



# NASA West Virginia Space Grant Consortium

<http://www.nasa.wvu.edu>

## Lead Institution

West Virginia  
University

## Affiliates

Bethany College  
Bluefield State  
College  
Clay Center for the Arts  
and Sciences  
Fairmont State  
University  
Marshall University  
NASA IV & V Facility  
Shepherd University  
West Liberty State  
College  
Workforce West  
Virginia Office  
West Virginia High  
Tech Consortium  
Foundation  
West Virginia State  
University  
West Virginia Wesleyan  
College  
Wheeling-Jesuit  
University  
WVU Institute of  
Technology

NASA West Virginia Space Grant Consortium is a group of eleven West Virginia institutions of higher education and industrial partners, including the Clay Center of Charleston, NASA IV & V Facility, WV High Technology Consortium Foundation and the Workforce West Virginia Office, that have joined together under the sponsorship of NASA in order to encourage and support West Virginia's participation in science, engineering, and high technology workforce development. A Board of Directors consisting of at least one member from each affiliate organization governs the NASA West Virginia Space Grant Consortium. The Board meets twice a year to set policy, to make decisions about program operation and distribution of funds in all program areas, and to review developments in the NASA Space Grant College and Fellowship program at the national level. The Space Grant office coordinates cooperative work among the affiliates and serves as a clearinghouse for information about NASA in general, and research and fellowship opportunities at NASA in particular.

Members of the Board have a variety of affiliations and background in academia, industry, government, and the military. Information on various NASA and non-NASA sponsored projects and opportunities is disseminated by the Director and, depending on the nature of the opportunity; he suggests collaboration among a subset of the affiliates. The lead for a collaborative initiative will be taken by a Board member, and the Consortium Director will then serve as the facilitator and advisor for subsequent activities. Many joint activities by the affiliates have been initiated in this way or simply by informal contacts and networking at various events sponsored or co-sponsored by the Consortium.

The Consortium is housed in the College of Engineering and Mineral Resources at West Virginia University. In cooperation with the WV Experimental Program to Stimulate Competitive Research (EPSCoR) office, all NASA EPSCoR programs are managed by the Space Grant Consortium. EPSCoR support is available to all higher education faculty in West Virginia.

The Consortium's programs focus on research, student fellowships, K-12 outreach, and a strategic vision for the state's involvement with the nation's future endeavors in science and technology. In November of 2005, the Consortium competed successfully at the national level and was elevated to a *Designated Grant Consortium*. The Designated status enabled new research programs that establish joint ventures between WWSGC faculty, industry, and state government. These joint ventures fostered new collaborations between researchers at WWSGC academic affiliates and West Virginia based industry. They allowed faculty to have access to resources and expertise in the high tech and industrial sectors, while facilitating transfer of the latest research and innovative concepts from universities to the industry.

The success of WWSGC in promoting NASA research in West Virginia has resulted in an overwhelming

demand and enthusiasm for our support to further enable WVSGC students to interact with NASA, and to spend some time in residency at the field centers and various facilities to participate in research activities.

In the past several years we have placed our students at a number of NASA facilities such as JPL, Goddard, Ames, Kennedy, Glenn and at the IV & V Facility in Fairmont, WV. We have been nominating and sponsoring our students to participate in NASA programs such as LARSS, NASA Academy, USRP, and various internships at the JPL, offered exclusively to Space Grant students.

Also, many of our NASA Scholars at our eleven academic affiliates have been awarded summer internships at high tech companies in West Virginia engaging in meaningful research and development activities while being mentored by their company supervisors. Our partners include Augusta Systems, WV High Technology Consortium Foundation, Institute for Scientific Research (ISR), National Energy Technology Laboratory (NETL), TMC Technologies, and Applied Physics Laboratory (APL) at Johns Hopkins University. Our goal is to provide the maximum number of positions to our qualified students in STEM disciplines. We also worked with Aurora Flight Systems and Lockheed-Martin facility in West Virginia to provide a true ESMD related hands on work and research experience for our students.



NASA Scholar, Kerri Phillips w/ Gov. Manchin

The main feature of our work in this area has been that we have personally recruited scientists at our partner companies to work with our students not only as a research supervisor, but also as a career mentor. Our experience has been that building these mentoring relationships has benefited our students tremendously and has opened new horizons and career paths for them. This is especially true for minority students and women. We are proud of our proactive and aggressive approach in getting women and minorities involved in our programs. We are currently co-sponsoring the Emerging Leaders program at WV State University and Bluefield State College, the only HBCUs in West Virginia. Students who are participating in the Emerging Leaders program at these two minority institutions will be made aware of and recruited for participation in this component of the current proposal.

In the 2006-07 academic year, the Consortium made the following awards in the categories of Student Scholarships and Fellowships. Dollar amounts represent the total of NASA funding and cost share by our member institutions.

	Undergraduate	Graduate	\$ Amount for Undergraduate	\$ Amount for Graduate
Research Fellowships	13	6	\$58,641	\$116,640
Scholarships	148	0	\$220,000	\$0
Research Sponsored (through PI's)	9	9	\$17,263	\$115,216
Work Force Development, Summer Internships	10	1	\$47,540	\$700
NASA IV & V	4	2	\$33,555	\$7,120
<b>TOTAL</b>	184	18	\$376,999	\$239,676

The Consortium Board envisions a NASA presence in every region of the state and to have a positive impact on the lives of West Virginians. To turn this vision into reality, WVSGC will further expand its reach; will work closely with other governmental and private entities concerned with building research infrastructure and promoting workforce development programs; and will continue to be effective in filling the pipeline for high tech workers of the future for NASA, the state, and the rest of the nation.