Goddard University Programs Office

Collaboration with the Great Mid-Western Space Grant Consortia

Dave Rosage and Lubna Rana - November 6, 2004
Mid-Western Regional Space Grant Meeting – Chicago, IL
AGENDA

• Introduction

• New Goddard Programs

• Possible New Programs of Mutual Interest for SG’s and GSFC

• Collaboration on Existing GSFC University Programs

• New 2005 Online Application System
Introduction

• The Six NASA Education Operating Principles
  ✓ Customer Focus
  ✓ Content
  ✓ Pipeline
  ✓ Diversity
  ✓ Evaluation
  ✓ Partnerships/Sustainability

• Focus today on Pipeline, Diversity and Partnerships/Sustainability

• Focus on Pipeline Gap: Freshman & Sophomore
New Goddard Programs

*Freshman and Sophomore Level Focus (Pipeline GAP Reducers)*

- College Freshman Internship Program
- NASA Robotics Internship Program
- Collaboration with Physics Education Research Community on Teacher Training
College Freshman Internship Program

- Current Pilot designed as a 2-week program for local college students
- Exploring direct linkage with Goddard’s Projects Office and the Integrated Mission Design Center
- In the future, with the help of Space Grants (SG’s), expand nationally
- Explore possibilities of Midwestern SG interest/involvement in this effort
NASA Robotics Internship Program

• Two-year pilot currently funded by HQ and Goddard for freshman and sophomore undergraduates

• Objectives:
  ✓ Inspire future robotic specialists
  ✓ Cultivate and sustain interest in STEM
  ✓ Promote alliances with academic and industry partners

• Format:
  ✓ 10 week resident summer internship (fashioned after the Academy)
  ✓ Interns work on Group Projects in teams of 3
  ✓ Advanced students with circular focus in robotics will serve as coaches to be recruited through NASA Academy and other internships

• Propose SG collaboration for recruitment and travel support.
• If successful, a cost sharing arrangement will be sought with SG’s and other organizations for sustainability.
Physics Education Research
Community Teacher Training

- Prof. David Hammer (UMCP) currently slated to run workshops for Education Specialist at GSFC December 04 – May 05
- Plan to extend this directly to National Explorer School teachers through summer workshops
- Explore possibilities of Midwestern SG interest/involvement in this effort
Possible New Programs of Mutual Interest

• Freshman Seminar on Space Physics with videoconferencing

✓ Opportunities with relevant GSFC scientists during the semester and possibility of on-site summer activity.

• Elicit other ideas from conference participants
Collaboration on Existing GSFC University Programs

- NASA Academy
- Student Internship Program (SIP)
- Maryland Space Business Round Table (MSBRT)
- Applied Physics Laboratory (APL)
- Independent Verification & Validation Facility (IV&V)
New 2005 Online Application System

University Programs 2005 Online Application

Welcome to the University Programs Online Application. Here you can apply to several of our internships with a single application. Please login below or create a new account.

Instructions

Deadline: January 31, 2005

Use this application to apply any of the following programs:

**NASA Academy**
- Location: Ames, Glenn, Goddard, and Marshall Centers
- Qualifications: 
- Description: 

**Student Internship Program (SIP)**
- Start: June 6, 2005
- Duration: 10 Weeks/40 Hours Per Week
- Location: Goddard, Wallops, GISS
- Transportation: 
- Housing: Housing is the responsibility of the student; a Fraternity house will have rooms available.
- Qualifications: U.S. Citizen or permanent resident, Be a enrolled fulltime student as of May of the program year; have a 3.0 average GPA (minimum)
- Description: SIP is designed for students whose primary interest is in space related research. Research is conducted in areas of aeronautics, Earth science, space science, propulsion, material science, remote sensing, and computational analysis.

**Robotics Internship Program**
- Location: Goddard
- Qualifications: 
- Description: 

Independent Verification & Validation (IV & V) Internship
New 2005 Online Application System

http://www.nasa-academy.nasa.gov/application/index.html

Contact Information:

Identification
- First Name: null
- Middle Name: null
- Last Name: name
- Honorific: [ ] (Example: Mr./Ms./Dr./Lt./etc.)
- E-mail: null

Current Address
Results of 2004 Online Applications

2004 NASA Academy Applications
Results of 2004 Online Applications

Underrepresented Minorities

- Yellow: 1-5
- Orange: 6-10
- Dark orange: 11-15
- Red: 16 or above
2004 GSFC Academy Summary

• 19 Participants (10 women/ 9 men/ 32% minority, and Academy’s first grandmother)

• 60% of work week spent in labs

• Group Project “Mars Subsurface Chemical Life Explorer”

• 30 lectures and 56 meetings

• 12 field trips including 5 NASA Centers and 3 to NASA HQ

• Girl Scout, Community Service Project, and Family Weekend

• 5 publications (Profile, Handbook, Mentors Guide, Educational Module Template, Selection Guide)
2004 NASA Academy

Questions & Answers