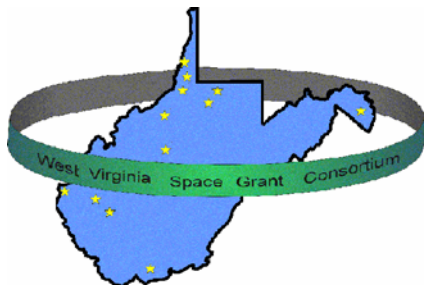


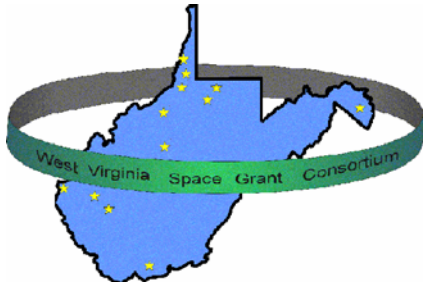
NASA West Virginia Space Grant Consortium

Organizational & Personal
Transformation:
A West Virginia Story



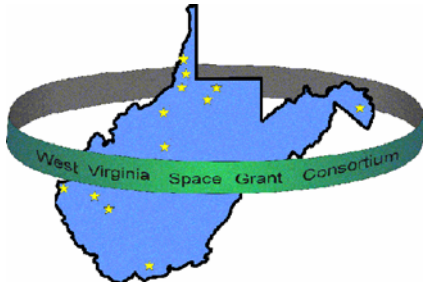
A Little History

- Modest Beginning in 1991(seven total members)
- Expanded in 1996 to 10 academic affiliates
- Expanded again in 2003 to eleven academic affiliates
- Include both of the HBCU's in WV



New Partnerships

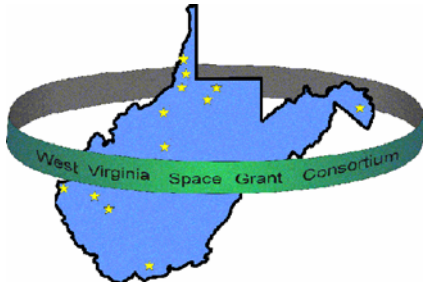
- WV High Tech Consortium Foundation
- NASA IV & V Facility in Fairmont, WV
- Governor's Workforce Investment Division
- True Partnerships with High Tech Companies



Matrix of Programs

Fellowships/Scholarships:

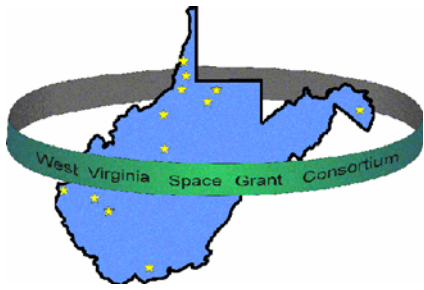
- Undergraduate Research Fellowship (at least \$1,000 each)
- Graduate Research Fellowships (at least \$12,000 each)



Matrix of Programs

Summer Internships:

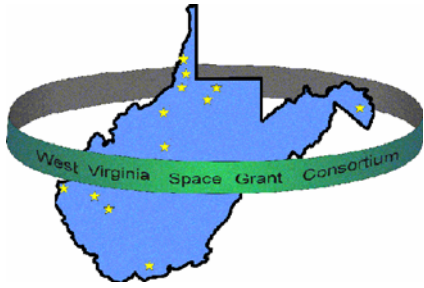
- USRP
- NASA Academies
- SIP at Goddard Space Flight Center
- Fellowships at the IV & V Facility
- Internships at High Tech Companies in West Virginia



Matrix of Programs

Research Infrastructure:

- Joint University-Industry Research Opportunity (\$20,000 each)
- Faculty Research Seed Grants (\$20,000)
- Inter-disciplinary Collaborative Research Grants (\$30,000 each)
- Summer Faculty Fellowship Programs at NASA Field Centers (\$15,000 each)
- Research Development Grants (approx. \$500 each)



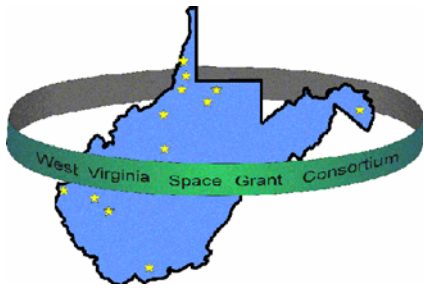
Matrix of Programs

Education:

- Pre-college Course Development (\$5,000 each)
- College Course Development (\$10,000 each)
- K-12 Outreach (Approx. \$3,000 each)

Public Service and Outreach:

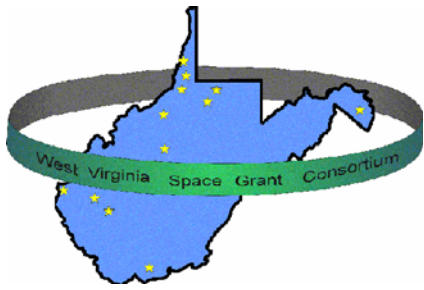
- (\$30,000 total)



Matrix of Programs

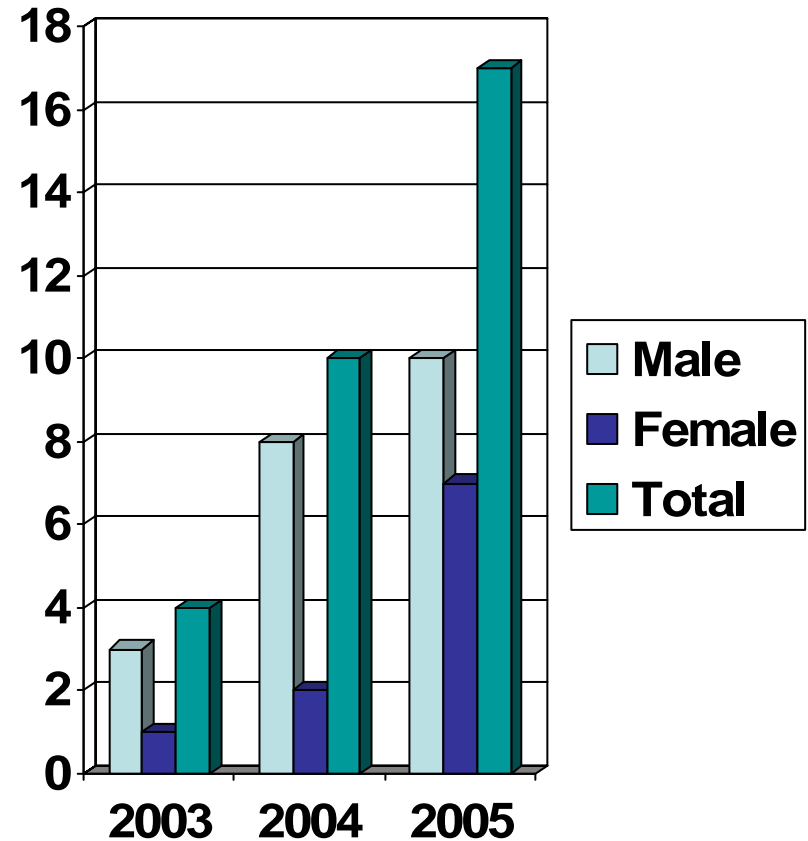
NASA ESPCoR Programs:

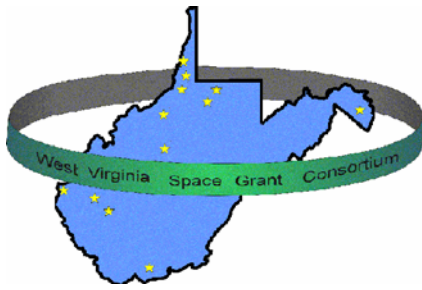
- Travel Grants (\$1,000 each)
- College University Collaboration (\$20,000 each)
- Seed Grants (\$5,000 each)
- Two (relatively) large research projects at West Virginia University and Marshall University (\$350,000 total)



Summer Internships

- High Tech Companies in West Virginia: 16
- NASA Related Facilities: 15

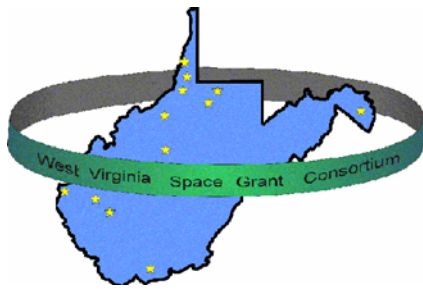




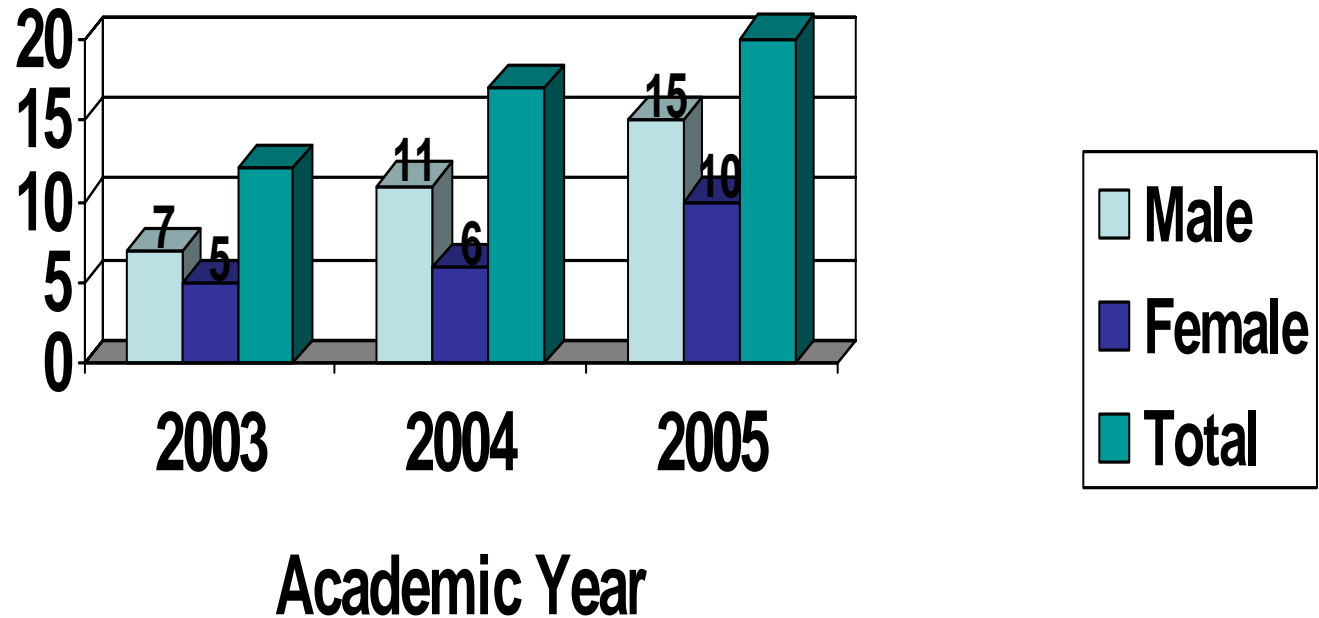
Student Satellite Program

Goals

- Adopt program as a required part of the WVU Aerospace Engineering undergraduate curriculum
- Train faculty in member institutions to conduct a balloon satellites project.
- Offer an additional elective course at the senior or beginning graduate level
- Participate in NASA plans for student-designed payloads.

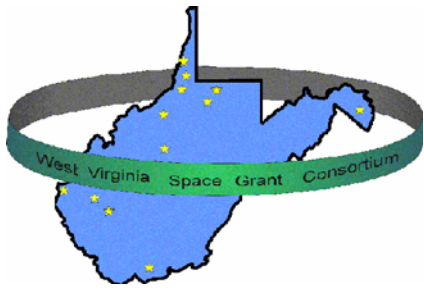


Student Satellite Program



Student teams design, build, launch, track, and recover small electronics payloads, using helium-filled weather balloons to send their payloads into and beyond the stratosphere!

<http://www2.cemr.wvu.edu/~satellite.balloon/>



Student Satellite Program

Final steps of preparation.



The Launch



Tracking



Curvature of earth as it tops the clouds

