeting;
- Generate a news story appropriate to a public audience, include content from peer researcher as appropriate.
- Respond to academic and employment follow-up surveys administered as required by the federal government.

Communications:

Fellows are required to:

- Work with the LA Sea Grant and LA Space Grant team to develop and implement a plan to share their research experiences, including but not exclusively on social media, in print and on the program websites.

- In coordination with the NC Grad Fellow Peer: Develop and deliver a presentation that encourages interest in the research topic (Why does this research matter?) among the general public, policymakers, and/or K-12 school students are encouraged by **December 1, 2023**;
- In coordination with the NC Grad Fellow Peer by **Tuesday, August 1, 2024**: Translate the results of their project into in a public forum or educational setting (two-page flyer/white paper/presentation/video) due with the final project.
- Translate the results of their project into a blog post or article for a publication in media outlets such as the Sea Grant and the Space Grant news webpage.

Information Sessions

There will be a virtual information session about this opportunity on Wednesday, June 14th, 10 am – 11am. For an invitation to this info session contact laspace@lsu.edu with subject line “GIRAF Info Session.”

Contact Information

Matt Bethel, LA Sea Grant, mbethe3@lsu.edu

Colleen H. Fava, LA Space Grant, laspace@lsu.edu