



**MISSISSIPPI
SPACE GRANT
CONSORTIUM**

Graduate Research Fellowships

Application for Academic Year 2009 - 2010

Deadline: March 6, 2009

Mississippi Space Grant Consortium

The University of Mississippi

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www.olemiss.edu/programs/nasa/



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I. MISSISSIPPI SPACE GRANT CONSORTIUM (MSSGC)

In 1988, Congress enacted the NASA National Space Grant College and Fellowship Program to address scientific and technological workforce needs and the national decline in scholastic achievement, especially in math and science. NASA's Space Grant funds education, research, and public outreach education in all 50 states, the District of Columbia, and Puerto Rico through a network of 52 university-based Space Grant Consortia with over 700 participating affiliates. The Space Grant Consortia is united by the common goal of developing the educational and economical benefits of aerospace research and exploration.

The Mississippi Space Grant Consortium consists of sixteen Mississippi Space Grant Colleges and Universities: Alcorn State University, Coahoma Community College, Delta State University, Hinds Community College, Itawamba Community College, Jackson State University, Meridian Community College, Mississippi Delta Community College, Mississippi Gulf Coast Community College, Mississippi State University, Mississippi University for Women, Mississippi Valley State University, Northeast Mississippi Community College, Pearl River Community College, University of Mississippi, and University of Southern Mississippi.

A major goal of the MSSGC is to help produce the engineers and scientists of the future. While opportunities for careers in STEM fields have expanded the number of talented students pursuing degrees in science, technology, engineering and mathematics, (STEM) have been declining. To encourage talented individuals to pursue STEM fields of study, the MSSGC established the Graduate Research Fellowship program.

II. MSSGC GRADUATE RESEARCH FELLOWSHIPS

The Mississippi Space Grant Consortium provides a competitive Graduate Fellowship program, funded by NASA, with the following goals:

- Encouraging undergraduate students in STEM fields of study to continue to the graduate level;
- Promote graduate STEM research, while recognizing high academic achievement and promise;
- Increasing participation of underrepresented minorities, females and students with disabilities in STEM careers; and
- Implementing the goals to the Mississippi Space Grant Consortium (MSSGC) and the National Aeronautics and Space Administration (NASA).

III. FELLOWSHIP AWARDS

Fellowships are \$17,000 for one year. Awards are renewable up to a total of three years for students making satisfactory research and academic progress, and participating in the Fellowship education program as described below. Awardees will be required to certify through their academic department that basic research support is being provided before funds are released. These awards may be either "stand-alone" or they may supplement other awards, such as graduate research or teaching assistantships and non-federal scholarships and fellowships.

IV. ELIGIBILITY

The Fellowship program is open to graduate students who are **U.S. citizens** and will be enrolled in a program of full-time study at one of the MSSGC universities. Students may apply prior to entering or anytime during their graduate program. Eligibility is limited to students pursuing advanced degrees in science, technology, engineering and mathematics (STEM) fields.

Successful fellowship recipients are expected to have a grade point average of at least 3.0 on a 4.0 scale. Priority for fellowship awards will be given to those who do not receive other federal fellowships such as NASA Graduate Student Research Program Fellowships, National Science Foundation Fellowships, etc. Since an important purpose of this program is to increase the participation of underrepresented minorities, females, and persons with disabilities in STEM careers, the MSSGC especially encourages applications from these students.

U. AWARDS PROCESS AND REQUIREMENTS

Applications must be received by the MSSGC by March 6, 2009. Awards will be announced by April 3, 2009.

Awardees must provide a photo and biographical information upon selection; inform the MSSGC of changes of addresses and respond to academic and employment follow-up surveys for MSSGC Fellows.

This fellowship program is modeled on the National Science Foundation's Graduate Teaching Fellows in K-12 Education (GK-12) program. In return for their fellowship, and in addition to performing mentored research in a STEM area, the GK-12 Fellows are required to act as resources for local K-8 teachers for fifteen hours per week during the K-12 school year. The Fellows are required to develop and test state standards-based, STEM-related modules for classroom use. (Currently, there is one such program in Mississippi, the North Mississippi GK-12 Program, at The University of Mississippi.) The goal is to enhance the STEM-related educational practices in use by K-8 teachers and students with emphasis on materials that improve critical thinking skills, effectively reaching students in every grade, academic performance level, and cultural background and learning style.

Similarly, NASA MSSGC Grant Fellows will be required to be a resource person to one or more teachers in one of their graduate institution's neighboring K-12 schools for ten hours per week. MSSGC Campus coordinators will be required to identify this teacher. Rather than develop modules, the Fellows will use already developed materials from the wide variety available through NASA or elsewhere (such as the GK-8 program). Since new graduate students need guidance in working with teachers, the MSSGC Associate Director and Fellows will participate in a one-day training, and that the training schedule will be arranged, as appropriate, to suit the requirements of the Space Grant Fellows.

If a Fellow terminates his/her academic programs during the award time period, the Affiliate University is required to return a prorated share of the fellowship award to the MSSGC. Fellowship funds are non transferable.

VI. APPLICATION GUIDELINE AND FELLOWSHIP RENEWALS

An Application Information Form must be filled out on both sides, signed by the student and endorsed by: a) a faculty advisor; b) the department chair; c) the MSSGC affiliate Campus Coordinator. Attachments:

■ *Description of Proposed Research and Plan of Study*

A statement written by the student in consultation with the advisor should describe the key elements of the proposed research and plan of study; what he/she intends to accomplish; and identify any NASA application of the proposed research activity. The statement should not exceed five double-spaced pages. (The selection committee is made up of university faculty from a variety of disciplines. Applicants should present their proposed research in a manner that is understandable to a range of readers.)

■ *Letter of Recommendation*

Applicants should submit one letter of recommendation from a university faculty member in the student's discipline.

■ *Resume*

Applicants should submit a short resume of education, significant accomplishments, research to date, and other relevant information.

■ *Transcript*

A certified transcript with grades up to date is required.

VII. APPLICATION SUBMISSION

Application package should include: 1) Application; 2) Description of Proposed Research; 3) Plan of Study; 4) Letter of Recommendation; 5) Student Resume and 6) Transcript

Mail materials to: Mississippi Space Grant Consortium
The University of Mississippi
PO Box 1848
308 Vardaman Hall
University, MS 38677-1848

VIII. INQUIRIES

Questions concerning this preparation and submission of application package should be directed to Margaret W. Schaff, Project Coordinator, MSSGC, Telephone (662) 915-1187 or e-mail mschaff@olemiss.edu.

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