National Space Grant College and Fellowship Program

*National Council of Space Grant Directors*

*Atlanta, GA*

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Space Grant and EPSCoR Programs
Sunday, October 26, 2008
National Program Update

- 20th Year Evaluation
- NASA Education Objectives and Measures
  - Longitudinal Tracking Results for FY07
  - NASA Hiring Avenues
- NASA Future Forums
- FY09 Budget
- EPSCoR
- Announcements
- Student Satellite Survey Results
20th Year Evaluation Timeline

October 2008
PPR Reviewer Training

December 2008
Reviews Complete

Jan/Feb 2009
Executive Panel Evaluation

March 2009
Release Results

✓ Affiliate Survey
✓ Network Participation and Responsiveness
✓ Program Performance and Results Reports Submission
Outcomes

Objectives

Measures

Education Projects
Outcome I: Contribute to the development of the STEM workforce in disciplines needed to achieve NASA’s strategic goals, through a portfolio of investments

Objectives

- Faculty and Research Support
- Student Support
- Student Involvement, Higher Education
- Course Development
- Targeted Institution Research and Academic Infrastructure
PART Measures – Higher Education

- Percentage of student participants employed by NASA, aerospace contractors, universities, & other educational institutions. (Outcome)

- Percentage of undergraduate students who move on to advanced education in NASA-related disciplines. (Outcome)

- Number of underrepresented and underserved students participating in NASA education programs. (Output)

- Number of new or revised courses targeted at STEM skills needed by NASA that are developed with NASA support. (Output)

- Number of institutions served in designated EPSCoR states. (Output)

- Percentage of higher education program participants who have participated in NASA elementary or secondary programs. (Output)
Next Step 2007
N = 1,000

- Pursuing Advanced STEM (42%)
- Seeking STEM Employment (9%)
- Employed STEM Academic (12%)
- Employed STEM NASA JPL (2%)
- Employed STEM non-Areo Position (14%)
- Employed STEM Aerospace Contractor (12%)
- Employed STEM Academia (12%)
Next Step by Year

- Pursuing Advanced STEM
- Seeking STEM Employment
- Employed STEM Industry
- Employed NASA JPL
- Employed STEM Academia
- All Non-STEM next step

Year 2006:
- Pursuing Advanced STEM: 150
- Seeking STEM Employment: 100
- Employed STEM Industry: 200
- Employed NASA JPL: 100
- Employed STEM Academia: 100
- All Non-STEM next step: 50

Year 2007:
- Pursuing Advanced STEM: 100
- Seeking STEM Employment: 50
- Employed STEM Industry: 250
- Employed NASA JPL: 100
- Employed STEM Academia: 100
- All Non-STEM next step: 50
NASA Hiring Avenues

• Hiring authorities to bring entry-level and “freshouts” into the NASA civil service* workforce.
  – Student Career Experience Program (co-op)
  – Federal Career Intern Program (FCIP)
  – Term Appointment
  – Permanent

* Does not include JPL
NASA’s greatest strength is its workforce — a team that is representative of America’s diversity.
NASA-Sponsored Education Program Participants

- NA08N0002 - Professional Engineering Positions

- NA08N0003 - Physical Sciences/Biological Sciences

- NA08N0004 - Accounting and Budget/Business and Industry/Organizational Administration/Human Resources

- NA08N0005 - Computer Engineer/Computer Scientist

STEPS FOR APPLYING

2. Create a USAJobs account.
3. Build your resume.
4. Locate the vacancy announcement of interest from the URLs listed above.
5. Click on the "Apply OnLine" button.
6. Follow steps provided online.
NASA Future Forum

- Washington
- Ohio
- Missouri
- Florida
- California
- Massachusetts
- Illinois
FY 09 Budget

• Continuing Resolution until March 1
  – We will not know the final budget for Space Grant until there is a NASA Appropriation
• Timed with 20\textsuperscript{th} Year Evaluation Results
• Working with NASA Comptroller
• 2009 Research EPSCoR CAN – mid-Nov to mid-Feb
• 2008 Research Awards – recruiting technical monitors
• 2007 Research Awards – Year-1 reports, Technical Monitor reviews, longitudinal tracking, evidence of effect in states
• Future data reporting will be done using the new NASA Education database
Announcements

• American Student Moon Orbiter (ASMO) Request For Information (RFI)

• Ralph Steckler/Space Grant Space Colonization Research and Technology Development Opportunity
  – New solicitation under development in conjunction with ESMD

• International Year of Astronomy – Science Mission Directorate opportunity

• Anticipate a new ESMD solicitation for Space Grant

• Interest in workshop on SMART goal development, measurement, and assessment?
Preliminary Statistics
Survey Population = 51 Space Grant Consortia
Administered Summer 2008 via SurveyMonkey

- **86%** of Consortia indicated that in 2007 they were engaged in a student-led flight project (n=44)
- In 2007, there were **more than 200 student-led flight projects** involving **180+ Institutions of Higher Education** and nearly **90 Industry partners**. These projects engaged nearly **2,200 college students**, more than **275 faculty**, and **115+ precollege educators**.
- **NASA Center** involvement was cited by **64%** (n=28) of Consortia who indicated engagement in student-led flight projects.
- The **2007 NASA Space Grant investment** supporting student-led flight projects totaled approximately **$1.7 million**. Additionally, **$2.75 million in non-NASA Space Grant funding** was utilized to support student-led flight projects.
46% of the student-led flight projects involve Ballooning.

Participants are predominantly undergraduate students, followed by faculty and graduate students.

More than 60% of the Ballooning projects were reported as “ongoing”.

The majority of the higher-order projects (Orbital launch vehicles, ISS/STS/CEV Experiments, and Beyond Low Earth Orbit) were reported as being in the design, building, and testing phases.
National Council of Space Grant Directors

Consortium Coordination

Karlene Rose
Space Grant and EPSCoR Programs
Sunday, October 26, 2008
New Database

“Next Generation CMIS”

Education Performance Measurement Systems (EPM)

– Purpose: *Provide single data collection and reporting system that will help NASA improve data collection and assessment* [and Program/Project Management]

3 TIER Approach

PART

Project-Specific

Office of Education Strategic Goals
• **Functionality/Capability**
  – More streamlined Forms (*collecting less w/more effective results*)
  – Upload capability
  – Report Building
    • Automated Reports
    • Interactive (charts/graphs)
    • Ad hoc (*more user-friendly tool – “Jasper”*)
  – Privileges/Access
    • Lead Institution

• **EPM ~ “Go Live”**
  – *October 31, 2008* (Office of Education)
  – *Early Calendar 2009* (Next Generation CMIS access)

• **EPSCoR**
  – Reporting capability within new system