LaSPACE

Research Enhancement Award (REA) Program

Notice of Funding Opportunity (NOFO) & Proposal Guidelines
Offered by the Louisiana Space Grant Consortium



Under the authority of the NASA Space Grant College and Fellowship Program & the Louisiana Board of Regents

LaSPACE Program Director: Colleen H. Fava

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REA Program Summary Page

About Research Enhancement Awards (REA)

The LaSPACE Research Enhancement Awards (REA) Program is intended to provide support for faculty (and students) at LaSPACE member institutions, particularly aimed at the emerging researcher or an established researcher who wishes to pursue new research directions, for the development of projects, contacts, and collaborations that will bring Louisiana scientists into the mainstream of NASA related research activity. The REA Program is funded by state matching funds, through the Louisiana Board of Regents Support Fund. The awards are intended to develop expertise and to contribute to research competitiveness. However, awards are not intended purely to support faculty salaries or student stipends. It is anticipated (and advised) that students will be involved in REA projects, but the overriding goal is the development of research capabilities and infrastructure in support of the country's space/aerospace endeavors. Contacts/collaborations/ties to NASA centers and NASA researchers are strongly encouraged; evidence of NASA-alignment is required.

Program Summary

- A **Notice of Intent (NOI)** to propose is required for the REA program. NOIs do not need to be routed for institutional approvals/signature the way the final proposal needs to be.
- The overall goal for this program is to effectively utilize the resources available through LaSPACE as incentive for faculty and students: 1) to develop research competitiveness, 2) to develop new research projects or directions, and 3) to foster collaborations with NASA researchers, federal laboratories, and with the business/industry community.
- Faculty affiliated with LaSPACE campuses are eligible to apply. On ALL proposals, only one PI can be proposed. Additional personnel should be listed as key personnel / researchers.
- PIs may only submit one proposal per competition cycle.
- Proposals must be signed off on by the Project PI and the Authorized Organizational Representative for Sponsored Programs at your institution.
- Student tuition is expressly forbidden on requested funds but is allowed as part of the institutional match.
- The final invoice and a final project report 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
 guidelines can be downloaded from the LaSPACE website's document center. A link to our new online
 reporting tool is also available.

IMPORTANT NOTE: This competition is being conducted in advance of LaSPACE receiving our formal contract for the next multiyear Space Grant award, which begins June 10, 2025. Any changes in restrictions / requirements included in our parent award from NASA will be passed down to all subawardees. Modifications to your proposal will be requested, if needed! Additionally, this program is funded by LA Board of Regents cost-match and is contingent upon available funding from the Louisiana Quality Educational Support Fund.

Proposal Submissions

- Submit all properly executed proposals via email as fully searchable pdf documents to laspace@lsu.edu by 11:59 pm on Tuesday, June 17, 2025.
- Important Dates:
 - o Proposal Release Date: Tuesday, April 22, 2025
 - o NOI Due Date: Tuesday, May 20, 2025
 - o Proposal Due Date: Tuesday, June 17, 2025
 - o Anticipated Award Announcements: July/August 2025
 - o Award Period of Performance: 09/15/2025 06/30/2026

LaSPACE 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 to promote, develop, and strengthen aerospace science, research, technology, education, and awareness. 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 goals at 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 other government and science organizations. The consortium is funded jointly by the National Aeronautics and Space Administration (NASA) and by the Louisiana Board of Regents Support Fund (BORSF), as well as significant cost share and support from the lead institution Louisiana State University. The consortium is administered by the LaSPACE Management team at LSU with input from the LaSPACE Council (comprised of affiliate representatives), 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. Reductions in federal funding will directly impact funding levels for our programs. Reductions or elimination of the La Board of Regents administered Support Fund will result in the reduction or elimination of the REA program.

NASA Agency Information

NASA 2022 Strategic Plan

NASA's 2022 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: Expand human knowledge through new scientific discoveries
- EXPLORE: Extend human presence to the Moon and on towards Mars for sustainable long-term exploration, development, and utilization
- INNOVATE: Catalyze economic growth and drive innovation to address national challenges
- ADVANCE: Enhance capabilities and operations to catalyze current and future mission success

The complete plan can be downloaded here.

NASA Vision

Exploring the secrets of the universe for the benefit of all.

NASA Mission

NASA explores the unknown in air and space, innovates for the benefit of humanity, and inspires the world through discovery.

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 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 all 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 Mission Directorates (MD)

Research, technology, and development priorities of your proposed project must align with one or more of NASA's Mission Directorates:

Aeronautics: Results achieved by NASA's aeronautical innovators through the years directly benefit today's air transportation system, the aviation industry, and the passengers and businesses who rely on those advances in flight every day. As a result, every U.S. commercial aircraft and U.S. air traffic control tower uses NASA-developed technology to improve efficiency and maintain safety.

Exploration Systems: The Exploration Systems Development Mission Directorate manages human exploration system development for lunar orbital, lunar surface, and Mars exploration. Artemis missions will open a new era of scientific discovery and economic opportunity on the Moon while validating operations and systems and preparing for human missions to Mars. Programs in the directorate include the Space Launch System rocket, Orion spacecraft, supporting ground systems, human landing systems, spacesuits, and Gateway.

Science: The Science Mission Directorate is an organization where discoveries in one scientific discipline have a direct route to other areas of study. This flow is something extremely valuable and is rare in the scientific world. From exoplanet research to better understanding Earth's climate to understanding the influence of the sun on our planet and the solar system, the directorate's work is interdisciplinary and collaborative.

<u>Space Operations</u>: The Space Operations Mission Directorate maintains a continuous human presence in space for the benefit of people on Earth. The programs within the directorate are the heart of NASA's space

exploration efforts, enabling Artemis, commercial space, science, and other agency missions through communication, launch services, research capabilities, and crew support.

Space Technology: Technology drives exploration and the space economy. NASA's Space Technology Mission Directorate aims to transform future missions while ensuring American leadership in aerospace. The directorate develops, demonstrates, and transfers new space technologies that benefit NASA, commercial, and other government missions.

All NASA Space Grant subprograms must relate to and support one or more of these directorates. Likewise, all programs supported by LaSPACE must support the NASA organization, align with the NASA Strategic Plan, and support the goals of the Office of STEM Engagement. Any alignment with NASA Center programs should also be detailed.

NASA MD Contacts for University Researchers

Aeronautics Research Mission Directorate (ARMD)

POC: Dave Berger, OSTEM Embed for ARMD, dave.e.berger@nasa.gov, 202.358.2473

Exploration Systems Development Mission Directorate (ESDMD)

POC: Veronica Seyl, OSTEM Embed for ESDMD, veronica.l.seyl@nasa.gov, 281.483.5110

Science Mission Directorate (SMD)

POC: Susan Poland, OSTEM Embed for SMD, susan.m.poland@nasa.gov, 202.358.1082

Space Operations Mission Directorate (SOMD)

POC: Veronica Seyl, OSTEM Embed for SOMD, veronica.l.seyl@nasa.gov, 281.483.5110

Space Technology Mission Directorate (STMD)

POC: Stephanie Yeldell, OSTEM Embed for STMD, stephanie.l.yeldell@nasa.gov, 202.358.1162

NASA Center Liaisons

Armstrong Flight Research Center Veronica Wilson veronica.l.wilson@nasa.gov	Johnson Space Center Jakarda Varnado jakarda.w.varnado@nasa.gov
Ames Research Center Veronica Wilson veronica.l.wilson@nasa.gov	Kennedy Space Center Patricia Gillis patricia.j.gillis@nasa.gov
Goddard Space Flight Center James Harrington james.l.harrington@nasa.gov	Langley Research Center Bonnie Murray bonnie.murray@nasa.gov
Glenn Research Center Gerald Voltz gerald.w.voltz@nasa.gov	Marshall Space Flight Center Vemitra Alexander vemitra.m.white@nasa.gov
Jet Propulsion Lab Petra Kneissl petra.a.kneissl-milanian@jpl.nasa.gov	Stennis Space Center Louis Thompson louis.m.thompson@nasa.gov

LaSPACE 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 robust technical workforce, and develops the research and economic infrastructure to boost Louisiana's contribution to NASA research priorities.

LaSPACE Program Office & Affiliate Representatives

General administration is the responsibility of the LaSPACE Team headquartered at LSU. Questions about applications to any LaSPACE programs must be directed to the program management team via the general laspace@lsu.edu email address. Unless otherwise directed, all proposals, invoices, reports, and queries must also be submitted via email to the program email address (laspace@lsu.edu).

LaSPACE Program Office, laspace@lsu.edu, 225-578-8697 LSU Department of Physics & Astronomy | 364 Nicholson Hall, Baton Rouge, LA 70803

Additionally, all member institutions have appointed an affiliate representative who sits on the LaSPACE Advisory Council and is available to discuss opportunities and processes related to LaSPACE programs. Contact information for all affiliates is provided below. For institutions with a vacancy, contact the LaSPACE program office at LSU. Please refer to the LaSPACE FAQs before contacting LaSPACE management and/or affiliate reps.

LaSPACE Affiliate Representatives

Affiliated Insitution	Rep Name	Email	Phone
Baton Rouge Community College (BRCC)	vacant	vacant	vacant
BREC / Highland Road Park	Christopher	o@brec.org	225-768-9948
Observatory (HRPO)	Kersey		
Cain Center for STEM Literacy	Frank	fneubr1@lsu.edu	225-578-4082
(Cain Center)	Neubrander		
Delgado Community College	Raymond	rduple@dcc.edu	504-671-6419
(DCC)	Duplessis		
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)	vacant	vacant	vacant
LaSTEM at LA BOR (LaSTEM)	Clint Coleman	Clint.coleman@laregents.edu	504-352-4891
Louisiana Arts and Science Museum (LASM)	vacant	vacant	vacant
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 Civil Air Patrol (La CAP)	Jud Ergle	fergle@cap.gov	504-756-9255

Louisiana Community and Technical College System (LCTCS)	vacant	vacant	vacant
	Luctin Doddon	Justin.Dedden@la.gov	225 242 5627
Louisiana Economic Development (LED) FastStart	Justin Dedden	Justin. Dedden@ta.gov	225-342-5607
La Board of Elementary &	Ann Wilson	ann.wilson@la.gov	225-342-0140
Secondary Education (BESE)			
Louisiana Public Broadcasting (LPB)	vacant	vacant	vacant
Louisiana State University and A&M College (LSU)	John Flake	johnflake@lsu.edu	225-578-5833
Louisiana State University at Alexandria	vacant	vacant	vacant
Louisiana State University	Wade	wbaumgartner@agcenter.lsu.edu	225-578-7742
Agricultural Center (LSU-Ag)	Baumgartner		220 070 7742
Louisiana State University Health	Xiaohong Lu	xiaohong.lu@lsuhs.edu	318-675-4276
Sciences (LSUHSC)	Alaonong Lu	<u>Naonong.ra. etamo.oaa</u>	310-073-4270
Louisiana State University of	Urska Cvek	urska.cvek@lsus.edu	318-675-5128
Shreveport (LSUS)	OISKA OVEK	<u>urona.oven@iouo.edu</u>	310-0/3-3128
Louisiana Tech University	Mary Caldorera-	mcmoore@latech.edu	318-257-2207
	Mary Caldorera-	memoore@tatecff.edu	310-23/-220/
(LaTech) Loyola University (Loyola)	Anat Burger	aburger@loyno.edu	504-865-2247
McNeese State University (McNeese)	Ning Zhang	nzhang@mcneese.edu	337-475-5873
National Center for Biomedical Research & Training (LSU-NCBRT)	Jason Krause	jkrause@ncbrt.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
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Nunez Community College (NCC)	vacant		vacant
River Parishes Community College (RPCC)	Esperanza Zenon	ezenon@rpcc.edu	225-743-8713
SciPort Discovery Center	Heather Kleiner	hkleiner@sciport.org	318-424-3466
Southeastern Louisiana University (SELU)	Gerard Blanchard	gerard.blanchard@selu.edu	985-549-2159
Southern University and A & M	Michael	michael_stubblefield@subr.edu	225-771-5231
College (SUBR)	Stubblefield		
Southern University of New Orleans (SUNO)	Illya Tietzel	itietzel@suno.edu	504-286-5111
The 1881 Institute	Bahiy Watson	bahiy@the1881school.org	504-475-8070
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	504-280-6836
Xavier University of Louisiana (Xavier)	Ashwith K. Chilvery	achilver@xula.edu	504-520-5149
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LaSPACE 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 to LaSPACE

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 formal request for information is made by the public, a copy of the application, by law, may 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 newsletters, flyers, 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.

Animal Use

Any project proposing the use of an animal model for validation <u>must include a local IACUC approval</u> <u>letter, fully signed, which specifies a validity period longer than the proposed project period</u>. 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 authorized by an affiliated institution to serve as Principal Investigator on behalf of said institution. Students directly funded under programs designated as NASA NIFs programs must be U.S. citizens. Current NASA NIFs programs offered by LaSPACE: GPS, GIRAF, GSRA, HIS, Internships, LURA, LaSSO, & STEMS. Additional, or altered, restrictions may apply to specific programs. The citizenship requirement is issued by NASA OSTEM and LaSPACE has no authority to supersede it.

Concurrent, Overlapping, and Consecutive Awards

PIs may hold more than one LaSPACE Award concurrently with some restrictions. No student may be funded simultaneously via multiple awards in the scholarship/fellowship programs (GSRA, GIRAF, LaSSO, LURA, HIS, & STEMS 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

Proposals submitted to this solicitation should keep their budgets within \$30-\$35k with a 100% cost match. For example, if you request \$32,500 in LaSPACE funding, you must provide a cost-match equal to or higher than \$32,500.

While equipment and foreign travel are technically allowed under Louisiana Board of Regents rules, such items must be well justified and might cause the proposal to not review well. Currently BOR funds are exclusively used to fund Space Grant REA projects. When available, NASA funding may be considered to fund additional, qualified proposals.

LaSPACE permits indirect (F&A) costs at the BOR rate (currently calculated as 25% of Salaries, Wages, and Fringe) on all REA proposals (Unrecovered F&A is an allowed form of cost sharing). The LaSPACE program management team may choose to use available NASA funds to support an REA project, and in such instances the proposing institution agrees to retain the BOR indirect rate charges, as originally proposed. All proposed F&A charges applied (LaSPACE requested funds & Cost-share funds including unrecovered indirect) must be calculated in detail in the budget narrative section.

Further, LaSPACE is a federal-state partnership that requires local matching funds to be generated. A significant cost sharing by the submitting institutions is required (approximately 1:1). Cost sharing indicates an institution's commitment to the proposed project and is one of the criteria used by the reviewers in their evaluation.

Applications solely for the acquisition of equipment, or solely to support a graduate student, will not be funded. However, some support for graduate and undergraduate students is anticipated within an application. Student tuition is *not* an allowable expense on requested funds but may be included as part of the proposed cost-share.

Funds are intended to be used to support research related activities of the participants. Research-related travel funds may be included in the budget, including conference registration fees to present results of LaSPACE funded research and/or for students to participate in a student paper/poster session (Louisiana State travel regulations apply to all travel).

Purchase of general office computers/software is not allowed unless it is specifically designated for the research, such as a dedicated laptop used on a research vessel, or the like. Other research-related expenditures will be considered on a case-by-case basis.

Any requests to rebudget funds on awarded projects must be submitted in writing to laspace@lsu.edu for consideration. A completed LaSPACE Budget Revision Request Form (available for

download from the <u>LaSPACE Document Center</u>) must be included, a progress report must be completed, and requests must be routed through campus offices for sponsored programs.

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 9.5 months. Shorter periods of performance may be proposed, or even required by the LaSPACE office, to meet any requirements or restrictions related to the parent grant. A proposed period of performance is provided for each program cycle on the summary page; proposers may request a different period with advance permission from the LaSPACE Management team.

Number and Duration of Awards

LaSPACE expects to issue 5 to 8 REA subawards annually contingent upon the availability of funding and quality of proposals. Note: This competition is being conducted in advance of LaSPACE receiving our formal contract for the next multiyear Space Grant award, which begins June 10, 2025. Any changes in restrictions / requirements included in our parent award from NASA will be passed down to all subawardees. Modifications to your proposal will be requested, if needed! Additionally, this program is funded by LA Board of Regents cost-match and is contingent upon available funding from the Louisiana Quality Educational Support Fund.

No-Cost Extensions

LaSPACE will no longer consider full-year No-Cost Extensions (NCEs). We may consider NCE requests for up to 6 months. We are getting more pressure from NASA to complete as much spending as possible within each program year. It is harder to justify NCEs for our subawarded projects. We need you to propose an NCE for *only exactly how much additional time you need*. If we deem that there are avoidable reasons for you needing an NCE, it may be rejected. Do your best to spend according to your proposed timeline. Reach out earlier rather than later if you hit early snags.

NCE's for ongoing projects must 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 progress 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 progress report must also identify all participants on the project (students, post-docs, faculty, and staff). A link to the online platform for progress report submission, as well as a document with detailed guidance for writing the report, are posted in the LaSPACE Document Center on our website.

Invoicing & Reporting Requirements

Invoices must be submitted monthly by the 15th of the month, beginning no later than the second full calendar month of the award period using the billing form available in our document center. Example: For awards with a period of performance of 09/15/2025—06/30/2026 the first invoice must be submitted in November by 11/15/2025 with additional invoices submitted on or before the 15th of each subsequent month. The final invoice must be submitted within 30 days of the last day of the period of performance. For the example period of performance, the final invoice would be due by 07/30/2026. The LaSPACE team will provide a prepopulated invoice template to each individual subawardee to help our affiliate's sponsored programs staff submit compliant invoices. A final report must be submitted by the PI/Project Lead no later than 30 days after 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 guidelines can be downloaded from the LaSPACE website's document

center. Please review the reporting guidelines at the start of your project

to identify in advance the kinds of information you must share at the end

of your award. For example, you must track participation hours & total

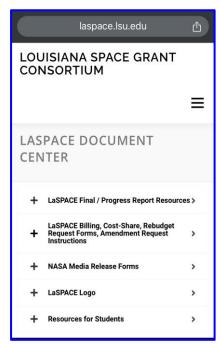


Figure 1: Screen Shot of the LaSPACE website's Document Center showing available content linked there; including Reporting Resources, Billing/Budgeting forms, Media Releases, the LaSPACE Logo, and Resources for Students.

students. Develop a plan to collect this info early!

Failure to submit timely invoices and reports may result in new restrictions and requirements, including a potential suspension of eligibility to apply for LaSPACE funding.

funding per student and collect reflective statements from your

LaSPACE Annual Meeting Participation

Funded participants are expected to make every effort to attend the LaSPACE Annual Meeting held during the fall semester on a Friday and Saturday at a different affiliate institution each year. For the 2025 meeting we will meet at Louisiana State University in Baton Rouge, LA on November 7th & 8th. Information will be sent out to our affiliate representatives and funded awardees and posted to our website <u>here</u>. Recently/currently funded students are expected to present a poster at the student poster session on Saturday.

Assessment by External Reviewers

All applications that meet the eligibility requirements and guidelines established for this program will be reviewed by out-of-state consultants for merit. A strong proposal will clearly address each of the following:

- 1. Scientific and Technical merit of the proposed project.
- 2. Relevance of the project to aerospace goals and alignment with NASA and one of its Mission Directorates.
- 3. Competency of the project personnel with emphasis on the potential degree of enhancement and of the probability for the project to lead to increased competitiveness and subsequently funded work.
- 4. Degree to which new research directions and capabilities are to be developed.
- 5. Degree to which the project will contribute to workforce development and human capital needs, both locally and nationally.

After receiving the recommendations of the out of state reviewers, LaSPACE will prepare a report on the evaluations for the Board of Regents (BOR). Once approved by the BOR, award letters will be issued, and subcontracts will be drafted by the LSU Office of Sponsored Programs (OSP).

Evaluation Criteria

Each proposal submitted under the Research Enhancement Awards Program will be evaluated by out-of-state reviewers from Space/Aerospace fields with knowledge of NASA Space Grant goals and restrictions, but not generally by an expert in any subject area. Sufficient information must be clearly stated by the proposer to allow the reviewer to make an informed judgment. Failure to supply the appropriate information will lead to lower scores and non-funding of the project. Proposals will be evaluated using the following criteria which are reflective of LaSPACE Goals and Objectives and the NASA Mission.

Evaluation Criteria

A panel of external reviewers will evaluate all the proposals on the following criteria.

- (15%) The degree to which this proposal is relevant to NASA.
- (25%) Scientific and technical merit of the proposed project.
- (10%) Demonstrated ability to carry out the research plan and achieve the stated goals.
- (10%) Probability for the project to develop new capabilities and secure additional funding.
- (10%) Clarity and appropriateness of the budget to carry out the project, including institutional commitments & matching funds.
- (10%) Clarity and appropriate degree of student involvement in the Research Plan.
- (10%) Degree to which the project contributes to workforce and/or economic development.
- (10%) Contribution of the proposed project to research infrastructure development in the state, specifically by increasing the scope and geographic representation of NASA research disciplines and institutional participation throughout Louisiana.

Research Enhancement Award (REA)

Application Guidelines

About the REA Program

The LaSPACE Research Enhancement Awards (REA) Program is intended to provide support for faculty (and students) at LaSPACE member institutions, particularly aimed at the emerging researcher or an established researcher who wishes to pursue new research directions, for the development of projects, contacts, and collaborations that will bring Louisiana scientists into the mainstream of NASA related research activity, thereby increasing their chances to successfully compete in the aerospace R&D marketplace. The REA Program is funded by state matching funds, through the Board of Regents Support Fund. The awards are intended to develop expertise and to contribute to research competitiveness. However, awards are not intended purely to support faculty salaries or graduate student stipends. It is anticipated (and strongly advised) that students (both graduate and undergraduate) will be involved in REA projects, but the overriding goal is the development of research capabilities and infrastructure in support of the country's space/aerospace endeavors. In that regard, contacts / collaborations / ties to NASA centers and NASA researchers are strongly encouraged.

The overall goal for the REA Program is to effectively utilize the resources available through LaSPACE as incentive for faculty and students: 1) to develop research competitiveness, 2) to develop new research projects or directions, and 3) to foster collaborations among NASA researchers, other federal laboratories, and with the business/industry community.

The REA Program is intended to support LaSPACE Goals with the objective to build research infrastructure:

- 1. To increase, in quantity and in quality, Louisiana's production of aerospace and related science and engineering graduates and professionals,
- 2. To enhance in scope, depth, and number, research and development activities in aerospace and related sciences and engineering, and
- 3. To indirectly increase aerospace and related industries in the state.

NOI Program Requirement for REAs

An NOI is required for LaSPACE REA proposals. Only proposers who have successfully submitted an NOI are eligible to submit an REA proposal. NOIs do not need to be routed through for institutional approvals/signature the way the final proposal needs to be. NOIs are required so that our office has more time to line up appropriate reviewers in advance of the proposal submittal date. The NOI deadline is provided on the program summary page and the form and instructions for submitting an NOI are included with all the other forms at the end of these guidelines.

REA Proposal Requirements & Format

All proposals submitted to LaSPACE must follow the format listed below. Proposals not constructed as follows may be rejected without review. Any forms mentioned below are included in the attachments following these guidelines.

- LaSPACE REA Program Proposal Cover Sheet
 - Proposals must be signed off on by the Project PI and the Authorized Organizational Representative for Sponsored Programs at your institution.
- Table of Contents
- Prior LaSPACE Awards Form
- Proposed Project Summary Form

The project summary (abstract) must be 250 words or less. It should concisely describe the proposed project, giving the objectives, key features, and proposed outcomes, and provide a timetable for project implementation. How the proposed research supports the goals and objectives of at least one NASA Mission Directorate must be explicitly stated and named, as well as any relevant NASA Centers. Summaries are to be written in general terms, understandable by a non-expert in the field.

A. Project Narrative

The project narrative should not exceed ten (10) single-spaced pages (11-12 point font). Subsections of the narrative should include, in the order listed, the following:

- 1) **Introduction:** State the technical or scientific problem to be addressed.
- 2) **Objectives of the Project:** Scientific, technical objectives, workforce development, and research capability development should be concisely delineated.
- 3) Implementation Strategy or Scientific Method and Timetable: The scientific and technological methodology to be employed in the work should be succinctly described. Strategies germane to the successful implementation of the project should be discussed. A concise timetable, preferably in a tabular form, should be provided. Key milestones toward the successful completion and possible continuation and expansion of the project should be shown in this table along with measurable outcomes from the project.
- 4) Relevance to NASA Mission: While direct collaboration with a NASA Center is not a requirement of the REA Program, it is desirable if possible. Previous or potential collaborations with NASA should be mentioned; explicit alignment with research goals established within at least one Mission Directorate must be stated.
- 5) **Long Term Benefits:** Describe the expected long-range benefits from the project to Space and Aerospace R & D and infrastructure at the institution, as well as to the project personnel. Describe your plan for dissemination of the results. Discuss plans and prospects for submitting a follow-up proposal to NASA, other federal agencies, BORSF, or non-public sources. Describe patent potential, if applicable.
- 6) **Key Personnel/Management:** Identify the key personnel and succinctly describe their qualifications and experiences as they relate to the successful execution, continuation, and expansion of the project. Discuss how the project contributes to creating a robust workforce and meeting the human capital needs of government, industry, and academia.
- 7) **Student Participants:** NASA is committed to the development of a strong aerospace workforce. Thus, proposers are expected to make every effort to include students in research

projects. NASA requires detailed longitudinal information on all participants, especially on students. Thus, all students must complete the online LaSPACE Student Participation Form (links provided on Student Participant List attachment). **Include the Student Participant List in this section of the proposal.** Include your plan to document the funds distributed to each student researcher and their total contact hours.

- B. NASA Media Release Form (submitted online by PI and all identified student participants). If other project collaborators appear in photos, please have them also complete a NASA Media Release Form.
- C. Budget, Budget Narrative, and Current/Pending Support Please provide the project budget on the Budget Form provided. Note that F&A for the LaSPACE Funds Requested is calculated at the BOR rate of 25% of salaries, wages, and fringe benefits only. Unrecovered F&A should be included as part of your Institutional Match Funds. Tuition is not an allowable cost on requested funds but may be included as part of the institutional match. You will be required to document the institutional contributions on your cost-share forms submitted with billings. The Budget Narrative should be provided on a separate page; they should be succinct but provide sufficient information for a reviewer to judge the need for and importance of the items requested. Budget explanations must also include a formula explaining how F&A is calculated in both the requested and cost-shared budget columns, including how any institutional contribution of unrecovered F&A was calculated. You must include a document or link to your institution's official federally negotiated F&A rate. Awarded proposals may be required to modify their budgets, if sponsored programs accounting identifies calculation errors. Clear and concise, but also detailed, budget details must be provided to ensure proper invoicing and accounting throughout the project. We have seen a drastic increase in invoices being submitted with calculation errors which seriously slows down the costing process and creates an undue burden of work on LaSPACE staff and LSU accounting staff.
- D. Vita/Resume Attach a two-page Vitae for the Principal Investigator. There can only be one Principal Investigator per project proposal.
- E. Letter of Support (if applicable)

 If the proposal involves work with a NASA center or other Federal laboratory or with a businessindustry partner, attach a letter of support from the contact at the collaborating/participating
 institution (an e-mail is acceptable). A strong letter of support, describing the specific
 contributions in personnel or facility/laboratory use, will reflect well. Letters of support for the
 research goals without an explicit commitment of collaboration are appropriate for this program.

Notes for Success

Remember, the reviewers will not be experts in all sub-fields. They will be generalists, usually faculty members and/or Space Grant/ NASA EPSCoR administrators at other universities. Avoid highly technical jargon as much as possible and write at a level for the average scientist/engineer in a clear and concise fashion, i.e. what has been called the "Scientific American Level." Keep in mind also that the proposal is your opportunity to present yourself in the most positive light and to emphasize your best points and accomplishments (and/or research career plans) in your research efforts. Any prior or planned contacts with NASA or aerospace-related institutions should be mentioned. Follow the format instructions and respond clearly to the requested information. Involving undergraduates or

graduate students in the research, along with opportunities for student papers/posters or as coauthors is expected. Review the Proposal Evaluation Criteria for additional hints for discussion points for a successful proposal.

- **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.

Attachments Required Proposal Forms

Required Forms

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

- Notice of Intent Submit this prior to submitting your proposal
- LaSPACE REA Program Proposal Cover Sheet (Note: Proposals must be signed off on by the Project PI and the Authorized Organizational Representative for Sponsored Programs at your institution.)
- Proposed Project Summary
- Prior LaSPACE Awards
- LaSPACE Proposed Budget Form
- Student Participant List & Form Submission Confirmations
- NASA Media Release Form (submitted online by PI and all identified student participants)

LaSPACE REA Program Notice of Intent (NOI) to Propose

This NOI must be submitted by the PI to LaSPACE on, or before, Tuesday, May 20, 2025 via email to laspace@lsu.edu.

NAME OF PRINCIPAL INVESTIGATOR (PI):	NAME INSTITUTION:
PI DEPARTMENT	PI PHONE NUMBER and EMAIL ADDRESS
TITLE OF PROPOSED PROJECT:	
LIST PROJECT DISCIPLINES:	
THE PROPOSED WORK WILL SUPPORT THE RESEARCH PRIORITIES	OF THE FOLLOWING NASA DIRECTORATES AND NASA FIELD CENTERS
(Check all that apply to your project. Narrative proof for selected a	lignment(s) must be included in your proposal narrative.):
Mission Directorate (Required): □SMD □STMD □ARMD	□ESDMD □SOMD
NASA Center (If Applicable):	
PROJECT ABSTRACT (maximum 250 words):	
The search of (maximum 200 words).	

LaSPACE REA Program Proposal Cover Sheet

1.	Title of Proposed Projec	ot:		
2.	Principal Investigator:			
		(Name)	(Highest Degree Earned)	(Citizenship)
		(Department	:)	
3.	Institution of Higher Ed	ucation:		
4.		Address/P.O. I	Box Number)	
	(City, S	tate)	(Zip Code)	
5.	Telephone:		FAX:	
	E-mail:			
6.	Date of Submission:			
7.	Total Funds Requested	:_\$	Institutional Match:\$	
Certi signa comp propo Execo Disco Restr 534 c	fication of Compliance with Ap tories certify that the statements by with LaSPACE award terms an osed project are in compliance w utive Order 12549, Debarment ar imination; Certification against L riction as detailed in Public Laws	plicable Executives made in this proposed conditions if an activity all applicable Fond Suspension, 34 Cobbying imposed but 112-10 Section 134 Continuing Appropri	e Orders and U.S. Code: By signing and so osal are true and complete to the best of the ward is made as a result of this proposal; ederal and State laws and regulations includers of the Part 85, Section 85.510, Participant's by section 1352, title 31, U.S. Code; Compart (a) and 112-55, Section 539; ACORN Collations Act of 2012 (Pub. L.112-55); and decay of Public Law 112-55).	ubmitting this proposa their knowledge; they a ; and the institution an luding, but not limited responsibilities; Non- pliance with China Fund pmpliance in accordan
8.	Signature of Principal Ir	nvestigator:		
9.	Name of Authorized Or	ganizational R	ep:	
10.	Signature of Authorized	l Organizationa	al 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
PROJECT TITLE
THE PROPOSED WORK WILL SUPPORT THE RESEARCH PRIORITIES OF THE FOLLOWING NASA DIRECTORATES AND NASA FIELD CENTERS (Check all that apply to your project. Narrative proof for selected alignment(s) must be included in your
proposal narrative.):
Mission Directorate (Required): □SMD □STMD □ARMD □ESDMD □SOMD
NASA Center (If Applicable):
PERIOD OF PERFORMANCE
09/15/2025-06/30/2026
ABSTRACT (DO NOT EXCEED 250 WORDS)

Prior LaSPACE Awards

(Limit this list to the last 5 years)

For each prior LaSPACE award, as a PI or a Co-I please provide the following:

1.	Project Title:		
2.	Dates:		
3.	Was a final to	echnical report submitted?YESNO*	
	If no, explain	:	
4.	Did a propos	al to a funding agency result?NOYES	
	If yes,	Agency:	
		Title:	
		Date:	
		Status:FundedDeclinedPend	ling
(Add s	additional pag	es as necessary.)	

LaSPACE Proposed 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. Use the proposed justification template on the following page to explain your proposed costs.

Proposal Title:	
Principal Investigator:	
Institution:	

	LaSPACE Funds Requested	Proposed Cost Share*	
A. Direct Labor		- 1	
1. Faculty/Staff Researchers	\$	\$	
2. Graduate Student(s)	\$	\$	
3. Undergraduate Student(s)	\$	\$	
4. Fringe Benefits	\$	\$	
5. Total A	\$	\$	
B. Supportive Expenses			
1. Travel	\$	\$	
2. Supplies & Materials	\$	\$	
3. Other Direct Costs (Identify)	\$	\$	
4. Total B	\$	\$	
C. Facilities & Administration			
1. F&A (Indirect Costs)	\$	\$	
1	1	1	
D. Total Budget			
Total Budget (A5+B4+C1)	\$	\$	

^{*}Must be certified on all financial billings/reports.

LaSPACE Proposed Budget Justification

LaSPACE Requested Funds

A. Direct Labor

- 1. Describe any faculty/staff support costs with explicit calculations.
- 2. Describe any graduate student support costs with explicit calculations.
- 3. Describe any undergraduate student support costs with explicit calculations.
- 4. Describe any fringe benefit costs with explicit calculations.

B. Supportive Expenses

- 1. Describe any proposed travel costs with explicit details regarding proposed travelers, destination, and estimated costs.
- 2. Describe any proposed supplies & materials costs with explicit details regarding proposed purchases, estimated costs, and justification of need.
- 3. Other Direct Costs must be explicitly named and defined and may include things like facility usage fees and printing services.

C. Facilities & Administration

1. Provide a letter or link to the official F&A rate for your campus. Describe all applicable costs for which you will apply your F&A rate OR a modified F&A rate. Be explicit and show calculations.

Institution Proposed Cost Share

A. Direct Labor

- 1. Describe any faculty/staff support costs with explicit calculations.
- 2. Describe any graduate student support costs with explicit calculations.
- 3. Describe any undergraduate student support costs with explicit calculations.
- 4. Describe any fringe benefit costs with explicit calculations.

B. Supportive Expenses

- 1. Describe any proposed travel costs with explicit details regarding proposed travelers, destination, and estimated costs.
- 2. Describe any proposed supplies & materials costs with explicit details regarding proposed purchases, estimated costs, and justification of need.
- 3. Other Direct Costs must be explicitly named and defined and may include things like facility usage fees and printing services.

C. Facilities & Administration

1. Provide a letter or link to the official F&A rate for your campus. Describe all applicable costs for which you will apply your F&A rate. Show calculations. Describe any unrecovered F&A costs you are claiming for cost share and show calculations.

LaSPACE Student Participant List & Form Submission Confirmations

The Student Participant List must be completed, and online participant forms filled out in advance of submitting a proposal.

Copy and complete the participant list and confirmation checkboxes below into your proposal.

Name	Classification	Major	Project Role
e.g. Jane Smith	Undergraduate, Junior	Electrical Engineering	Electrical Design Lead; Technical Writing Co- Lead
☐ Check this box to on the control of the control		above have completed a I	_aSPACE student participant for
☐ Check this box to on the control of the control	confirm that all students listed ur proposal.	above have completed a I	NASA STEM Gateway profile.
☐ Check this box to opage in your proposal.		above have completed a I	Media Release Form. Include th
☐ Check this box to		ited after you've been awa	arded will complete the required ude this page in your proposal.

LaSPACE Student Participant Form Instructions

Link to LaSPACE Student Participant Form

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

- The LaSPACE Student Participant Information Form must be completed in advance of submitting this application. If any section is left blank in the online form, you will be disqualified from consideration.
- Upon completion of the form, a message will appear on the screen to confirm the form was successfully submitted. Additionally, a confirmation email will be sent to the school email provided in the form. Once the email is received, it is safe to close your browser. Save the confirmation email and forward to your Principal Investigator / Project Lead. Do NOT include NOR share screenshots or copies of your demographic information. This is to protect your Personally Identifiable Information.
- The **Project PI / Lead** should be the PI who is submitting this proposal. Please provide the students with your office phone number and email address to input.
- The **LaSPACE Program** should be the program for which students are currently applying for/participating in. If working under multiple LaSPACE projects, students will submit a participant form for each separate project. For this proposal students will select REA.
- The **Project Start Date** is the first day of the project's Period of Performance (PoP). This is not your personal start date on the project. Confirm PoP start date in the program guidelines or ask your Project PI / Lead. Project Start date should be 9/15/2025 for students under this current proposal submission.
- The **Participating Semester(s)** is where students select their semesters of participation on the project.

NASA STEM Gateway Profile Instructions

All students funded under any National Space Grant Program must register in the NASA STEM Gateway system here: https://stemgateway.nasa.gov/s/.

Guidance on setting up a NASA STEM Gateway profile is posted to the <u>LaSPACE Document Center</u> on our website in the student resources section.

LaSPACE NASA Media Release Form Instructions

The LaSPACE NASA Media Release Form provides permission to LaSPACE and NASA to share your photographs in our reports, newsletters, and online channels. It must be completed in advance of submitting this application. If any section is left blank in the online form, you will be disqualified from consideration. After submitting the form, check the relevant confirmation checkbox on the Proposed Project Summary Form.

LaSPACE NASA Media Release Form

- The online form should be completed and submitted by the PI and any other named, known participants (i.e. undergraduate student researcher for a LURA / graduate student for a GSRA, etc) at the time of proposal submission. Facilitators/participants recruited later and/or featured in photos associated with the funded activities should complete their own forms before, or at the time, of Final Report submission.
- For projects that involve recruiting student participants during the active award period (i.e. Senior Design, LaACES, etc), we suggest requiring completion of this form and the student participant form on the first day of official participation by the student.
- Upon completion of the form, a message will appear on the screen to confirm the form was successfully submitted. Additionally, a confirmation email will be sent to the school email provided in the form. Save this email and have students/external participants forward to the Principal Investigator / Project Lead.
- For large-scale public events, we suggest bringing a device for folks to complete on-site releases.
- For registration-based activities, we suggest including a link to our online form in your registration materials.