

South Carolina Space Grant Consortium Palmetto Academy Program Summer 2010

“From the time of our birth, humans have felt a primordial urge to explore -- to blaze new trails, map new lands, and answer profound questions about ourselves and our universe.” – NASA

General Information

The South Carolina Space Grant Consortium (SCSGC) is pleased to announce the Palmetto Academy Program, an immersive and integrated multidisciplinary exposure and training for students with various backgrounds and career aspirations of critical importance to the National aerospace program. This program, aimed at undergraduate and graduate students attending colleges and universities in South Carolina, encourages student participation in order to meet the growing need by NASA for skilled science and engineering workers. The Palmetto Academy program is expected to contribute to NASA's goal of developing a diverse, competitive, and globally-engaged science and engineering workforce.

Faculty at member institutions may apply to host a Palmetto Academy site focused on one of NASA's current research priorities. Although the program is a ten-week summer program, the Palmetto Academy Sites should host 9-week research opportunities that have direct relevance to NASA mission areas. The students will be involved in a welcome session at the beginning and then a finale ceremony at the end, constituting the tenth week. The SCSGC Palmetto Academy will enable faculty at colleges throughout South Carolina to immerse students in "hands on" learning experiences while working on NASA-related research. As is true of all SCSGC Programs, minority participation is encouraged.

Goals and Objectives

The overarching goals of the SCSGC Palmetto Academy are to enhance workforce development within South Carolina in STEM areas and to increase the number of students interested in and retain those currently pursuing STEM disciplines. Specifically, the SCSGC Palmetto Academy program will reach out to students from underrepresented communities or at smaller institutions interested in STEM activities. Further, the mentored SCSGC Palmetto Academy sites will advance NASA's research agenda and will raise NASA's profile in the Southeast region of the United States. The goals and objectives for the student participants are:

- To provide a unique, intensive, and rigorous educational and training curriculum related to scientific methods and processes
- To create an environment that fosters creativity, personal initiative/self confidence, together with group mentality, teamwork, and professional ethics
 - Students will have the necessary confidence and wherewithal to submit applications for other NASA internship programs, NASA Academy, and the like.
- To increase written and oral communication skills
 - Students within the Palmetto Academy will submit a final report. Students will prepare a poster and presentation to share their research experience with others.
- To spark an interest in continuing NASA-relevant research in graduate school and beyond.
 - Students will pursue advanced degrees in STEM fields.
- To facilitate access to and dissemination of valuable information on career development paths, financial support, technical writing standards, intellectual property, etc.

- SCSGC will develop a listserv at the onset of the Palmetto Academy to communicate and disseminate information effectively with the faculty mentors and students.
- To enter the STEM workforce by working on NASA-related endeavors
 - Students will continue to pursue career paths in STEM areas.

SCSGC Palmetto Academy Eligibility:

Faculty: The Palmetto Academy will be open to any research proposals that advance NASA's research interests, such as aeronautics, biomedical science, astrophysics, planetary exploration, including the Earth and Moon, and Earth System Science, to further include global climate change, drought, etc. These research thrusts are pertinent not only on a national scale but also regionally here in the southeast. Any faculty at member institutions working on one of the above thrusts may be awarded a SCSGC Palmetto Academy grant.

Faculty must be US residents to apply. An individual from one of our member institutions should be designated as Principal Investigator and will be responsible for overseeing all aspects of the Palmetto Academy award in collaboration with the Palmetto Academy Coordinator. One additional person may act as Co-Principal Investigator. Other anticipated research mentors should be listed as Senior Personnel.

****Note:** The Palmetto Academy Coordinator will aid the PIs in advertising. In addition, she will be in charge of all logistics for the program including arranging the opening and closing sessions for all PIs and students, site visits to each of the five chosen Palmetto Academy sites during the program, and running the selection process for PIs and students. She will handle all of the evaluation and assessments of the program as well as of each individual project.

Students: SCSGC and the Academy Coordinator will develop an extensive recruiting campaign to attract students from smaller institutions and minority institutions. The SCSGC will begin targeting at the sophomore level. The Academy Coordinator will do this through a targeted advertising campaign for STEM and Education majors. Undergraduate and graduate students attending member institutions in the SCSGC are eligible to apply. The students can apply, selecting multiple projects, ranking them by priority. Students wishing to apply will have access to the Palmetto Academy packet, which will include an application, descriptions of the selected research projects, and all other necessary materials; this information will also be posted on the SCSGC website. Faculty and Student participants supported with NASA funds must be citizens of the United States or its possessions.

SCSGC Palmetto Academy Required Proposal elements:

The original, 2 copies and complete electronic versions (including signature and budget pages) must be submitted to Cynthia Hall, Palmetto Academy Program Director, (hallcr@cofc.edu) in the Main Space Grant Office by noon on December 07, 2009.

LATE APPLICATIONS WILL NOT BE ACCEPTED.

1. Cover Sheet.
2. Contact Information for Principal Investigator.

3. Project Summary (1-page limit). Provide a description of the activities that would result if the project is funded, including comments on its connection to the NASA mission, objectives, and intended student activities.
4. Project Description:
 - a. Overview. Provide a brief description of the objectives of the proposed Palmetto Academy Site, targeted student participants, NASA mission links, organizational structure, timetable, and institutional commitment to the Palmetto Academy. Duration of Palmetto Academy and follow up activities should be discussed.
 - b. Research questions and NASA ties. Provide a description of the research questions and their relevance to the NASA mission.
 - c. Duration. The PI should discuss the length of time that students will spend at a Palmetto Academy site. A brief discussion of the activities that will occur after the students leave a SCSGC Palmetto Academy site should be included.
 - d. Nature of Student Activities. Proposals should address the approach to undergraduate/graduate research training and should provide detailed descriptions of examples of research projects that students will pursue.
 - e. Project Evaluation and Reporting. A detailed account of your evaluation procedures must be included in the proposal. The objective of the evaluation process is to measure qualitatively and quantitatively the success of the project in achieving its goals – starting from its nascent stages. Specific attention will be focused on the learning experience of the student and how his/her perspectives on science or engineering have been expanded.
5. Current and Pending Support.
6. Biographical Sketches of PI's and Co-PI, and other senior personnel.
7. Project Budget and Budget Justification.

Budget and Justification (\$16,000, \$21,200, or \$26,400 plus a 1:1 match for one summer program).

A PI may request funding for one student for a total budget of \$16,000, a PI with two students may request \$21,200 and a PI with three students may request \$26,400. The budget MUST include a minimum of a \$5,000 stipend per student. The remaining amount can be distributed at the PI's discretion and may include research supplies, travel to a NASA center for the PI and the students and any other items needed for the research project.

Depending on funding from NASA, the SCSGC will try to include a midway weekend trip to a NASA facility of SCSGC's choosing. If you would like to include a visit to a specific NASA center or observation facility or to a specific national conference for you and your student, you must include those travel costs in your budget.

****Note:** The SCSGC will cover ALL travel costs for the PI and students to attend the opening summit and closing finale at a central location. This includes transportation, overnight room and per diem expenses. In addition, the SCSGC will cover housing for student participants at the host institution. As such, PI's do not need to include these costs as part of their budget!

*COST SHARING AND ALLOWABLE COSTS (new this year)

The Consortium is required to match NASA 1:1. **Therefore, applicants will be required to match 100% of their requested funds with non-federal funds. Match can be in the form of either hard money matches or in kind**

matches, including waived indirect costs, academic release for faculty members, student stipends, instrument, and computer time.

As per SCSGC policy, SCSGC funds cannot be used for indirect costs and overhead charges. Applications solely for the acquisition of equipment or computers cannot be funded.

***NASA SC Space Grant funds may NOT be used for salary, wages and fringes for any non-US citizens (students or faculty).**

Palmetto Academy Review and Selection criteria

The proposals will undergo a merit review and selection process using reviewers external to the state. All reviewers and panelists will have knowledge of NASA's mission and research priorities. The reviewers will assess the degree to which the research activity advances discovery and understanding and promotes teaching and learning. Reviewers will be looking for projects that align with NASA's mission needs and one of NASA's four mission directorates, scientifically relevant research, the value of the educational experience for student participants, follow up after the program, and budget realism/effectiveness.

Project Reporting

The PI must prepare a project report within 30 days of the end of the Palmetto Academy to be submitted to the SCSGC and NASA. These reports should include information on project participants, the research training provided and other educational activities, publications and products, and most importantly, contributions to education and human resource development. The report should emphasize the relationship with NASA and efforts to continue collaboration after the completion of SCSGC Palmetto Academy activities.

Student Report

The report should include a brief statement from the student regarding his/her experience within the SCSGC Palmetto Academy mentor program with NASA. For example, thoughts that might be expressed may include – What has the program done for them? How has it helped shaped their future career with, or outside of, NASA? Would they recommend this program to their friends?

Timeline

September, 2009	Announcement of Opportunity
December 07, 2009	Application for Palmetto Academy deadline *Original, 2 copies and COMPLETE ELECTRONIC VERSIONS (including signature and budget pages) must be submitted to Cynthia Hall in the Main Space Grant Office
January 4, 2010	Awardees selected and announced
February 26, 2010	Student Applications due
March 2010	Selection and Placement of Students
Summer 2010	Palmetto Academy Summer Session
September 2010	Student follow up at home university
October 2010	Palmetto Academy reports submitted to SCSGC

South Carolina Space Grant Administration

The SCSGC is composed of 13 institutions of higher education in South Carolina. The Consortium Space Grant Program Office is located at the College of Charleston. For questions related to the Palmetto Academy, please contact Ms. Cynthia Hall, MA, Palmetto Academy Program Director at (843) 953-5463 or via email at hallcr@cofc.edu. For general questions or more information about SCSGC, please contact Ms. Tara B. Scozzaro, MPA, Space Grant Program Manager at (843) 953-5463 or via email at scozzarot@cofc.edu.

<p>US Mail: SC Space Grant Consortium/Geology 66 George Street College of Charleston Charleston, SC 29424</p>	<p>Fed Ex/UPS: 58 Coming Street, Room 339 Charleston, SC 29401</p>
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The Consortium Director and a Campus Director on each of the thirteen campuses constitute the Consortium Management Team. If you have any questions, you may contact your campus representative.

<p>Benedict College College of Charleston College of Charleston The Citadel Clafin University Clemson University Coastal Carolina University Francis Marion University Furman University Lander University The Medical University of South Carolina South Carolina State University University of South Carolina Wofford College</p>	<p>Dr. Larry Lowe Dr. Mitchell Colgan (Director) Dr. Cassandra Runyon Dr. Saul Adelman Dr. Angela Peters Dr. Ted Bateman Dr. Craig Gilman Dr. Jeanette Myers Dr. Hayden Porter Dr. Lisa Brodhacker Dr. Joann Sullivan Dr. Jennifer Cash Dr. Xiadong “Chris” Li Dr. Angela Shiflet</p>	<p>(803) 705-4573 (843) 953-7171 (843) 953-8279 (843) 953-6943 (803) 535-5447 (864) 656-0180 (843) 349-2228 (843) 661-1441 (864) 294-3223 (864) 388-8187 (843) 792-0780 (803) 516-4753 (803) 777-8011 (864) 597-4528</p>
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