

## **Student Opportunities at NASA Centers**

### **Student Opportunities at Ames Research Center:**

Ames Research Center (Mountain View, CA) is a leader in information technology research with a focus on supercomputing, networking and intelligent systems. Ames conducts the critical R&D and develops the enabling technologies that make NASA missions possible. Ames also is a leader in nanotechnology, fundamental space biology, biotechnology, aerospace and thermal protection systems, human factors and astrobiology research. Ames participates in several agency education programs such as NASA's Undergraduate Student Researcher's Program (USRP; <http://www.epo.usra.edu/usrp>), an undergraduate internship program for science, engineering and mathematics majors, and the Graduate Student Researcher's Program (GSRP; <http://fellowships.hq.nasa.gov/gsrp>) for graduate study leading to masters or doctoral degrees related to NASA research and development. Acting as a portal between minority institutions and the funding priorities of our nation, the United Negro College Fund Special Programs Corporation's (UNCFSP; <http://uncfsp.org/>) division of Science and Technology offers internships and fellowships to faculty members undergraduate students and graduate students who have an interest in the science, technology, engineering and mathematics disciplines.. Some of the UNCFSP opportunities at Ames include, NASA Science and Technology Institute Summer Scholars Project (NSTI-SSP), NSTI Summer Faculty Fellowship Project (SFF), and Motivating Undergraduates in Science and Technology (MUST). Ames specific student opportunities would include the Foothill-DeAnza Internship Program (FHDA; <http://internships.fhda.edu/>), a career development program for community college students, and the Education Associates Program (EAP; <http://edassoc.arc.nasa.gov/>), a program that is driven by actual research opportunities and needs at Ames. For information on the full list of Ames educational opportunities, please visit the Ames Education website at <http://education.arc.nasa.gov/>.

### **Glenn Research Center Hosts Broad Spectrum of NASA Higher Education Programs:**

Glenn Research Center (Cleveland, Ohio) is designated as NASA lead Center for Aeropropulsion from subsonic to hypersonic speed. In this capacity it is Glenn's role to develop, verify, and transfer aeropropulsion technologies to U.S. industry. Glenn is, also, a designated Center of Excellence in Turbomachinery, to develop new and innovative turbomachinery technology to improve the reliability and performance, efficiency and affordability, capacity and environmental compatibility of future aeronautical and space propulsion systems. Other areas of expertise embody a broad array of technology developments for NASA Science missions, as well as, research and technology developments for aerospace power, aerospace

communications, and space processes and experiments which include bioscience and technology. Finally, Glenn is engaged in technology development in advanced energy that embodies renewable wind, solar and coal energy. Some of several energy-related demonstration projects focus on testing, evaluation and advancement of wind turbines, fuel cells and photovoltaics. For Higher Education programs that link to the foregoing opportunities, please visit <http://newbusiness.grc.nasa.gov/university-affairs/>.

### **Goddard Space Flight Center Education Programs:**

Goddard Space Flight Center (Greenbelt, MD) has set a goal of 50% minority participation among its highly competitive interns in its education programs. We seek help with summer intern programs. The main on-line application deadline for next summer is January 16, 2009. Our web based application (to the collection of programs) is at <http://university.gsfc.nasa.gov/>. It includes a list of over 100 project opportunities," for summer 2009, from which the applicant selects his or her favorites. The programs which cooperate in the process are described on the above cited web site. Students then apply for these projects. Hence, advisor support in recommending highly qualified students is most welcome. If you have questions, e-mail [Janie.Nall@nasa.gov](mailto:Janie.Nall@nasa.gov) (301-286-0885) or Terri Patterson at [Terri.J.Patterson@nasa.gov](mailto:Terri.J.Patterson@nasa.gov) (301-286-4398). We very much appreciate your help by encouraging highly qualified students, especially minorities, to apply.

### **Student Opportunities at Johnson Space Center:**

Johnson Space Center (Houston, TX) has a robust education program and participates in many Agency student programs. JSC's main areas of research emphasize current and future Human exploration including life sciences as well as vehicle systems development and other systems engineering activities. JSC leads or participates in several agency education programs, such as NASA's Undergraduate Student Research Program (USRP <http://www.epo.usra.edu/usrp>) the undergraduate internship program for science, engineering and mathematics majors; The Graduate Student Researchers Program (GSRP <http://fellowships.hq.nasa.gov/gsrp>) for graduate study leading to masters or doctoral degrees in the fields of science, mathematics, and engineering related to NASA research and development; and the Reduced Gravity Student Flight Opportunities Program (<http://microgravityuniversity.jsc.nasa.gov/>) for undergraduate students to propose, design, fabricate, fly and evaluate a reduced gravity experiment of their choice. Additionally, JSC encourages proposals to the Steckler/Space Grant Opportunity found at the NSPIRES website at <http://nspires.nasaprs.com/> which will award Twenty \$70,000 grants for research proposals concerning technology and development activities to enable space colonization or space settlement. For information on the full list of JSC educational opportunities, please visit the JSC Education website at <http://education.jsc.nasa.gov/>.

### **Student Opportunity: Interdisciplinary National Science Project Incorporating Research and Education Experience:**

Applications are being accepted for INSPIRE's online community from 9th to 12th grade students through December 31, 2008. The community provides NASA-related resources and educational activities, allows for students to interact with other students, ask questions and share knowledge. Once selected into the online community, students may compete for the unique grade appropriate summer experiences ranging from a 1 day VIP tour and workshops, a 2 week on-campus collegiate experience, and paid summer internships.

For additional information, visit our website at <http://www.nasa.gov/education/INSPIRE>.

### **Higher Education Student Opportunities at Marshall Space Flight Center:**

From advanced materials, avionics and optics research - to propulsion, robotics and systems engineering, Marshall proves it is more than a rocket center. Science areas emphasized are astrophysics, heliophysics/plasmas, Earth science (remote sensing and climate variability) and astrobiology. The Marshall Space Flight Center is a key contributor to significant NASA programs, continuing a legacy of accomplishment that includes the Saturn V rocket that launched America's astronauts to the moon; the propulsion system for the space shuttle; and the Hubble and Chandra Space Telescopes. As it has throughout its history, Marshall is again playing a critical role in maintaining America's preeminence in space. The new launch vehicles, the Ares I and the Ares V, are currently under development at Marshall.

<http://education.nasa.gov/edoffices/centeroffices/marshall/highered/>

### **Exploration Systems Mission Directorate Space Grant Project:**

NASA's Exploration Systems Mission Directorate (ESMD) is offering opportunities related to Exploration in partnership with the National Space Grant Consortia. ESMD SG provides internships for full-time students, mentors for senior design projects and competitions for System Engineering and Research papers. For information on these programs visit our website at

<http://education.ksc.nasa.gov/esmdspacegrant/>.