

LaSPACE & LSG

Louisiana Space and Sea grant Opportunities (LaSSO)

for Undergraduate Research

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/>

LaSSO Program Summary Page

About the LaSSO Program

The Louisiana Space & Sea grant Opportunities (LaSSO) for Undergraduate Research Program is directed at science and engineering students who are working on projects in research areas deemed a priority by both NASA and NOAA. This is a new project developed in collaboration between the Louisiana Space Grant and Louisiana Sea Grant programs. Likely areas of research focus would include earth science, coastal studies, remote sensing, and similar topics that are relevant to the NASA Earth Science and NOAA missions. It is up to the proposers to provide evidence that the proposed work is of interest to both Agencies.

The intent of the LaSSO program is to supplement and enhance the undergraduate academic curriculum by providing the science/engineering student with a hands-on, mentored research experience relevant to space, earth, coastal, and/or marine sciences. A LaSSO project will be a joint effort between a faculty researcher, who serves as mentor and project Principal Investigator, and an undergraduate researcher. Proposals must clearly identify the Mission Directorate/NASA Center/Research Division at NASA **and** the Louisiana Sea Grant's strategic plan research priority/NOAA Research Division being addressed by this project.

Program Summary

- A LaSSO project should support Louisiana Space and Sea Grants' goal of strengthening the higher education pipeline in STEM fields required for the future space, earth, coastal, and marine workforce. In particular, our objective is to increase the number of undergraduates from traditionally underrepresented groups in STEM who pursue careers and advanced graduate studies in these disciplines.
- We **strongly encourage** proposals from HBCUs and MSIs and/or from students and Faculty Mentors who can demonstrate how their work and related outreach will benefit underserved and underrepresented communities.
- A LaSSO project should expose Louisiana STEM students to the full cycle of a research project from proposal writing, through research and analysis, to budget/ time management, and final reporting.
- Proposals must be co-written by the Faculty Mentor and undergraduate student with a clear plan for the individual student's research work.
- Proposals must be signed off on by the Faculty Mentor PI and the Designated Institutional Representative for Sponsored Programs at your institution.
- A student applicant cannot hold two LURA awards concurrently. Consecutive awards are allowable, **IF** the application explicitly addresses completion of tasks from the previous award, details **distinctly new objectives and tasks for the new award**, includes a draft of the previous award's final report, and has **NO** overlapping period of performance dates for the two awards.
- Awards are for \$4000 for a 9-month academic year with no match requirement. The majority of the funds (\geq \$3k) are to be distributed directly to the student. It is recommended that some travel funds be budgeted for the student to attend at least one professional meeting; including, if possible, the annual LaSPACE Council Meeting Student Poster Session held in the early fall each year.
- All funded Awards: The final invoice and a final technical report co-written by the Faculty Mentor & LaSSO student must be submitted to the LaSPACE office within 30 days of the project end date. Photographs and copies of all papers, presentations, and posters generated should be shared with LaSPACE as they occur

and collected/referenced in the final report. Final Report template is available from the LaSPACE office. Final Report guidelines can be downloaded from the LaSPACE website's [document center](#).

- Data Management Plan: 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). 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."

Proposal Submissions

- **Submit all properly executed proposals via email as fully searchable pdf documents to laspace@lsu.edu by 11:59 pm on Friday, May 20, 2022.**
- Important Dates:
 - Proposal Release Date: Friday, March 11, 2022
 - **Proposal Due Date: Friday, May 20, 2022**
 - Anticipated Award Announcements: June
 - Award Period of Performance: 09/01/2022 - 05/31/2023

Louisiana Space & Sea Grant General Guidelines

Introduction to the Space Grant Program

The Louisiana Space Grant Consortium (LaSPACE) is a Designated Consortium in the NASA National Space Grant and Fellowship Program network, which was designed to network colleges, universities, and state education boards with partners in business, industry, and the non-profit sector in order to promote, develop, and strengthen aerospace science, research, technology, education, and awareness. Our mission is “To enhance Space and Aerospace related research, education, and public awareness throughout the State of Louisiana and thereby promote math/science education, training of professionals, and economic development.” LaSPACE promotes scientific research, workforce development, and public outreach to develop and strengthen long-term research capabilities within Louisiana that will make significant contributions to the research and technology Mission Directorates of NASA while supporting the goals of the state.

Basis of Authority

The Louisiana Space Grant Consortium (LaSPACE) currently comprises Louisiana public and private colleges and universities in addition to business/industry partners and other organizations. The consortium is funded jointly by the National Aeronautics and Space Administration (NASA) and by the Louisiana Board of Regents Support Fund (BORSF). The consortium is administered by the LaSPACE Council, under the aegis of NASA and the Board of Regents. The basis of authority for this and other programs of LaSPACE rests in part on the above funding. It is important, therefore, to note that the implementation of LaSPACE-supported projects must conform to applicable Federal and State regulations, in general, and to the NASA stipulations, in particular.

NASA Agency Information

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](#).

NASA Vision

To discover and expand knowledge for the benefit of humanity.

NASA Mission

Lead an innovative and sustainable program of exploration with commercial and international partners to enable human expansion across the solar system and bring new knowledge and opportunities back to Earth. Support the growth of the Nation’s economy in space and aeronautics, increase understanding of the universe

and our place in it, work with industry to improve America’s aerospace technologies, and advance American leadership.

NASA Office of STEM Engagement

NASA’s journeys have propelled technological breakthroughs, pushed the frontiers of scientific research, and expanded our understanding of the universe. These accomplishments, and those to come, share a common genesis: education in science, technology, engineering, and math. NASA’s [Office of STEM Engagement](#) (OSTEM) delivers tools for young Americans and educators to learn and succeed. OSTEM seeks to:

- Create unique opportunities for students and the public to contribute to NASA’s work in exploration and discovery.
- Build a diverse future STEM workforce by engaging students in authentic learning experiences with NASA people, content, and facilities.
- Strengthen public understanding by enabling powerful connections to NASA’s mission and work.

To achieve these goals, NASA’s Office of STEM Engagement strives to increase K-12 involvement in NASA projects, enhance higher education, support underrepresented communities, strengthen online education, and boost NASA’s contribution to informal education. The intended outcome is a generation prepared to code, calculate, design, and discover its way to a new era of American innovation.

The National Space Grant College and Fellowship Program, from which LaSPACE is derived, is a component of the NASA Office of STEM Engagement’s larger portfolio, managed at NASA Headquarters in Washington D.C., in alignment with the NASA Mission Directorates, and engagement with all NASA centers and facilities.

NASA Office of STEM Engagement, and by extension LaSPACE, supports the four strategic goals detailed in the 2018 plan. Research and design work supported by Space Grant or NASA EPSCoR must align with one or more of these strategic goals and corresponding objectives.

NASA Mission Directorates (MD)

For the LaSSO program projects will exclusively align with the Earth Sciences Division of the Science Mission Directorate.

The [Science Mission Directorate \(SMD\)](#) expands the frontiers of Earth science, heliophysics, planetary science, and astrophysics. Using robotic observatories, explorer craft, ground-based instruments, and a peer-reviewed portfolio of sponsored research, SMD seeks knowledge about our solar system, the farthest reaches of space and time, and our changing Earth.

NASA MD Contacts for University Researchers

Science Mission Directorate (SMD)

POC: Kristen Erickson, Director, Science Engagement Partnerships Phone: (202) 358-1017,
Kristen.Erickson@nasa.gov

NASA Center Liaisons

NASA Goddard Space Flight Center and the NASA Jet Propulsion Laboratory have significant Earth Science portfolios and are the most relevant to the LaSSO program.

Ames Research Center, <i>Veronica Wilson</i> Space Grant Liaison/Specialist Phone: (661) 276-2970 Veronica.I.wilson@nasa.gov	Kennedy Space Center, <i>Theresa Martinez</i> Education Program Specialist Phone: (321) 867-0590 Theresa.c.martinez@nasa.gov
Armstrong Flight Research Center, <i>Veronica Wilson</i> Space Grant Liaison/Specialist Phone: (661) 276-2970 Veronica.I.wilson@nasa.gov	Langley Research Center, <i>Erin Reed</i> Space Grant Liaison/Specialist Phone: (419) 621-3350 Erin.m.reed@nasa.gov
Goddard Space Flight Center, <i>James L. Harrington</i> Computer Research and Development/Space Grant Specialist Phone: (301) 286-4063 James.L.Harrington@nasa.gov	Glenn Research Center, <i>Mark David Kankam, Ph.D.</i> University Affairs Officer/Space Grant Specialist Phone: (216) 433-6143 Mark.D.Kankam@nasa.gov
Jet Propulsion Laboratory, <i>Linda Rodgers or Petra Kneissl</i> Space Grant Program Specialists Linda Phone: (818) 354-3274; Linda.L.Rodgers@jpl.nasa.gov Petra Phone: (818) 201-8805 Petra.A.Kneissl-milanian@jpl.nasa.gov	Marshall Space Flight Center, <i>Kelly McCarthy</i> Education Program Specialist Phone: (228) 688-8228 kelly.mccarthy@nasa.gov
Johnson Space Center, <i>Misti Moore</i> Education Program Specialist Phone: (281) 483-3065 misti.m.moore@nasa.gov	Stennis Space Center, <i>Kelly McCarthy</i> Education Program Specialist Phone: (228) 688-8228 kelly.mccarthy@nasa.gov

Introduction to 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.

Louisiana Sea Grant Research Priorities

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](#)

A. Focus Area: HEALTHY COASTAL ECOSYSTEMS

The maintenance and restoration of healthy coastal ecosystems is fundamental to economies and quality of life along Louisiana's coast. Urban development, overfishing, sea level rise, subsidence and other factors have resulted in wetland loss, water quality degradation and hypoxia, a decline of fisheries, proliferation of invasive species, reduced storm and surge protection, and a host of other challenges to sustainable working coast. Louisiana's invaluable coastal ecosystems have suffered severely from the combined effects of human activities and nature's whims.

To help inform projects that may enhance the state's coastal ecosystems, LASG promotes innovative research and outreach that increases our understanding of ecosystem function and implementation of appropriate designs for restoring lost function. LASG emphasizes three topics under the Healthy Coastal Ecosystem focus area: water quality, coastal restoration and coastal ecosystem services in the context of anticipated climate change impacts. Research goals, outcomes and objectives in this area relate to protecting, restoring and conserving natural resources and developing mechanisms to help natural resource managers make optimal decisions. **LASG encourages Healthy Coastal Ecosystems research with emphasis on the following areas:**

- Develop and share scientific understanding, decision-support tools, technologies and approaches to protect, restore and improve water quality in Louisiana's wetlands, rivers and estuaries.
- Advancing and developing practices, technologies and systems designed to sustain the habitat, diversity and the abundance of coastal ecosystems in Louisiana that are being affected by changes from relative sea-level rise and restoration activities.
- Investigate adaptation strategies to enhance resilient ecosystems in the context of changing conditions to include the effects of increased river flow on food webs in receiving basins, climate fluctuations and restoration activities on animal migrations in estuaries utilizing coastal habitats, etc.

- Develop and share improved predictions of coastal processes (e.g. interior ponding, subsidence, sand shoreline dynamics and shore edge erosion of the marsh platform) under normal and storm conditions, factoring in projected sea-level rise scenarios and other climate change-related effects on these processes over time.

Outcomes may include but are not limited to: greater scientific understanding and technological designs to inform and improve restoration and management of Louisiana’s water resources; improved coordination of Louisiana coastal and river watershed research to fill information gaps needed for decision-making; development of a framework to help guide coastal protection and restoration efforts that support sustainable estuaries given anticipated climate and land use changes; development of natural and/or bioengineered reef and shoreline protection techniques that enhance coastal restoration and protection project efforts; and improved capability of predictive models that establish the relative contribution of factors, including physical climatic processes, which drive coastal change; and adaptation strategies of site selection for restoration activities.

B. Focus Area: SUSTAINABLE FISHERIES AND AQUACULTURE

Louisiana has one of the largest commercial and recreational fisheries in the United States, occurring in a coastal landscape that is experiencing one of the highest rates of wetland habitat loss. Simultaneously seafood consumption nationwide has been on the rise, but global markets and workforce issues present risks to an important part of our economy and culture. LASG, through its research, extension and education activities, and work with industry partners, has helped to stabilize and improve many sectors of the state’s fisheries seafood producing industries. **LASG encourages research in Sustainable Fisheries and Aquaculture with emphasis on the following areas:**

- Identify ways to maximize quality, sustainability, value, safety and use of Louisiana seafood, including harvesting, aquaculture opportunities, processing, marketing strategies and development of underutilized fisheries, as well as local micro-processing capabilities.
- Develop and promote understanding of: the effects of increased river flow on food webs in receiving basins; new fishery adaptation strategies and aquaculture opportunities that could arise from coastal restoration (e.g., river diversions); and climate change impacts (e.g., ocean acidification).
- NOAA has increased research funding available for aquaculture to increase seafood production. LASG is particularly interested in aquaculture projects that meet the objectives as outlined in the national initiative that can be found at https://seagrant.noaa.gov/Portals/0/Documents/Handouts/AquacultureVisionNOAA_March2016.pdf

Outcomes may include but are not limited to: the Louisiana seafood industry employs technologies and reinforces marketing strategies to ensure safe and sustainable seafood and products; consumers have access to and purchase safe and sustainable seafood products; increased understanding and technological solutions aid aquaculture management and production; innovative solutions that increase understanding of climate impacts on fisheries and aquaculture are available and accessible to resource managers and fishing and aquaculture supply chain management; resource managers and fishing and aquaculture communities have access to science and tools to increase their capability to adapt to future resource management needs.

C. Focus Area: RESILIENT COMMUNITIES AND ECONOMIES

Louisiana Sea Grant's resilient communities and economies efforts focus on four topic areas: climate change adaptation, community sustainability, pollution prevention and water resources. The anticipated outcomes will result in increased availability of tools and information, and local and state implementation of related best management practices. Climate change is among the top environmental challenges facing coastal Louisiana and impacts both aquatic and terrestrial ecosystems. It also poses threats to human lives, environments and economies. LASG will continue to help communities and individuals plan for and adapt to projected climate changes, considering the vulnerability and extent of uncertainty in many of the projections. **LASG encourages Resilient Communities and Economies research with emphasis on the following areas:**

- Research innovative designs that aid comprehensive planning and adaptive management strategies to enhance community resilience and improve outreach that increases understanding of how these strategies are communicated between local community residents and policy makers; identify best practices and improved methods for facilitating the reciprocal exchange of knowledge among residents, community leaders, researchers and policy makers.
- Research adaptation capacities and mitigation strategies that promote community resilience to climate-related coastal hazards and restoration activities with a focus on incorporating traditional ecological knowledge (TEK) to enhance community resiliency and adaptive capacity with approaches that take into consideration impacts on diverse, underserved and underrepresented populations.
- Research relationships between ecosystem services, quality of life, and community resilience within coastal habitats, particularly pertaining to habitat changes and shifts due to projected climate change and/or restoration project impacts.
- Investigate existing water policy and explore more beneficial alternatives that include issues of ownership in changing environments and conditions, and planning and implementation related to public safety and risk.
- Develop and share best management practices (BMPs) and measures to protect and manage water resources.

Outcomes may include but are not limited to: resources are available to coastal residents to be able to prepare, respond and adapt to changing environmental conditions and coastal hazards; coastal residents and leadership employ adaptive management strategies and apply tools to engage diverse members of the community to improve resilience and community sustainability; resources are available to help coastal residents and leadership better understand ecosystem services and associated values of coastal habitats in areas experiencing ongoing or predicted habitat shifts and coastal restoration activities; information is available that clarifies the linkages and feedbacks between the natural and human components to evaluate long-term coastal resilience; improved outreach and decision-support tools will help guide planning processes related to the state's water resources; sound science, data, tools and services are available to coastal residents to better design adaptation strategies, develop informed decisions and anticipate changes in water quality and quantity; and communities have access to science, tools, and technologies to protect and sustain water resources and make informed decisions.

D. Focus Area: ENVIRONMENTAL LITERACY AND WORKFORCE DEVELOPMENT

The myriad challenges facing coastal Louisiana require an environmentally literate population to make informed decisions. Similarly, to effectively address these challenges a well-trained workforce with a fundamental understanding of the ecological, economic, aesthetic, cultural and ethical values of Louisiana resources is required. Classroom and community engagement programs should be developed for all learners, consider K-gray audiences and include underserved and underrepresented populations. Materials developed for K-12 classrooms should address state and federal education standards and seek to encompass Louisiana-based phenomena. **LASG encourages Environmental Literacy and Workforce Development research with emphasis on the following areas:**

- Research methodologies to engage the public in community adaptive management planning processes given changing conditions by providing best available information.
- Research in instruction methods to increase effective environmental literacy for Louisiana's K-12 teachers and students through education and outreach programs.
- Research in communication and engagement methodologies to increase opportunities for Louisiana's undergraduate and graduate students, as well as university faculty, to gain knowledge and experience in the science and management of Louisiana's watershed, coastal and marine resources.
- Research methodologies in preparing a responsive and diverse workforce to advance and benefit from sectors that support the needs of Louisiana's coastal communities and ecosystems (e.g. industry, research, government, etc.), and to adapt and thrive in changing conditions.

Outcomes may include but are not limited to: community science initiatives improving knowledge of Louisiana's coastal ecosystems, knowledge and tools for K-12 teachers to instruct students about Louisiana-specific phenomena, contributions to adaptive management for increased flood risk planning, professional development opportunities that increase literacy and preparedness for working on science and policy issues, fostering a sense of stewarding for coastal resources and developing materials and pathways so that existing and future workforces can adapt and thrive to changing conditions.

The Louisiana Space Grant Program

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.

LaSPACE Program Administration & Institutional Coordinators

General administration and management is the responsibility of the LaSPACE Staff headquartered at LSU. Questions about applications to any LaSPACE programs should be directed to the program management team via the general laspace@lsu.edu email address. Unless otherwise directed, all proposals, invoices, reports, and queries should also be submitted via email to the program email address (laspace@lsu.edu). Please refer to [the LaSPACE FAQs](#) before contacting LaSPACE management and/or coordinators.

LaSPACE Program Office, laspace@lsu.edu, 225-578-8697

LSU Department of Physics & Astronomy | 364 Nicholson Hall, Baton Rouge, LA 70803

T. Gregory Guzik, Director, tgguzik@lsu.edu | Colleen H. Fava, Assistant Director, colleenf@lsu.edu | Meaghin Woolie, Program Manager, mwooli2@lsu.edu | Doug Granger, Student Flight Program Manager, dgrang2@lsu.edu | Aaron Ryan, Flight Associate & Outreach Manager, aryan21@lsu.edu

Additionally, all member institutions have appointed an institutional coordinator who sits on the LaSPACE Advisory Council and is available to discuss opportunities and processes related to LaSPACE programs. Contact information for all advisors is provided below. For institutions with a vacancy, contact the program manager listed above.

LaSPACE Affiliate Institutional Coordinators

Baton Rouge Community College (BRCC)	Sandra Guzman	guzmans@mybrcc.edu	225-216-8213
BREC / Highland Road Park Observatory (HRPO)	Christopher Kersey	o@brec.org	225-768-9948
Cain Center for STEM Literacy (Cain Center)	Frank Neubrandner	fneubr1@lsu.edu	225-578-4082
Delgado Community College (DCC)	Raymond Duplessis	rduple@dcc.edu	504-671-6419
Dillard University (Dillard)	Abdalla Darwish	adarwish@dillard.edu	504-816-4840
East Baton Rouge Parish Library (EBRPL)	Mary Stein	mstein@ebrpl.com	225-231-3710
Grambling State University (GSU)	Matthew F. Ware	waremf@gram.edu	318-274-2391
LaSTEM at LA BOR (LaSTEM)	Clint Coleman	Clint.coleman@laregents.edu	504-352-4891
Louisiana Arts and Science Museum (LASM)	vacant	vacant	vacant
La Board of Elementary & Secondary Education (BESE)	Ann Wilson	ann.wilson@la.gov	225-342-0140
Louisiana Board of Regents (BOR)	Jessica Patton	jessica.domingue@la.gov	225-342-4253
Louisiana Business and Technology Center (LBTC)	Roy Keller	rkeller@lsu.edu	225-578-3985
Louisiana Economic Development (LED) FastStart	Susana Schowen	susana.schowen@la.gov	225-342-5729
Louisiana Public Broadcasting (LPB)	Christina Melton	cmelton@lpb.org	225-757-4215
Louisiana State University and A&M College (LSU)	Stephen D. Beck	sdbeck@lsu.edu	225-578-5833
Louisiana State University at Alexandria	Gerard Dumancas	gumancas@lsua.edu	318-427-4436
Louisiana State University Agricultural Center (LSU-Ag)	Wade Baumgartner	wbaumgartner@agcenter.lsu.edu	225-578-7742
Louisiana State University Health Sciences (LSUHSC)	Lynn Harrison	lynn.clary@lsuhs.edu	318-675-4213
Louisiana State University of Shreveport (LSUS)	Urska Cvek	urska.cvek@lsus.edu	318-795-4266
Louisiana Tech University (LaTech)	Mary Caldorera-Moore	mcmoore@latech.edu	318-257-2207
Loyola University (Loyola)	Martin McHugh	mmchugh@loyno.edu	504-865-2451
McNeese State University (McNeese)	Ning Zhang	nzhang@mcneese.edu	337-475-5873
National Center for Biomedical Research & Training (LSU-NCBRT)	Jason Krause	jkrause@ncbirt.lsu.edu	225-578-0285

Nicholls State University (Nicholls)	Matt Marlow	matthew.marlow@nicholls.edu	985-448-4576
Northshore Technical Community College (NTTC)	Chuck Crabtree	charlescrabtree@northshorecollege.edu	985-545-1231
Northwestern State University of Louisiana (NSULA)	Anna Dugas	dugasa@nsula.edu	318-357-5519
Nunez Community College (NCC)	Andreas Pashos	apashos@nunez.edu	504-278-6287
River Parishes Community College (RPCC)	Esperanza Zenon	ezenon@rpcc.edu	225-743-8713
SciPort Louisiana's Science Center	vacant	<u>vacant</u>	vacant
Southeastern Louisiana University (SELU)	Gerard Blanchard	gerard.blanchard@selu.edu	985-549-2159
Southern University and A & M College (SUBR)	Michael Stubblefield	michael_stubblefield@subr.edu	225-771-5231
Southern University of New Orleans (SUNO)	Illya Tietzel	itietzel@suno.edu	504-286-5111
Tulane University (Tulane)	Mark J. Fink	fink@tulane.edu	504-862-3568
University of Louisiana at Lafayette (ULL)	Afef Fekih	afef.fekih@louisiana.edu	337-482-5333
University of Louisiana at Monroe (ULM)	Ken Leppert	leppert@ulm.edu	318-342-1918
University of New Orleans (UNO)	Matthew Tarr	mtarr@uno.edu	504-280-1038
Xavier University of Louisiana (Xavier)	Ashwith K. Chilvery	achilver@xula.edu	504-520-5149

Louisiana Space & Sea Grant Requirements and Restrictions

In this section, requirements and restrictions applied to all LaSPACE programs are summarized. Additional requirements and restrictions pertaining to individual programs offered by LaSPACE are detailed later in these guidelines.

Public Nature of Applications

Once an application is received in the LaSPACE office, it becomes public record. Although the staff will not disseminate applications to individuals other than to reviewers, applicants should be aware that, if a request for information is made by the public (e.g., the news media), a copy of the application, by law, must be provided.

Disclosure of Information

All LaSPACE programs must conform to applicable Federal, State and NASA regulations and stipulations. This includes annual reporting of award participant information to both the Louisiana Board of Regents and NASA. Part of this information will include both directory information such as name, address, telephone number, date of birth, and demographic information such as gender, ethnicity, and race for all award participants including faculty, staff, and students. Further, LaSPACE outreach includes public dissemination of its supported programs through *The Newsletter*, the LaSPACE website (<https://laspace.lsu.edu/>), as well as papers and/or presentations at Space Grant or related Education & Public Outreach conferences. The contents of award reports, including participant names, titles, institution, project summaries, results or conclusions and images, might be included in such public outreach articles. It is not intended that these public articles will disclose directory or demographic information except as aggregated statistical data.

Diversity

It is a national priority to increase diversity in Science, Technology, Engineering, and Mathematics (STEM), from university students, faculty, and staff to industry employees. Traditionally, minority groups and women have been under-represented in the STEM disciplines as students and faculty as well as in the workplace after graduation. LaSPACE is committed to addressing this priority and utilizing its programs, to the degree possible, to increase the diversity among its awardees. **All proposers are expected to help recruit diverse participants to their proposed projects.** To ensure that PIs are making a reasonable effort to recruit diverse participants, a diversity recruitment plan must be included in all proposals submitted to LaSPACE.

Animal Use

Any project proposing the use of an animal model for validation must include a local IACUC approval letter, fully signed, which specifies a validity period longer than the proposed project period. Failure to obtain the Institutional Animal Care and Use Committee's approval in advance, is grounds for returning the proposal unreviewed. Attach the IACUC material as an additional appendix.

Human Subjects

Projects that involve human subjects are not acceptable for this program.

Eligibility

PI must be associated with a LaSPACE affiliated institution. PI must be a research or tenure-track faculty member or designated institutional representative recognized by LaSPACE and approved for PI status at their home

institution. All LaSSO funded participants must be U.S. citizens. Additional, or altered, restrictions may apply to specific programs.

Concurrent, Overlapping, and Consecutive Awards

PIs may hold more than one LaSPACE Award concurrently with some restrictions. First, no student may be funded simultaneously via multiple awards in the scholarship/fellowship programs (GSRA, Fellows, LaSSO, LURA, & HIS programs). Consecutive, non-overlapping awards in these program areas may be issued to exceptional students in the midst of extended research. Proposals for additional year(s) of funding may be submitted if 1) the previous period of performance has recently passed or is 60 days or less from completion, 2) must explicitly reference the completion of proposed tasks from the current/previous award within the new proposal, 3) **must include a final report, or preliminary final report if still in progress, in an appendix**, and 4) must clearly state the objectives and goals for the new proposal differentiating said goals from the prior work.

Budgeting

Capital Equipment purchases and Foreign Travel are not allowable costs. **Any requests to rebudget funds must be submitted in writing to laspace@lsu.edu for consideration.** A detailed justification for the rebudget must be included and minimum requirements for direct student funding commitments must be met.

Disbursement of Funds

LaSPACE Award fund distribution will be managed by the applicant's college or university, either via a cost-reimbursable subcontract if the applicant is at an affiliate other than LSU, or by transfer of funds from LaSPACE to the applicant's department for projects at LSU. The institution/department will assume responsibility for administering, distributing, and documenting costs charged to this program.

Period of Performance

Unless otherwise stated, LaSPACE programs have a default period of performance of no greater than 12 months. The period of performance for the LaSSO program is an academic year, defined as 9 months, running from August/September to May.

No cost extensions (NCEs) for ongoing projects may be submitted to the LaSPACE program office no later than 60 days before the initial project end-date. All NCE requests must be submitted to laspace@lsu.edu and must include a status report which addresses all accomplishments made to-date on the project (including all publications, proposals, presentations, patents, etc), where the project is in relation to the originally proposed end date, reasons why the project has been delayed, and a proposed plan for completing the project. This status report must also identify all participants on the project (students, post-docs, faculty, and staff).

Louisiana Space & Sea grant Opportunities (LaSSO) for Undergraduate Research Program Application Guidelines

About the LaSSO Program

The Louisiana Space & Sea grant Opportunities (LaSSO) for Undergraduate Research Program is directed at science and engineering students who are working on projects in research areas deemed a priority by both NASA and NOAA. This is a new project developed in collaboration between the Louisiana Space Grant and Louisiana Sea Grant programs. Likely areas of research focus would include earth science, coastal studies, remote sensing, and similar topics that are relevant to the NASA Earth Science and NOAA missions. It is up to the proposers to provide evidence that the proposed work is of interest to both Agencies.

Program Description

The intent of the LaSSO program is to supplement and enhance the undergraduate academic curriculum by providing the science/engineering student with a hands-on, mentored research experience relevant to space, earth, coastal, and/or marine sciences. A LaSSO project will be a joint effort between a faculty researcher, who serves as mentor and project Principal Investigator, and an undergraduate researcher. Proposals must clearly identify the Mission Directorate/NASA Center/Research Division at NASA and the Louisiana Sea Grant's strategic plan research priority/NOAA Research Division being addressed by this project. Projects focused exclusively on NASA Research not of relevance to NOAA should be submitted to the LaSPACE [LURA program](#), while projects exclusively focused on NOAA priorities should be submitted to the LA Sea Grant's [UROP program](#).

The LaSSO award provides financial support in the amount of \$4000 for the student researcher, who will be designated as a LaSSO Undergraduate Researchers. The majority of the funds, \geq \$3000, must go directly to the student with the remaining funding used for supplies, travel, or additional financial support to the student. The period of performance is 9 months, with an expected award period of 09/01/2022 to 05/31/2023.

A joint application is submitted by both the student and the faculty mentor. Student applicants must coordinate their effort with a faculty mentor and be able to devote 10-20 hours per week to the project. Faculty mentors must 1) be affiliated with a LaSPACE campus, 2) be engaged in research or education projects explicitly aligned with the Earth Sciences Division of the NASA Science Mission Directorate, which is also of a priority to NOAA/ Louisiana Sea Grant, and 3) serve as the student faculty mentor and subaward PI. Applications are judged by the relevance of the research project to the NASA & NOAA missions, the student's future career plans, scholastic accomplishment, science experience, leadership, and intellectual ability as well as the faculty mentor plan for student academic development and opportunities for student presentations.

Eligibility

To be eligible to apply for a LaSSO award, an applicant must meet each of the following criteria:

Undergraduate Research Assistant Requirements:

1. They must be a U.S. Citizen.
2. At the time of application, an applicant must currently be enrolled at a LaSPACE College/University.
3. The current or prospective field of study of an applicant must be in a STEM discipline with career goals relevant to the NASA and/or NOAA missions.
4. An applicant must pursue their undergraduate degree on a full-time basis.
5. The applicant must coordinate with a faculty/mentor who will file a joint application with the student.
6. The student applicant must be able to devote 10-20 hours per week to the project for a full academic year.
7. The proposal must include a project plan written with the PI that details all the tasks and deliverables to be completed by the student, and a final report, also jointly written, must be produced with results that match the submitted project plan.

NOTE: Occasionally, a student originally included in the project proposal cannot participate. It is permissible for the PI to replace the student, but this replacement must be requested in writing and approved by the LaSPACE office (including LaSPACE approval of the new student's application).

Faculty Mentor/Principal Investigator

1. The faculty member must be affiliated with a LaSPACE campus.
2. The faculty member must serve as mentor to the student researcher and be contractually responsible for the award.
3. The faculty/mentor must be engaged in research which relates to the NASA Science Mission Directorates Earth Science Division **and** a NOAA mission research priority.
4. The proposal must include a project plan written with the student that details all the tasks and deliverables to be completed by the student, and a final report, also jointly written, must be produced with results that match the submitted project plan.

NOTE: A change in PI is possible if justified in a written request and approved by LaSPACE and/or LSG.

LaSSO Award Terms and Conditions

Award Funds

A LaSSO award is set at \$4k per student with no match requirement. The majority of the funds (\geq \$3k) are to be distributed directly to the student. It is recommended that some travel funds be budgeted for the student to attend at least one professional meeting; including, if possible, the annual LaSPACE Council Meeting Student Poster Session held in the fall each year.

Award funds will be provided to the College or University in which a winning PI/student candidate team is enrolled, via cost-reimbursable subcontract. The campus will assume responsibility for administering and distributing these monies according to standard procedures and consistent with all federal and state rules and guidelines. It is understood by all LaSPACE member campuses that these funds are to be used for support of the student award recipient and for supplies and/or travel.

Duration

A LaSSO award is usually for an academic year, defined here as 9 months. In order to complete goals, and with prior written justification, a No Cost Extension may be granted.

Number of Awards

LaSPACE & LSG intend to award 3 to 6 LaSSO awards each year.

Equal Opportunity / Diversity

Applicants from groups under-represented in Math, Science, and Engineering are especially encouraged. African Americans, Native Americans, Mexican Americans, Puerto Ricans, Alaskan Natives, Native Pacific Islanders, Hispanics, women, and persons with disabilities are strongly urged to apply. No applicant shall be denied consideration or appointment to a LaSSO award on the grounds of race, creed, color, age, gender, or disability. LaSPACE / LSG also seek to recruit proposers from a variety of institutions and disciplines. PIs must show a commitment to Diversity by including a diversity recruitment plan.

Student Support

The majority of the award is expected to be student support (\$3000 minimum).

Supplies & Travel

The materials, supplies, and travel budget categories are limited to a total of \$1000. The travel budget category is restricted to travel for the student. No foreign travel is allowed.

Equipment

The use of LaSSO grant funds for the purchase of equipment is prohibited.

Indirect Costs

F & A (Indirect) charges are waived for LaSSO awards as per the NASA grant. Indirect/overhead (F & A) and fringe charges are prohibited on these funds. There is no cost-share for this award and no way to charge unrecovered indirect.

Re-Application to the Program

After an award term has expired, applicants may apply for another supplement in order to continue promising research and progress toward the degree. Reapplication is contingent on the availability of funds, satisfactory progress in the research work, submission and approval of the Final Technical Report for previous awards, and the continued fulfillment of the eligibility criteria. No re-application will be considered until the previous award's final/preliminary technical report and final financial report are submitted and approved. There can be no overlap of the periods of performance on consecutive awards.

Animal Use

Any project proposing the use of an 'animal model' for validation must include a local IACUC approval letter, fully signed, which specifies a validity period longer than the proposed project period. Failure to obtain the Institutional Animal Care and Use Committee's approval in advance, is grounds for returning the proposal unreviewed. Attach the IACUC material as an additional appendix.

Human Subjects

Projects that involve human subjects are not acceptable for this program.

LaSSO Proposal Requirements & Format

LaSSO proposals should be submitted as fully searchable pdf documents via email to laspace@lsu.edu. A LaSSO proposal **must** include the following completed sections in the order presented:

- LaSSO Cover Page
- Proposed Project Summary Form
- A. LaSSO Student Application written by the Student Researcher/Applicant (not to exceed 7 pages including application cover sheet)
- B. Proposal Narrative written by the Faculty Mentor/PI (not to exceed 5 pages)
 1. Overview of the Faculty Mentor's research
 2. Explicit statements of alignment with a specific research program/group within the NASA Science Mission Directorate Earth Sciences Division **and** the NOAA Mission Research Priority or Division. Broad and general statements about relevance to NASA/NOAA will not fulfill this requirement.
 3. Diversity Recruitment (explicitly describe the steps taken to encourage / recruit diverse students to your lab in general and this project in particular; include details regarding obstacles, challenges, successes, & failures in this recruitment process)
 4. Proposed work plan for the student, including a timeline with major milestones
 5. Benefits to the Student (technical & scientific skills)
 6. Professional Development Opportunities (lab meetings, authoring papers, poster presentations, etc.)
 7. Benefit to the Research Project (how will the student researcher help advance your project)
- C. Letter of Recommendation from the Faculty Mentor/PI for proposed student
- D. Budget (LaSPACE Budget Form followed by detailed narrative explanation of all costs)
- E. Student Participant Online Form Completion Certification
- F. NASA Media Release Form (completed by PI and student applicant)
- G. For Consecutive Award Requests only: Include preliminary final technical report here for the current LaSSO

NOTE to Proposers:

- Do NOT include anything that is not explicitly listed above. If you believe additional content/sections are needed, contact our office at laspace@lsu.edu to request permission.
- Do NOT include the guidelines in your proposal submission.

LaSSO Evaluation

Each proposal will be evaluated using the following evaluation form. **Review Process:** A proposal review panel will include the LA Space and Sea Grant Core Management Team and other in-state experts as needed. Applications will be ranked based on their relevance to the identified focus areas, the quality of the proposed work, evidence of likely completion of the project, contribution to diversity, budget appropriateness, and adherence to the instructions provided in this request for proposals.

LaSSO Evaluation Form

Institution	
PI Name	
Proposal Title	
Funding Recommendation	

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

Relevance to & Alignment with NASA
Clearly aligned to an explicitly stated program or group within the NASA Science Mission Directorate Earth Sciences Division AND a NOAA Mission Research Priority or Division

Overall Quality of Proposal
Clarity & quality of the proposed work and key personnel

Evidence of Likely Completion of the Project
Management and task plan is detailed and specific; evidence of past success

Contribution to Diversity (not just student and faculty participation, but institutions & disciplines)
We aim to support projects around the state and not only on the same few campuses focused on the same handful of disciplines. The diversity recruitment plan followed to recruit the student for this project must be included.

Budget Appropriateness
Appropriate to the work and to the goals of this program. Sufficient narrative details on costs.

Additional Comments
Additional Comments

Attachments

Required Proposal Forms

Required Forms for Proposal

All proposals submitted to LaSPACE must use the forms included following this page. Proposals not using these forms may be rejected without review.

- Cover Sheet
- Proposed Project Summary
- Proposal Budget Form
- Student Participant List (online form completion certification)
- NASA Media Release Form (completed by PI and all identified student participants)

Louisiana Space & Sea grant Opportunities Proposal Cover Sheet

1. Title of Proposed Project: _____

2. Principal Investigator: _____
(Name) (Highest Degree Earned) (Citizenship)

(Department)

3. Institution of Higher Education: _____

4. Address: _____
(Street Address/P.O. Box Number)

(City, State) (Zip Code)

5. Telephone: _____ FAX: _____

E-mail: _____

6. Date of Submission: _____

7. Total Funds Requested: \$ _____ Institutional Match: \$ n/a _____

Certification of Compliance with Applicable Executive Orders and U.S. Code: By signing and submitting this proposal, the signatories certify that the statements made in this proposal are true and complete to the best of their knowledge; they agree to comply with LaSPACE award terms and conditions if an award is made as a result of this proposal; and the institution and proposed project are in compliance with all applicable Federal and State laws and regulations including, but not limited to, Executive Order 12549, Debarment and Suspension, 34 CFR Part 85, Section 85.510, Participant's responsibilities; Non-Discrimination; Certification against Lobbying imposed by section 1352, title 31, U.S. Code; Compliance with China Funding Restriction as detailed in Public Laws 112-10 Section 1340(a) and 112-55, Section 539; ACORN Compliance in accordance with 534 of the Consolidated and Further Continuing Appropriations Act of 2012 (Pub. L.112-55); and does not have a federal tax liability or federal felony conviction (sections 544 and 543 of Public Law 112-55).

8. Signature of Principal Investigator: _____

9. Name of Authorized Institutional Rep: _____

10. Signature of Authorized Institutional Rep: _____

11. Date Signed: _____

Proposed Project Summary

NAME OF INSTITUTION (INCLUDE BRANCH/CAMPUS AND SCHOOL OR DIVISION)
ADDRESS (INCLUDE DEPARTMENT, BUILDING & ROOM #, CITY, STATE, ZIP)
PRINCIPAL INVESTIGATOR NAME, TITLE, & EMAIL
STUDENT RESEARCHER NAME & EMAIL
PROJECT TITLE
PROPOSED PROJECT START DATE 09/01/2021 – 05/31/2022
ABSTRACT (DO NOT EXCEED 250 WORDS)

Louisiana Space & Sea grant Opportunities Proposal Budget Form

Include this form in your proposal. Be sure to only ascribe funds to categories explicitly open to the program area to which you are applying. Following this form, include a detailed narrative explanation of all proposed costs.

Proposal Title: _____

Principal Investigator: _____

Institution: _____

	LaSPACE Funds Requested	Institutional Match Funds*
A. Direct Labor		
1. Researchers	\$ n/a	\$ n/a
2. Graduate Student(s)	\$ n/a	\$ n/a
3. Undergraduate Student(s)	\$	\$ n/a
4. Fringe Benefits	\$ n/a	\$ n/a
5. Subtotal A	\$	\$ n/a
B. Supportive Expenses		
1. Travel	\$	\$ n/a
2. Supplies & Materials	\$	\$ n/a
3. Communications & Equipment	\$ n/a	\$ n/a
4. Other Direct Costs (Identify)	\$ n/a	\$ n/a
5. Subcontracts	\$ n/a	\$ n/a
6. Subtotal B	\$	\$ n/a
7. F&A (Indirect)	\$ n/a	\$ n/a
C. Total Project Cost		
	\$	\$ n/a

**Must be certified on all financial billings/reports.*

Student Participant List

Student Participant List must be completed and online demo forms filled out in advance of submitting this application.

Name	Classification	Major	Project Role
<i>e.g. Jane Smith</i>	<i>Undergraduate, Junior</i>	<i>Electrical Engineering</i>	<i>Electrical Design Lead; Technical Writing Co-Lead</i>

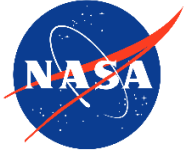
[Link to Undergraduate Student Participation Form](#)

Check this box to confirm that all students listed above have completed an online participant form. Include this page in your proposal.

Online Student Participant Form Guidance (applicable to all submissions):

Please provide the following guidance to students completing the online participant form.

- The online form should be completed and submitted by all student participants.
- Upon completion of the form, students will see an option to “print or get PDF of answers.” It is recommended that students save a copy of their answers to their local device for their own records.
- The **Faculty Advisor/ Mentor (question 12)** should be the PI who is submitting this proposal. Please provide the students with your office phone number and email address to input.
- The **Program (question 15)** should be the program for which students are currently applying/participating in. If working under multiple LaSPACE projects, students will submit a demographic form for each separate project. For this proposal students will select LaSSO.
- The **Project Start Date (question 16)** should be 9/1/2022 for students under this current proposal submission. For this program select LaSSO.
- The **Participating Semester(s)** should be the “Fall 2022, Spring 2023” option.



I, , hereby give permission to be interviewed, photographed, and/or videotaped.

I understand and agree that the text, photographs, and/or videotapes thereof containing my name, likeness, and voice, including transcripts thereof, may be used in the production of instructional, promotional materials, and for other purposes that NASA deems appropriate; and such materials may be distributed to the public and displayed publicly one or more times and in different formats, including but not limited to, websites, cablecasting, broadcasting, and other forms of transmission to the public.

I also understand that this permission to use the text, photographs, videotapes, and name in such material is not limited in time and that I will not receive any compensation for granting this permission.

I understand that NASA has no obligation to use my name, likeness, or voice in the materials it produces, but if NASA so decides to use them, I acknowledge that it may edit such materials. I hereby waive the right to inspect or approve any such use in advance or following distribution or display.

I hereby unconditionally release NASA and its representatives from any and all claims and demands arising out of the activities authorized under the terms of this agreement.

By signing below, I represent that I am of legal age, have full legal capacity, and agree that I will not revoke or deny this agreement at any time.

I have read the foregoing and fully understand its contents.

Accepted by:

Signature: Date:

Address:

Cell Phone:

Email Address:

Name and Location of Event:

Note: This release pertains to my likeness captured by LaSPACE / LA NASA EPSCoR program staff and/or funded participants, as well as media I submit to the LaSPACE Management office documenting experiences related to this Project. This release is valid for all documentation submitted or released for the duration of the project. This waiver gives LaSPACE/ LaNASA EPSCoR team, LSU, the LA BoR, & NASA permission to share my likeness.



The updated LaSSO application form is included after this page. It must be completed and signed by the student and included in the complete proposal submitted for Review by LaSPACE & LSG.

Louisiana Space & Sea grant Opportunities (LaSSO) for Undergraduate Research Application Form

Name: _____

University: _____

Current Classification (check one): Freshman Sophomore Junior Senior

Major(s)/Minor(s): _____

Current G.P.A.: _____ SAT or ACT Scores: _____

Anticipated Graduation (Month/Year): _____

Will you or your siblings be the first in your family to graduate from college? ____ Yes ____ No

Faculty Mentor: _____ Department: _____

Advisor Phone: _____ Advisor E-mail: _____

Student Applicant Signature: _____ Date: _____

Insert Last Name at the top of All Pages

List in REVERSE chronological order colleges/universities and the last high school attended starting with current institution.

Institution	City	State	Dates Attended	Degree Earned Or expected	GPA/Base
_____	_____	_____	_____	_____	____/____
_____	_____	_____	_____	_____	____/____
_____	_____	_____	_____	_____	____/____
_____	_____	_____	_____	_____	____/____

Use up to 6 pages to complete the following sections (*Insert Last Name at the top of All Pages*)

1. List scholarships, academic honors, student leadership roles, honorary societies, awards, and any other recognition relevant to your application (*Include any scholarship or office of any kind held at the time of the submission of this application*).
2. List any work experiences, research activities, or outside interests relevant to your field of study. Provide brief descriptions, as applicable.
3. In a concise statement, summarize the objectives of your educational program and your long-range professional goals and how participation in this LaSSO program and this research project will help you achieve your goals (Provide sufficient information for evaluation by reviewers).
4. Discuss the NASA Earth Science **AND** NOAA/Sea Grant relevance of the research project and its relationship to your academic/professional goals. Be explicit in explaining how the work you will perform under this award aligns with NASA and NOAA Research, and how your academic/career plans support the goals and priorities of NASA and/or NOAA.
5. Provide a summary of the project work plan detailed by the PI in the proposal, delineate the specific work you will do, capabilities & skills you will acquire, and list all expected deliverables or outcomes (including planned presentations, if known).