

LaSPACE Graduate Student Research Assistance (GSRA) Program



NASA SPACE GRANT PROGRAM

for

SUPPLEMENTAL FUNDING

for

GRADUATE STUDENT RESEARCH

in

SPACE AND AEROSPACE FIELDS

OFFERED BY

THE LOUISIANA SPACE CONSORTIUM

UNDER THE AUTHORITY OF

THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

APPLICATION PACKET

(Available at <http://laspace.lsu.edu/RFP/>)

LaSPACE Graduate Student Research Assistance (GSRA) Program

A NASA SPACE GRANT FELLOWSHIP PROGRAM

Application Guidelines

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LaSPACE Graduate Student Research Assistance (GSRA) Program A NASA SPACE GRANT PROGRAM

**Louisiana Space Consortium
364 Nicholson Hall
Department of Physics and Astronomy
Louisiana State University
Baton Rouge, LA 70803**

Application Guidelines for Space and Aerospace GSRA Program (Available at <http://phacts.phys.lsu.edu/RFP/>)

INTRODUCTION

This document describes the Louisiana Space Consortium Graduate Student Research Assistance (GSRA) Program. The program provides small supplements for research and study for graduate students, who are **U. S. citizens**, and who undertake a curriculum of **space** or **aerospace** related fields of study in math, science, or engineering at a college/university that is a Designated Member of the Louisiana Space Consortium. A list of Consortium Member Institutions and respective Campus Coordinators is given in Section I, along with general information about the GSRA Program and this application for supplemental funding.

Section II describes the eligibility requirements, award amount, and selection process. Sections III and IV of this document give requirements and instructions for submission of the application. The application form is included in Appendix I. The form for the Final Technical Report due at the end of the award period is given in Appendix II.

I. GENERAL INFORMATION

A. PURPOSES OF THE LaSPACE PROGRAM

Succinctly stated, the goals and objectives of the Louisiana Space Consortium, as per the training grant proposal approved by NASA, and the LaSPACE affiliates are:

1. To increase, in quantity and in quality, Louisiana's production of aerospace and related science and engineering graduates and professionals,
2. To enhance in scope, depth, and number, research and development activities in aerospace and related sciences and engineering, and
3. To indirectly increase aerospace and related industries in the state -- not only for economic development but also for economic diversification.

The stimulus and planning activities of LaSPACE, as delineated in the above objectives, have been modeled, in part, after those of the Louisiana Stimulus for Excellence in Research -- Experimental Program to Stimulate Competitive Research (LaSER -- EPSCOR) -- an initiative funded by the National Science Foundation whose major goal is to increase the competitiveness of Louisiana's scientists, engineers, and mathematicians for federal research funds. The enhancement of space and aerospace related research and development throughout Louisiana is a central program of LaSPACE.

B. PUBLIC NATURE OF APPLICATIONS SUBMITTED IN THE LaSPACE FELLOWSHIP PROGRAM

Once an application is received in the LaSPACE office, it becomes public record. Although the LaSPACE 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., a representative of the news media), a copy of the application, by law, must be provided. (Sensitive personal information, such as the social security number, will be redacted.)

C. LaSPACE PROGRAM ADMINISTRATION AND CAMPUS COORDINATORS

Specific questions concerning this document and the requirements set forth herein should be directed to the applicant's LaSPACE Campus Coordinator listed below, or to LaSPACE management:

John P. Wefel, Director; T. Gregory Guzik, Assistant Director
LaSPACE GSRA Program
Department of Physics and Astronomy
Nicholson Hall – 364
Louisiana State University
Baton Rouge, LA 70803
Phone: 225-578-8697
E-mail: wefel@phunds.phys.lsu.edu; guzik@phunds.phys.lsu.edu

This is also the address to which completed applications should be sent.

The following list comprises the LaSPACE Consortium Member Institutions and their respective Campus Coordinators:

Dillard University	Dr. Abdalla Darwish	504-816-4840
Grambling State University	Dr. Matthew F. Ware	318-274-2687
Louisiana State University	Dr. Keith Gonthier	225-578-5792
Louisiana Tech University	Dr. Dick Greenwood	318-257-2302
Loyola University	Dr. Creston King	504-865-3644
LSU Agricultural Center	Lyda C. Gatewood	225-578-8231
LSU Shreveport	Dr. Laura Whitlock	318-797-5238
McNeese State University	Dr. Giovanni Santostasi	337-475-5759
Nicholls State University	Dr. Chadwick H. Young	985-448-4879

Northwestern State University of Louisiana	Dr. Austin L. Temple Jr.	318-357-6699
Southeastern Louisiana University	Dr. Nick Norton	985-549-3740
Southern University and A & M College	Dr. Michael A. Stubblefield	225-771-3290
	Dr. Diola Bagayoko	225-771-2730
Southern University in New Orleans	Dr. Joe Omojola	504-368-0589
Tulane University	Dr. Mark J. Fink	504-862-3568
University of Louisiana at Lafayette	Dr. Terrence L. Chambers	337-482-6517
University of Louisiana at Monroe	Dr. Lisa Colvin	318-342-1036
University of New Orleans	Dr. Kenneth Holladay	504-280-6124
Xavier University of Louisiana	Rachel Cruthirds	504-520-5600

D. NASA MISSION DIRECTORATES

The NASA program of discovery and development is organized into Mission Directorates, following the President's 2004 announcement of the new "Vision for Space Exploration." All Space Grant programs must align with and support the *Vision for U. S. Space Exploration* - - see (www.nasa.gov/pdf/55583main_vision_space_exploration2.pdf).

All NASA subprograms must relate to and support one or more of these Directorates. Likewise, all programs supported by LaSPACE must also support these new NASA Directorates. The current Mission Directorates are:

- **Aeronautics** - - *Enable a safer, more secure, efficient, and environmentally friendly air transportation system.*
- **Exploration Systems** - - *Direct the identification, development, and validation of exploration systems and technologies.*
- **Science** - - *Exploring the Earth-Sun system, our own solar system, and the universe beyond.*
- **Space Operations** - - *Extend the duration and boundaries of human space flight to create new opportunities for exploration and discovery.*

The NASA Mission Directorates identify what NASA does and for whom, focusing on the ends, not the means. Each Mission Directorate has a unique set of goals, objectives, and strategies that addresses the requirements of its primary external customers. Although NASA's broad mission is driven by the Space Act, the specific programs that are conducted within its directorates, and the priorities placed on them, are driven by the directives of the Administration and Congress, and, therefore, change over time. Current specific content for the Mission Directorates is presented within their own Strategic Plans available on the web. (<http://www.education.nasa.gov/about/nasaent/index.html>.)

E. DIVERSITY

In addition to the Directorates, NASA's **Office of Education** coordinates education efforts from K-16, including educational products and technology. The Education Office's goal is "to inspire the next generation of explorers" and to develop the Workforce that will lead NASA into the exploration era.

It is a national priority to increase diversity in the Science, Technology, Engineering and Mathematics (STEM) marketplace, from university students to 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 address the diversity issue.

II. THE LaSPACE GRADUATE STUDENT RESEARCH ASSISTANCE PROGRAM

A. OBJECTIVES

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 strengthen the educational base in Louisiana, and (3) to develop the research infrastructure needed for an increasing level of aerospace R & D in the state. LaSPACE offers two programs in support of these objectives - - the Graduate Fellowship Program, which offers annual stipends for Master's and Doctoral candidates, and the GSRA program that offers a supplement to assist with graduate student research.

A new initiative under the LaSPACE Fellowship/Scholarship Component, introduced in the Fall of 2005, the GSRA Program helps address the challenge to strengthen the educational base among member institutions, in concert with state and NASA needs, based upon an analysis of institution roles and expectations.

GSRA is a program whose Objectives are (i) to retain more U. S. students for graduate study on consortium campuses, (ii) to promote diversity and (iii) to assist with thesis/dissertation research. The award can be used to augment student stipends, to defray expenses for research costs, to promote attendance at national meetings to present research results and network, or for other research related purposes.

B. ELIGIBILITY

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

1. An applicant must be a U.S. Citizen.

2. At the time of application, the student must be currently enrolled in graduate school at a LaSPACE Consortium Member Institution.
3. The graduate work of the applicant must be in a space- or aerospace-related field or program.
4. An applicant must pursue his/her graduate degree on a full time basis, and be registered for each semester, including the summers. (On a case by case basis, LaSPACE administrators may allow stipend payment for students engaged in research off campus or registered for degree only or research only. Prior approval by LaSPACE is required in such cases.)

C. TERM AND AWARD AMOUNT

A LaSPACE GSRA supplement carries an annual award of \$5,000. for graduate students seeking a Master's or Doctoral degree. Both degree levels are reviewed on an equal basis. Applications are reviewed on a first-come, first-served basis. There is no proposal deadline.

Applicants from groups under-represented in the Math, Science and Engineering STEM disciplines are strongly encouraged to apply. Applicants from four-year schools and HBCU's are also especially encouraged.

The applicant's institution must commit at least a 1:1 match in non-federal and non-LaSPACE funds. (This is discussed in Section II-D below.) GSRA Award funds will be transferred to the applicant's LaSPACE college or university, either via subcontract (if the applicant is not on the LSU campus) or by transfer of funds from the LaSPACE account at LSU to the applicant's department account if the applicant is on the LSU campus. The institution will assume responsibility for administering and distributing these monies. **The applicant's Research Advisor will serve as PI for the subcontract or account and will be responsible for the stewardship of the funds.** It is understood by all LaSPACE member campuses that these funds are to be used for stipends to the graduate student recipient, or for other research assistance for preparation of the thesis or dissertation.

The term of the award (subcontract) is normally 12 months, and recipients may be required by their institution to register for each semester (quarter) in order to expend the funds or receive a stipend. Check the procedures at your institution.

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, timely submission of the Final Technical Report (see form in Appendix II), and the continued fulfillment of the eligibility criteria.

A Final Technical Report, **jointly submitted** by the applicant's Research Advisor and by the graduate student, will serve as the contract deliverable. The format for this

report is given in Appendix II. These reports are due at the end of the contract term or at the time of graduation, whichever comes first. **Failure to submit this report is grounds for elimination from future LaSPACE programs, or forfeiture of funds.**

The report is important not only to document the accomplishments made possible by the NASA funding, but it also serves as a mechanism to collect the metrics, outcomes, and longitudinal tracking data that LaSPACE is required to report on all participants and projects undertaken by the Space Grant Program.

D. MATCHING FUNDS/COST SHARING and INDIRECT COSTS

The GSRA program requires at least a 1:1 match in non-federal and non-LaSPACE funds. This requirement may seem unusual, but

- a) 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
- b) LaSPACE, as a federal-state partnership, is required to generate 1:1 matching funds on its awards. (Without generating this match, there would be no 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.

The required match may be from the student's regular stipend as a graduate assistant or a research assistant provided that this regular stipend is not from a federal agency or from a LaSPACE Fellowship. In the latter cases, a student is still eligible, but the match must come from other sources such as Research Advisor time, or the like.

F & A (Indirect) charges are waived for GSRA awards as per the NASA grant. Each student is encouraged to discuss the application with his/her Department Chair and Graduate Advisor and/or with the local LaSPACE Campus Coordinator.

E. SELECTION OF APPLICATIONS

Applications are accepted on a first-come, first-served basis. All applications that meet the eligibility requirements and guidelines established for this Program will be reviewed and rated based upon the extent to which they meet specific criteria and ranked according to their scores on the following:

- Space and aerospace relevance of the research.
- Overall utility and relevance to LaSPACE research and human resources development objectives.

Successful applicants will be notified by letter, with a copy to the Research Advisor and Campus Coordinator.

F. FINAL TECHNICAL REPORT

LaSPACE requires a Final Technical Report and Final Financial Report on all funded projects. Additionally, LaSPACE reserves the right to review projects and/or require additional reports whenever such actions are deemed necessary or are requested by sources supporting LaSPACE. The reporting requirements will be delineated in the contracts negotiated with each campus. The GSRA student and Research Advisor are responsible for ensuring that these reports are submitted to LaSPACE within 30 days of the expiration of the GSRA award. The student (plus research advisor) is responsible for the Final Technical Report (the form is given in Appendix II) which is also signed by the Research Advisor. The institution prepares the financial statement, along with the accompanying cost share certification.

All publications, presentations, etc. that emanate from the work supported by this subcontract shall cite the support of the Louisiana Space Consortium and NASA under grant NNG05GH22H.

III. PROCEDURE AND DEADLINE FOR SUBMISSION OF APPLICATIONS

Applications are accepted at any time. There is no deadline. GSRA applications for consideration under this Program may be submitted to The LaSPACE GSRA Program, at the address listed previously. Only the signed original (no copies) need be submitted.

Preferably, applications can be submitted electronically, as a PDF file, to eads@phys.lsu.edu. In this mode, the signature page should be scanned and included in the PDF file.

If a proposal is submitted electronically without the signature page, then that signed page must be received by fax (225-578-1222), or courier, or mail within a week of the electronic submission.

IV. REQUIREMENTS AND FORMAT FOR APPLICATIONS

Additional copies of these application guidelines are available from the LaSPACE Office or the LaSPACE website. Applicants are encouraged to talk with their Research Advisor or Campus Coordinator as they develop their application.

The following format and requirements for applications must be followed. Applications which do not adhere to these guidelines will be returned for non-compliance and will not be considered further.

A completed application must include the following:

STUDENT APPLICATION FORM:

1. A properly executed (signed original) LaSPACE GSRA Application Form (Appendix I), includes
 - Cover pages.
 - Description of Research plan, current status and projected schedule.
 - Statement of the Space/Aerospace relevance of the research. (See descriptions of the NASA Mission Directorates.)
 - Description of how the funds will be expended. (A lump sum payment to the student is acceptable if consistent with campus policy.)
 - Professional Goals post graduation.
 - List of Publications, Presentations, Patents, etc.
 - Related work experiences.
 - List of Scholarships, Awards, Honors, Recognition.

RESEARCH ADVISOR'S LETTER OF RECOMMENDATION:

2. A letter of recommendation from the applicant's research advisor attesting to: a) the enrollment of the applicant in a graduate program; b) the degree of relevance of the applicant's current or prospective graduate work to space and aerospace related fields and program; and c) the applicant's need for the supplement to further his/her graduate research objectives. (May be submitted via e-mail.)

BUDGET CERTIFICATION

3. A Matching Funds Commitment page (Appendix I), signed by the submitting institution, describing the matching funds that are committed to the project.

APPENDIX I

GSRA APPLICATION FORM

(REPRODUCE AS NEEDED)

LaSPACE GSRA APPLICATION FORM

Date of Submission: _____

NAME: _____ Male _____ Female
 Last First MI

Current Address: _____

U.S. Citizen: _____ Yes _____ No

Date of Birth: _____

Home Phone: (____) _____

Place of Birth: _____

Campus Phone: (____) _____

FAX (if any): (____) _____

Cell Phone: (____) _____

Current E-mail: _____

Permanent Address: _____
(if different from above) _____

Check if you are a member of the following underrepresented minority groups in science and engineering (optional):

____ American Indian ____ Pacific Islander (Polynesian or Micronesian)
____ Black ____ Other _____
____ Hispanic
____ Native Alaskan (Eskimo or Aleut) ____ Disabled

Graduate Institution _____

Academic Discipline: _____ Degree Sought: _____

Major Field: _____ Minor Field (if applicable): _____

Current Research Advisor's: _____
 Name E-mail

Campus Address

Campus Phone

Last Name: _____

On a separate sheet, please briefly respond to each question below.

1. Describe your research plan, accomplishments to date, and provide a brief time-table for completion of your degree plan.
2. Describe the Space/Aerospace relevance of your research.
3. Describe your 'need' for this research supplement and how it will be used.
4. Briefly describe your professional goals.
5. List publications, patent applications, conference presentations, etc. related to your graduate research.
6. List any work experiences, scientific research activities, or outside interests relevant to your field of study.
7. List scholarships, academic honors, scientific or engineering student leadership roles, honorary societies, awards, and any other recognition relevant to your field.

Signature of Applicant _____ Date _____

Signature of Research Advisor _____ Date _____

Return to: LaSPACE GSRA Program
Nicholson Hall – 364
Department of Physics and Astronomy
Louisiana State University
Baton Rouge, LA 70803-4001

GSRA Matching Funds Commitment

Graduate Student Name: _____

Institution: _____

Department: _____

Research Advisor: _____

Award Amount Requested: \$ _____

Institutional Commitment: \$ _____

Explanation:

Signature of Research Advisor (PI): _____

Signature of Authorized Institutional Representative: _____

Name and Contact Information for Authorized Institutional Representative:

APPENDIX II

FINAL TECHNICAL REPORT FORM

LaSPACE Graduate Student Research Assistance
Final Technical Report

I. Contact Information

Date: _____

Name: _____

Division/Department: _____

Current Mailing Address: _____

University: _____

Graduate Advisor:

Name: _____

Daytime Phone: _____

Address: _____

Fax Number: _____

Cell Phone: _____

Phone: _____

E-Mail: _____

E-mail: _____

II. Coursework

Report for Period: _____

Degree Title: _____

Projected date when degree is expected: _____

Courses Taken (if applicable):

Course Name	Course Number	Hours	Completed/Grade
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III. Research (Please attach a several page write up that describes your project, methods, results, and include any presentations/publications/reports. You must cite support from your LaSPACE award on any presentations/publications/reports.)

IV. Other Activities (Please Describe)

V. Bibliography (List any presentations/publications/reports emanating from this support.) Give complete citations.

VI. Graduate Advisor's Evaluation (Attach additional sheets if necessary.)

Advisor Signature

Date

Please return to: LaSPACE Office, 364 Nicholson Hall, Department of Physics and Astronomy,
Louisiana State University, Baton Rouge, LA 70803-4001 (tel. 225-578-8697).

APPENDIX III

STUDENT INFORMATION FORM (To be attached to Final Report)

III. Student Information Form

(The following is the information we must collect for each student participating in a LaSPACE Space Grant or NASA EPSCoR program.)

Name: _____

Permanent Address: _____

Permanent Telephone: _____ Permanent e-mail: _____

Current Telephone: _____ Current e-mail: _____

Citizenship: _____

Project in which participated: _____

Faculty advisor/mentor: _____

University: _____

Gender: ____ M ____ F Ethnicity*: _____

Do you have a disability that limits a life activity? ____ Yes ____ No

(*Caucasian; African-American; Hispanic; Asian; American Indian/Eskimo/Aleut/Filipino)

Undergraduate: ____ Yes ____ No

If Yes: Year in School: _____

Major: _____

Anticipated Graduation date (mo./yr.): _____

Post-graduation plans (if known): _____

Graduate Student: ____ Yes ____ No

If Yes: Degree Sought: _____

Major: _____

Anticipated Graduation date (mo./yr.): _____

Post-graduation plans (if known): _____

Note: No individual student data will be reported. NASA receives only aggregate data.