LaSPACE

Graduate Student Research Assistance (GSRA) Program

Offered by the Louisiana Space Grant Consortium

Under the authority of the
NASA Space Grant College and Fellowship Program

Louisiana Space Grant Consortium (LaSPACE)
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Louisiana State University, Baton Rouge, LA 70803
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Revised, April 2020
All previous versions of this program's guidelines are null and void.

GSRA Program Summary Page

About the GSRA Program

The Graduate Student Research Assistance (GSRA) program is designed to augment the lower than average compensation levels available to promising graduate students on LaSPACE campuses and, thereby, 1) retain more U.S. students for graduate study at consortium institutions, 2) promote diversity, and 3) assist in dissertation research. The GSRA supplement is $8,000 for a 12 month period and can be used for augmenting the student stipend, to defray dissertation related research expenses, and promote student research presentations at national meetings. Cost share on the award is required as is a final technical report. Applications are judged on the basis of aerospace/NASA relevance of the research and overall relevance to LaSPACE research and human resource development objectives. Proposals must clearly identify the Mission Directorate/ NASA Center priority being addressed by this project. We plan to issue three to five GSRA awards each year.

Program Summary

- Graduate student applicants must be a U.S. Citizen, currently enrolled full-time in a graduate program at a LaSPACE Affiliate Institution, and be working on a research project with demonstrated relevance to NASA.
- An applicant may not apply for a GSRA if he/she already holds a major Fellowship or similar award.
- At least 50% of the requested funds must be used for direct student support.
- A student applicant cannot hold two GSRA 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 (*for this solicitation cycle only, the one month overlap conflict disqualifier is waived*).
- Tuition Costs, Foreign Travel, and the Purchase of Capital Equipment are not allowed.
- Proposals must be sponsored by a Faculty Mentor/PI at the affiliated university and signed by the University's institutional representative for sponsored programs.
- The final invoices and a final technical report written by the Graduate student and signed off on by the Faculty PI must be submitted to the LaSPACE office within 30 days of the project end date. Final Reports must follow the template provided by the LaSPACE office.
- Note: For awards under this solicitation NCEs will not be allowed. Plan accordingly.

Proposal Submissions

- **Submit all properly executed proposals via email as fully searchable pdf documents to laspace@lsu.edu by 11:59 pm on Wednesday, June 10, 2020.**
- Important Dates:
  - Proposal Release Date: Wednesday, April 15, 2020
  - **Proposal Due Date: Wednesday, June 10, 2020**
  - Anticipated Award Announcements: July
  - Award Period of Performance: 08/15/2020 - 08/14/2021

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 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 *(formerly Office of Education)*

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)

Research and technology priorities are aligned with one or more of NASA's Mission Directorates:

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.

The **Aeronautics Research Mission Directorate (ARMD)** transforms aviation with research to dramatically reduce the environmental impact of flight, and improves aircraft and operations efficiency while maintaining safety in increasingly crowded skies. ARMD also generates innovative aviation concepts, tools, and technologies for development and maturation by the aviation community.

The **Space Technology Mission Directorate (STMD)** pursues transformational technologies that have high potential for offsetting future mission risk, reducing cost, and advancing existing capabilities. STMD uses merit-based competition to conduct research and technology development, demonstration, and infusion of these technologies into NASA's missions and American industry. This mission directorate is being refocused as a new Exploration Research & Technology (ER&T) organization to support exploration as a primary customer.

The **Human Exploration and Operations Mission Directorate (HEOMD)** leads human exploration in and beyond low Earth orbit by developing new transportation systems and performing scientific research to enable sustained and affordable human life outside of Earth. HEOMD also manages space communication and navigation services for the Agency and its international partners.

All NASA 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.

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

The Aeronautics Research Mission Directorate (ARMD)

POC: Karen L. Rugg, Lead, Communications and Education Phone: (202) 358-2197, karen.l.rugg@nasa.gov

Space Technology Mission Directorate (STMD)

POC: Damian Taylor, SBIR and STTR Mission, Directorate Liaison Phone: (202) 358-1432, damian.taylor@nasa.gov

Human Exploration and Operations Mission Directorate (HEOMD)

POC: Bradley Carpenter Phone: (202) 358-0826, BCarpenter@nasa.gov

NASA Center Liaisons

Ames Research Center, *Brenda Collins* Chief, Education and Public Outreach Phone: (650) 604-3540 brenda.j.collins@nasa.gov	Kennedy Space Center, *Jeffrey A. Kohler* Technology Transfer Office Phone: (321) 867-2462 jeffrey.a.kohler@nasa.gov
Armstrong Flight Research Center, *Dave Berger* University Affairs Officer Phone: (661) 276-5712 Dave.e.Berger@nasa.gov	Langley Research Center, *Kim Brush* LaRC OSTEM Integration Manager Phone: (757) 864-6454 kimberly.m.brush@nasa.gov
Goddard Space Flight Center, *James L. Harrington* Computer Research and Development Phone: (301) 286-4063 james.l.harrington@nasa.gov	Glenn Research Center, *Mark David Kankam, Ph.D.* University Affairs Officer Phone: (216) 433-6143 Mark.D.Kankam@nasa.gov
Jet Propulsion Laboratory, Linda *Rodgers or Petra Kneissl* University Programs Administrators 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, *Frank Six* University Affairs Officer Office of Academic Affairs (HS30) Phone: (256) 961-0678 Norman.F.Six@nasa.gov
Johnson Space Center, *Kamlesh Lulla* Director, University Research Collaborations and Partnership Office Phone: (281) 483-3065 Kamlesh.P.Lulla@nasa.gov	Stennis Space Center, *Mitch Krell*, Ph.D. Data Analysis Phone: (228) 688-1821 mitch.krell@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 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 Louisiana State University (LSU). Questions about applications to any LaSPACE programs should be directed to the Director or Assistant Director via the general laspace@lsu.edu email address. Unless otherwise directed, all proposals, invoices, reports, and queries should 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

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

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	observatory@brec.org	225-768-9948
Cain Center for STEM Literacy (Cain Center)	Frank Neubrander	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
Grambling State University (GSU)	Matthew F. Ware	waremf@gram.edu	318-274-2391
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 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 Agricultural Center (LSU-Ag)	Wade Baumgartner	wbaumgartner@agcenter.lsu.edu	225-578-7742
Louisiana State University Health Sciences (LSUHSC)	Lynn Harrison	lclary@lsuhsc.edu	318-675-4213
Louisiana State University of Shreveport (LSU-S)	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@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
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	vacant	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

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 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 Spaceporter 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. LaSPACE also aims to support a diverse set of institutions and disciplines. **All proposers are encouraged to help recruit diverse participants to their proposed projects.**

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. All significantly, direct 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, LURA, MRS, & 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, in general, not allowable costs.

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. 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 within 60 days from our proposed start date, unless otherwise indicated. Proposers may not request a date any earlier than that which was listed by LaSPACE. Modified PoPs will be considered but not promised.* 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 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).

Graduate Student Research Assistance (GSRA) Program

Application Guidelines

About the GSRA Program

Background and Objectives

The GSRA Program serves to strengthen the educational base among member LASPACE institutions, and to contribute to the future STEM workforce in line with Federal and State needs. The specific objectives in recruiting superior graduate students under the LaSPACE program are: (1) to encourage highly qualified individuals with interests in aerospace to continue in the field, (2) to support graduate level education in Louisiana, and (3) to develop the research infrastructure needed to grow the level of aerospace and space science R & D in the state. Objectives of the GSRA program are (i) to retain more U. S. students for graduate study on consortium campuses, (ii) to promote diversity, and (iii) to assist graduate students with thesis/dissertation research. 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 encouraged to help recruit diverse participants to their proposed projects.**

Program Description

The Graduate Student Research Assistance (GSRA) program is designed to augment the lower than average compensation levels available to promising graduate students on LaSPACE campuses and, thereby, 1) retain more U.S. students for graduate study at consortium institutions, 2) promote diversity, and 3) assist in dissertation research. The GSRA award is $8,000 for a 12 month period and can be used for augmenting the student stipend, to defray dissertation related research expenses, and promote student research presentations at national meetings. At least 50% of the requested funds ($4k or greater) must be used to directly fund the student. It is not the purpose of the GSRA program to pay for research projects nor to provide general, personal supplies to the student. GSRA funds cannot be applied to student tuition. Cost share on the award is required as is a final technical report. Applications are judged on the basis of aerospace relevance of the research and overall relevance to LaSPACE research and human resource development objectives. Applications must be submitted by a Faculty advisor, who will be responsible for properly routing the proposal for required signatures/submission, for administering funds on any awards made, and for submitting technical reports to LaSPACE.

Eligibility & Allowable Expenditures

To be eligible to apply for a LaSPACE GSRA Award, the graduate student applicant must meet each of the following criteria:

1. The Graduate Student must be a U.S. Citizen.
2. At the time of application, the student must be currently enrolled in graduate school at a LaSPACE Affiliate Institution.
3. The graduate work of the applicant must be relevant to NASA and in an aerospace or space sciences related field. This must be explicitly described in the application by stating the NASA Mission Directorate under which this research is aligned. Additional alignment with NASA Centers and current missions should also be identified.
4. An applicant may not apply for a GSRA if he/she already holds a major Fellowship or similar award. For example, if a student has an active Fellowship (LaSPACE, BOR, NSF, DOE, other federal, etc.) that student is ineligible for a GSRA award. It is not the purpose of these NASA funds to support students already funded by another federal/state agency.
5. An applicant must pursue his/her graduate degree on a full-time basis, and be registered for each semester, including the summers.
6. 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.
7. Projects that involve human subjects are not acceptable for this program.
8. Foreign Travel and the Purchase of Capital Equipment are not allowed.
9. GSRA funds cannot be used for tuition.
10. Proposals must be sponsored by a Faculty Mentor/PI at the affiliated university.

NOTE: GSRA awards are not transferable to another graduate student. However, if circumstances necessitate it, a change in PI can be requested in writing.

GSRA Award Terms and Conditions

Award Funds

A LaSPACE GSRA supplement carries an annual award of $8k for graduate students seeking a Master's or Doctoral degree. Both degree levels are reviewed on an equal basis. At least 50% of the requested funds ($4k or greater) must be used to directly fund the student.

Travel & Equipment

The travel budget category is restricted to travel for the students. No foreign travel is allowed. The use of LaSPACE GSRA grant funds for the purchase of equipment is prohibited.

Duration

A GSRA award is usually for a 12-month period. Awards for fewer than 12 months are also possible (two semesters or three quarters) with sufficient justification in writing. In order to complete goals, and with prior written justification, a No Cost Extension may be granted.

Number of Awards

LaSPACE intends to issue 5 to 8 GSRA awards each year.

Equal Opportunity / Diversity

As with all LaSPACE programs, 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, women, and persons with disabilities are strongly urged to apply. No applicant shall be denied consideration or appointment on the grounds of race, creed, color, age, gender, or disability.

Cost-Share Requirement

The applicant's institution must commit at least a 1:1 match in non-federal and non-LaSPACE funds. The GSRA award is supplemental. It is intended to enhance or re-vitalize a graduate student's program and not to replace any current student support, and LaSPACE, as a federal-state partnership, is required to generate 1:1 matching funds on its awards. The match on GSRA awards helps us meet this programmatic requirement. The match also indicates an institution's commitment to the success of the program. Thus, the match requirement is an integral part of the program and must be considered in the evaluation of the applicants. Because indirect costs are waived on GSRA awards per the terms of the NASA grant, these unrecovered costs **cannot** be used as a cost-match.

Indirect Costs

F & A (Indirect) charges are waived for GSRA awards as per the NASA grant. Indirect/overhead (F & A) charges should not be applied on student support funds.

Disbursement of Funds

GSRA 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. The applicant's Faculty Advisor will serve as PI for the subcontract or account.

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 graduate 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 is complete with final technical report and final financial report submitted and approved.

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.

GSRA Proposal Requirements & Format

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

- LaSPACE Cover Page
- Proposed Project Summary Form
- Prior LaSPACE Awards Form

A. Proposal Narrative (not to exceed 10 pages)
   1. Description of overall research project, current status, and project plan.
   2. Statement of how this research project is relevant to NASA Aerospace and Space Science research (See NASA Mission Directorates for more info on NASA research). Make it explicitly clear which Mission Directorate your research falls under and how your work supports the goals of said NASA Mission Directorate(s)/Center/Program Office and the overall Agency mission.
   3. Explanation of how the LaSPACE GSRA will directly support the project, how the funds expended will enable progress toward the degree, and a justification of "need" for these funds.
   4. Profile of the Applicant to include:
      - Related Work Experience, Awards, Honors, Recognition.
      - Publications, Presentations, Patents, etc.
      - Current Financial Support (Fellowships, scholarships, Assistantships, Work, etc.): funding amounts and commitments for funding during the duration of the proposed period of performance.
      - Career goals and professional plans post-graduation

B. Letter of Recommendation from Faculty Mentor/PI (affirm that the applicant is in a graduate program, attest to the relevance of the applicant's research to NASA, and speak to the applicant's need for the supplement to further his/her graduate research objectives).

C. Budget (LaSPACE Budget Form followed by a detailed narrative explanation of all costs. *Note: Funding requests should be consistent with the level of effort proposed for the student in the proposal project plan).*

D. Student Participant List (online form completion certification)

GSRA Evaluation

Each proposal will be evaluated using the following evaluation form.

GSRA 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 a NASA Mission Directorate and priorities

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)
LaSPACE Program Portfolio aims to support projects around the state and not only on the same few campuses focused on the same handful of disciplines.

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
- Prior LaSPACE Awards
- Proposal Budget Form
- Student Participant List (online form completion certification)

LaSPACE GSRA Program 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: $ _____

****

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: _____

Signature of Graduate Student Applicant: _____

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 08/15/2020 – 08/14/2021
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 technical report submitted? _____YES _____NO*

   If no, explain:

4. Did a proposal to a funding agency result? _____NO _____YES

   If yes, Agency:

   Title:

   Date:

   Status: _____Funded _____Declined _____Pending

(Add additional pages 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. 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	$	$
	2. Graduate Student(s)	$	$
	3. Undergraduate Student(s)	$	$
	4. Fringe Benefits	$	$
	5. Subtotal A	$	$
B. Supportive Expenses			
	1. Travel	$	$
	2. Supplies & Materials	$	$
	3. Communications & Equipment	$	$
	4. Other Direct Costs (Identify)	$	$
	5. Subcontracts	$	$
	6. Subtotal B	$	$
	7. F&A (Indirect)	$	$
C. Total Project Cost			
		$	**$**

**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
e.g. Jane Smith	*Undergraduate, Junior*	*Electrical Engineering*	*Electrical Design Lead; Technical Writing Co-Lead*

Link to Undergraduate Student Participation Form
Link to Graduate Student Participation Form

☐ Check this box to confirm that all students listed above have completed an online participant form.