LaSPACE

LaSPACE Undergraduate Research Assistantship (LURA) 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

LaSPACE Program Director: Colleen H. Fava

Louisiana Space Grant Consortium (LaSPACE) 364 Nicholson Hall, Department of Physics and Astronomy Louisiana State University, Baton Rouge, LA 70803 225.578.8697 | https://laspace.lsu.edu/ | laspace@lsu.edu

LURA Program Summary Page

About the LURA Program

The LaSPACE Undergraduate Research Assistantship (LURA) Program is directed at undergraduate science and engineering students who are interested in NASA relevant research. The intent of the LURA program is to supplement and enhance the undergraduate academic curriculum by providing the science/engineering student with a hands-on, mentored research experience relevant to space sciences. A LURA project will be a joint effort between an undergraduate student and a faculty researcher, who serves as mentor and Principal Investigator. Proposals must identify the Mission Directorate(s) the proposal aligns with.

Program Summary

- A LURA project should support NASA's goal of strengthening the higher education pipeline in STEM fields required for the future NASA workforce.
- Proposals must be co-written by the Faculty Mentor and undergraduate student with a clear plan for the student's research work.
- Proposals must be signed off on by the Project PI and the Authorized Organizational Representative for Sponsored Programs at your institution.
- A student applicant cannot hold two LURA awards concurrently. Consecutive awards are allowable, **IF** the application explicitly addresses completion of tasks from the previous award, details **distinctly new objectives and tasks for the new award**, includes a draft of the previous award's final report, and has **NO** overlapping period of performance dates for the two awards.
- Awards are for \$4500 with no match requirement. Most of the funds (≥\$3.5k) are to be distributed directly to the student. It is recommended that travel funds be budgeted for the student to attend at least one professional meeting; including the annual LaSPACE Council Meeting Student Poster Session held in the early fall each year. No more than \$1k can be used for travel, materials, and supplies.
- 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 part of the Final Report. Final Report guidelines and a link to the final report online platform are available on the LaSPACE website: <u>document center</u>.

Proposal Submissions – Re-open for 2025-2026

- Submit all properly executed proposals via email as fully searchable pdf documents to laspace@lsu.edu ON OR BEFORE Monday, August 4, 2025
- Important Dates:
 - o Funding Opportunity Release Date: Friday, June 27, 2025
 - Proposal Due Date: Monday, August 4, 2025
 - o Anticipated Award Announcements: ASAP
 - \circ $\;$ Award Period of Performance: 08/15/2025 05/31/2026 $\;$

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.

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 <u>here</u>.

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 <u>Office of STEM</u> <u>Engagement</u> (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.

Space Operations: 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 Aeronautics, Phone: (661) 276-5712, <u>dave.e.berger@nasa.gov</u> Exploration Systems Development Mission Directorate (ESDMD)

POC: Greg Chavers, DAA for HEO System Engineering & Integration, Phone: (256) 544-0494,

greg.chavers@nasa.gov

Science Mission Directorate (SMD)

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

kristen.erickson@nasa.gov

Space Operations Mission Directorate (SOMD)

POC: Marc Timm Phone: (202) 358-0373, marc.g.timm@nasa.gov

Space Technology Mission Directorate (STMD)

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

NASA Center Liaisons

| Armstrong Flight Research Center | Johnson Space Center |
|---------------------------------------|---------------------------------|
| Veronica Wilson | Jakarda Varnado |
| <u>veronica.l.wilson@nasa.gov</u> | jakarda.w.varnado@nasa.gov |
| Ames Research Center | Kennedy Space Center |
| Veronica Wilson | Patricia Gillis |
| veronica.l.wilson@nasa.gov | patricia.j.gillis@nasa.gov |
| Goddard Space Flight Center | Langley Research Center |
| James Harrington | Bonnie Murray |
| james.l.harrington@nasa.gov | bonnie.murray@nasa.gov |
| Glenn Research Center | Marshall Space Flight Center |
| Gerald Voltz | Vemitra Alexander |
| gerald.w.voltz@nasa.gov | <u>vemitra.m.white@nasa.gov</u> |
| Jet Propulsion Lab | Stennis Space Center |
| Petra Kneissl | Louis Thompson |
| petra.a.kneissl-milanian@jpl.nasa.gov | 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 should be directed to the program management team via the general <u>laspace@lsu.edu</u> email address. Unless otherwise directed, all proposals, invoices, reports, and queries should also be submitted via email to the program email address (<u>laspace@lsu.edu</u>).

LaSPACE Program Office, <u>laspace@lsu.edu</u>, 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 <u>the LaSPACE FAQs</u> before contacting LaSPACE management and/or affiliate reps.

| 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 | <u>fneubr1@lsu.edu</u> | 225-578-4082 | |
| (Cain Center) | Neubrander | | | |
| Delgado Community College | Raymond | rduple@dcc.edu | 504-671-6419 | |
| (DCC) | Duplessis | | | |
| Dillard University (Dillard) | Abdalla Darwish <u>adarwish@dillard.edu</u> | | 504-816-4840 | |
| East Baton Rouge Parish Library Mary Stein (EBRPL) | | <u>mstein@ebrpl.com</u> | 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 | vacant | vacant | vacant | |
| Museum (LASM) Louisiana Board of Regents (BOR) | Jessica Patton | jessica.domingue@la.gov | 225-342-4253 | |
| Louisiana Business and | Roy Keller | rkeller@lsu.edu | 225-578-3985 | |
| Technology Center (LBTC) | | | | |
| Louisiana Civil Air Patrol (La CAP) | Jud Ergle | fergle@cap.gov | 504-756-9255 | |

LaSPACE Affiliate Representatives

| Louisiana Community and Technical College System (LCTCS) | vacant | vacant | vacant |
|---|--------------------------|---------------------------------------|--------------|
| Louisiana Economic Development (LED) FastStart | Justin Dedden | Justin.Dedden@la.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 | | |
| Louisiana State University Health | Xiaohong Lu | xiaohong.lu@lsuhs.edu | 318-675-4276 |
| Sciences (LSUHSC) | | | |
| Louisiana State University of | Urska Cvek | urska.cvek@lsus.edu | 318-675-5128 |
| Shreveport (LSUS) | | | |
| Louisiana Tech University (LaTech) | Mary Caldorera- Moore | mcmoore@latech.edu | 318-257-2207 |
| 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 |
| Nunez Community College (NCC) | Reggie J. Poché | rpoche1@nunez.edu | 504-278-6277 |
| 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 | Gerard | gerard.blanchard@selu.edu | 985-549-2159 |
| University (SELU) | Blanchard | | |
| 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 |
| 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 |

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, & SEMSI. 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, & SEMSI programs). Consecutive, non-overlapping awards in these program areas may be

issued to exceptional students in the midst of extended research. Proposals for additional year(s) of funding may be submitted if 1) the previous period of performance has recently passed or is 60 days or less from completion, 2) must explicitly reference the completion of proposed tasks from the current/previous award within the new proposal, **3) must include a Final report, or preliminary Final Report if still in progress, in an appendix**, and 4) must clearly state the objectives and goals for the new proposal differentiating said goals from the prior work.

Budgeting

Capital Equipment purchases and Foreign Travel are not allowable costs. The submitting PI is responsible for the writing of the budget. **Any requests to rebudget funds must be submitted in writing to**<u>laspace@lsu.edu</u> for consideration. A completed LaSPACE Budget Revision Request Form (available for download from the <u>LaSPACE Document Center</u>) must be included and minimum requirements for direct student funding commitments must be met.

Disbursement of Funds

LaSPACE Award fund distribution will be managed by the applicant's college or university, either via a costreimbursable 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, including any cost-share commitments.

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.

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 <u>laspace@lsu.edu</u> 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 <u>LaSPACE Document Center</u> 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 08/15/2025-05/31/2026 the first invoice must be submitted in October by 10/15/2025 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 06/30/2026. The LaSPACE team is now providing prepopulated invoice templates for each individual subaward 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 funding per student and collect reflective statements from your students. Develop a plan to collect this info early!

laspace.lsu.edu LOUISIANA SPACE GRANT CONSORTIUM \equiv LASPACE DOCUMENT CENTER LaSPACE Final / Progress Report Resources > LaSPACE Billing, Cost-Share, Rebudget > + **Request Forms, Amendment Request** Instructions NASA Media Release Forms > LaSPACE Logo > **Resources for Students** >

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.

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.

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.

LaSPACE Undergraduate Research Assistantship (LURA) Program

Application Guidelines

About the LURA Program

The LaSPACE Undergraduate Research Assistantship (LURA) Program is designed to support outstanding undergraduate students engaged in faculty-mentored, NASA-related, aerospace research on a LaSPACE affiliate campus and, thereby, retain such students while providing valuable hands-on training, as well as supporting the research infrastructure in Louisiana.

Background and Objectives

The State of Louisiana's prime goal is to develop a well-trained, technical workforce capable of moving the state forward in R & D, attracting high tech industries, and promoting economic development. This is precisely what NASA desires and what LaSPACE is working to achieve. The core focus of the LaSPACE program continues to be student involvement in genuine scientific research and engineering projects.

The purposes of the LURA program are: to recruit superior undergraduate students into NASA relevant fields of study; to strengthen the educational base in Louisiana by increasing the number of students training for careers in space-related science, engineering, and mathematics; to enhance the research capability and infrastructure in Louisiana through the support of outstanding undergraduates in mentored research; and, to develop an appreciation for space and aerospace related careers for Louisiana students.

Program Description

The LaSPACE Undergraduate Research Assistantship (LURA) Program is directed at undergraduate science and engineering students who are interested in NASA relevant research. The intent of the LURA program is to supplement and enhance the undergraduate academic curriculum by providing the science/engineering student with hands-on, mentored research experience relevant to NASA. A LURA project will be a joint effort between a faculty researcher, who serves as mentor and project Principal Investigator, and an undergraduate research assistant. This PI/student team will usually work on the PI's existing NASA related research but may develop a new project designed for the student.

The LURA award provides student support for the research assistant, who will be designated as a LaSPACE Undergraduate Research Assistant. Funding for materials, supplies, and travel to present research results is also available. LURA funding is not intended to pay for the research project.

A LURA award is set at \$4.5k per student for a 9.5-month period and is used for a supplemental student stipend plus travel for a student research presentation, with a minimum amount available for research supplies. A joint application is submitted by both the student and the faculty mentor. Student applicants must coordinate their effort with a faculty mentor and be able to devote around 10 hours per week to the project. Students may be paid via periodic stipends distributed across the period of performance or under

an hourly wage. The minimum hourly wage for LaSPACE supported students is \$10 per hour. Faculty mentors must 1) be affiliated with a LaSPACE campus, 2) be engaged in NASA Mission Directorate related aerospace research or education, and 3) serve as the student faculty mentor. Applications are judged by the relevance of the research project to the NASA mission, the student's future career plans, scholastic accomplishment, science experience, leadership, and intellectual ability as well as the faculty mentor plan for student academic development and opportunities for student presentations.

<u>Eligibility</u>

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

Undergraduate Research Assistant Requirements:

- 1. They must be a U.S. Citizen.
- 2. At the time of application, an applicant must currently be enrolled at a LaSPACE College/University. Alternatively, the applicant can be in their senior year of high school, or a recent high school graduate, and must have applied for admission to a LaSPACE member college or university.
- 3. The current or prospective field of study of an applicant must be in a discipline, with a space- or aerospace-related program. NASA Workforce Development goals imply that students must express interest in an aerospace related career.
- 4. An applicant must pursue their undergraduate degree on a full-time basis.
- 5. The applicant must coordinate with a faculty/mentor who will file a joint application with the student.
- 6. The student applicant must be able to devote 10-20 hours per week to the project.
- 7. The proposal must include a project plan written with the PI that details all the tasks and deliverables to be completed by the student, and a final report, also jointly written, must be produced with results that match the submitted project plan.

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

Faculty Mentor/Principal Investigator

- 1. The faculty member must be affiliated with a LaSPACE campus.
- 2. The faculty member must serve as mentor to the student researcher and be contractually responsible for the award.
- 3. The faculty/mentor must be engaged in space related research or education, which relates to one of the NASA Mission Directorates as discussed earlier.
- 4. The proposal must include a project plan written with the student that details all the tasks and deliverables to be completed by the student, and a final report, also jointly written, must be produced with results that match the submitted project plan.

NOTE: A change in PI is possible if justified in a written request to <u>laspace@lsu.edu</u> and approved by LaSPACE.

LURA Award Terms and Conditions

Award Funds

A LURA award is set at \$4.5k per student with no match requirement. Most of the funds (≥\$3.5k) are to be distributed directly to the student. The remaining \$1000 can be applied to additional student support, travel, and/or materials and supplies. It is recommended that some travel funds be budgeted for the student to attend at least one professional meeting; including, if possible, the annual LaSPACE Council Meeting Student Poster Session held in the fall each year.

No more than \$1k can be used for travel, materials, and supplies. The entire \$4.5k may be allocated to the student, distributed as either periodic stipend disbursement or as hourly wages, depending on your institution's preferred approach and capability. The minimum hourly wage for LaSPACE supported students is \$10 per hour.

Travel & Equipment & Supplies

The travel budget category is restricted to travel for the students. No foreign travel is allowed. The use of LaSPACE LURA grant funds for the purchase of equipment is prohibited. Travel, materials, and supplies budget categories are capped at a combined total of \$1k.

Duration

A LURA award is for a 9.5-month period and is not open to negotiation. One-semester projects are not suitable for the LURA program.

Number of Awards

LaSPACE intends to award 5 to 8 LURA teams each year. No applicant shall be denied consideration or given preferred access to LaSPACE funding. LaSPACE seeks to recruit proposals from a variety of institutions and disciplines across our consortium.

Student Support

The majority of the award is expected to be student support (\$3500 minimum / no maximum).

Indirect Costs

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

Disbursement of Funds

LURA award fund distribution will be managed by the applicant's college or university, either via costreimbursable 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 according to standard procedures and consistent with all federal and state rules and guidelines. The applicant's Faculty Advisor will serve as PI for the subcontract or account. It is understood by all LaSPACE member campuses that these funds are to be used for support of the student award recipient and for supplies and/or travel. The subawarded institution must invoice LaSPACE monthly.

Re-Application to the Program

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

Incompletion of Project

If projects are not completed and/or deliverables are not met, LaSPACE reserves the right to restrict individual PIs and campuses from participation in future programs.

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.

Proposal Revision Requests

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!

LURA Proposal Requirements & Format

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

- LaSPACE LURA 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.
- Proposed Project Summary Form
- Prior LaSPACE Awards Form
- A. LURA Student Application Form completed by the Student Researcher/Applicant (not to exceed 7 pages including application cover sheet)
- B. Proposal Narrative written by the Faculty Mentor/PI (not to exceed 6 pages)
 - 1. Overview of the Faculty Mentor's Research
 - Explicit statements of alignment with a NASA Research Priority and the NASA MD it supports (you
 may also include NASA Centers and/or Missions and Program(s) under which this alignment falls).
 Broad and general statements about relevance to NASA will not fulfill this requirement. Explicit
 statements about active work at NASA is required.
 - 3. Proposed Work Plan for the student, including a timeline with major milestones. Detail the expectations and deliverables for the student that are both challenging and achievable in the proposed period of performance.
 - 4. Benefits to the Student: technical & scientific skills to be developed or honed. Note: If this proposal is a request for a consecutive award for a student already being funded by a LURA, include here how this proposed project builds on (but does not duplicate) the work from the previous award.
 - 5. Professional Development Opportunities: mentorship plan, lab meetings, authoring papers, poster presentations, conferences, resources etc.
 - 6. Benefit to the Research Project (how will the student researcher help advance your project)
- C. Letter of Recommendation from the Faculty Mentor/PI for proposed student
- D. Budget: LaSPACE Budget Form followed by a narrative justification of all costs.
- E. Student Participant List & Form Submission Confirmations page
- F. NASA Media Release Form (completed by PI and all identified student participants)
- G. For Consecutive Award Requests only: Include preliminary progress report here for the current LURA

NOTE to Proposers:

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

LURA Evaluation

Each proposal will be evaluated using the following evaluation form.

LURA Evaluation Form

| Institution | |
|------------------------|--|
| PI Name | |
| Proposal Title | |
| Funding Recommendation | |

Proposal Formatting and Required Contents

All sections are present and in the right order. Current forms and guidance are used.

Relevance to & Alignment with NASA

Clearly aligned to a NASA Mission Directorate and priorities. Explicit references made to MDs, Centers, Divisions, and/or Programs which clearly align with the proposed project.

Quality of Student's Application & Credentials

Clarity & quality of the student's applicant. Understanding of proposed work and NASA relevance. Demonstrated ability to complete the work.

Overall Quality of Total Proposal

Clarity & quality of the proposed work and plan for the student

Evidence of Likely Completion of the Project

Management and task plan is detailed and specific; evidence of past success

Budget Appropriateness & Clarity

Appropriate to the work and to the goals of this program. Only allowable sections included. Sufficient narrative details to justify 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.

- LaSPACE LURA 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
- Instructions for LASPACE Student info forms, NASA Gateway profiles, and Media Release Forms (submitted online by PI and all identified student participants)

LaSPACE LURA Program Proposal Cover Sheet

| 1. | Title of Proposed Projec | ot: | | |
|---|---|---|--|---|
| 2. | Principal Investigator: | (Name) | (Highest Degree Earned) | (Citizenship) |
| | | (Departme | ent) | |
| 3. | Institution of Higher Ed | | , | |
| 4. | Address: | | | |
| | (Street) | Address/P.C |). Box Number) | |
| | (City, S ⁱ | tate) | (Zip Code) | |
| 5. | PI Phone: | | | |
| | PI E-mail: | | | |
| 6. | Date of Submission: | | | |
| 7. | Total Funds Requested | :\$ | Institutional Match:\$N/ | Α |
| Cert prop knov prop regu 85.5 title 112- Appr | ification of Compliance with osal, the signatories certify th vledge; they agree to comply v osal; and the institution and p lations including, but not limit 10, Participant's responsibiliti 31, U.S. Code; Compliance wi 55, Section 539; ACORN Com | Applicable E at the stateme vith LaSPACE a proposed proje ed to, Executiv es; Non-Discri th China Fund pliance in acc .112-55); and o | EXAMPLE 2 A Contract Set Set Set Set Set Set Set Set Set Se | ning and submitting this omplete to the best of their is made as a result of this Federal and State laws and sion, 34 CFR Part 85, Section g imposed by section 1352, s 112-10 Section 1340(a) and nd Further Continuing |
| 8. | Signature of Principal Ir | nvestigator:_ | | |
| 9. | Name of Authorized Or | ganizational | Rep: | |
| 10. | Signature of Authorized | Organizatio | onal 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 |
| NASA MISSION DIRECTORATE ALIGNMENT (Check <u>all</u> that apply to your project. Narrative proof for selected alignment(s) must be included in your proposal narrative.) |
| □ Aeronautics □ Exploration Systems □ Science □ Space Operations □ Space Technology |
| ABSTRACT (DO NOT EXCEED 250 WORDS) |
| |
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| |

Prior LaSPACE Awards

(Limit this list to the last 5 projects / last 3 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 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. 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. Faculty/Staff Researchers | \$ n/a | \$ n/a | | |
| 2. Graduate Student(s) | \$ n/a | \$ n/a | | |
| 3. Undergraduate Student(s) | \$ | \$ n/a | | |
| 4. Fringe Benefits | \$ n/a | \$ n/a | | |
| 5. Total A | \$ | \$ n/a | | |
| B. Supportive Expenses | | | | |
| 1. Travel | \$ | \$ n/a | | |
| 2. Supplies & Materials | \$ | \$ n/a | | |
| 3. Other Direct Costs (<mark>Identify</mark>) | \$ n/a | \$ n/a | | |
| 4. Total B | \$ | \$ n/a | | |
| C. Facilities & Administration | | | | |
| 1. F&A (Indirect Costs) | \$ n/a | \$ n/a | | |
| · | | | | |
| D. Total Budget | | | | |
| Total Budget (A5+B4+C1) | \$ | \$ n/a | | |

*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.

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 confirm that all students listed above have completed a LaSPACE student participant form. Include this page in your proposal.

□ Check this box to confirm that all students listed above have completed a NASA STEM Gateway profile. Include this page in your proposal.

□ Check this box to confirm that all students listed above have completed a Media Release Form. Include this page in your proposal.

For Projects which have not yet recruited student participants only:

□ Check this box to confirm that all students recruited after you've been awarded will complete the required online forms and you will submit this table immediately upon recruitment. Include 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 GSRA.
- 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 8/15/2025 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: <u>https://stemgateway.nasa.gov/s/</u>.

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.

NOTE: The updated LURA application form is included after this page. It must be completed and signed by the student and included in the complete proposal to LaSPACE.

LaSPACE Undergraduate Research Assistantship (LURA) Student Application Cover Page

| Name: | | | | | | |
|--|---------------------|-----------|------------------|-----------|-----------------------|---------------|
| College Campus: | | | | | | |
| Current Classification (check | one): 🗆 Freshmai | n ⊡S | ophomore [| Junior | □ Senior | |
| Major(s): | | | | | | |
| Minor(s): | | | | | | |
| Current G.P.A.: | | SA | AT or ACT Score | es: | | |
| Anticipated Graduation (Mont | h/Year): | | | | | |
| List in REVERSE chronological current institution. | order colleges/univ | versities | s and the last h | igh schoo | l attended s | starting with |
| Institution | City | State | Dates Attende | • | ee Earned expected | GPA/Base |
| | | | | | | / |
| | | | | | | / |
| | | | | | | / |
| | | | | | | / |
| | | | | | | |
| Faculty Mentor Name: | | | | | | |
| Department: | | | | | | |
| Mentor Phone: | Me | ntor En | nail: | | | |
| Student Applicant Signature: _ | | | | Date | e: | |

 $\hfill\square$ Confirmation that LaSPACE Online Student Participant Form has been submitted.

LaSPACE Undergraduate Research Assistantship (LURA) Student Application Narrative

Use up to **6 pages** to respond to the following sections. We provide you with 6 pages for a reason; very short, unspecific responses will not review well.

- 1. List and *describe* scholarships, academic honors, student leadership roles, honorary societies, awards, and any other recognition relevant to your application (*Include any scholarship or office of any kind held at the time of the submission of this application*).
- 2. List and *describe* any work experience, research activities, club memberships, or outside interests relevant to your field of study or your development as a professional.
- 3. In a concise statement, summarize the objectives of your educational program and your long-range professional goals and how participation in this LURA program and this research project will help you achieve your goals (Provide sufficient information for evaluation by reviewers).
- 4. Discuss the NASA relevance of the research project and its relationship to your academic/professional goals. Be explicit in explaining how the work you will perform under this LURA supports NASA Research, and how your academic/career plans support the goals and priorities of NASA. This program is funded by NASA and only projects relevant to NASA will be supported.
- 5. Provide a summary, in your own words, of the project work plan detailed by the PI in the proposal, delineate the specific work you will do, capabilities & skills you will acquire, and list all expected deliverables or outcomes (including planned presentations, if known). It is critical that you prove to us that you understand the work you are signing up for and that you have a clear understanding of your Faculty Mentor's expectations.