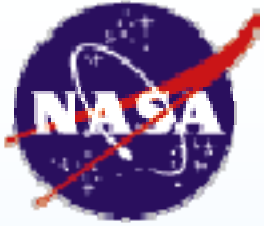


# **Goddard University Programs Office**

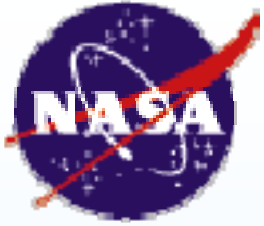
*Collaboration with the Great Mid-Western  
Space Grant Consortia*

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



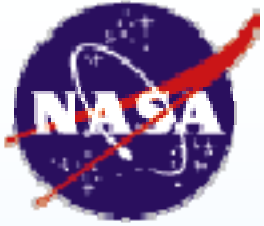
# AGENDA

- 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

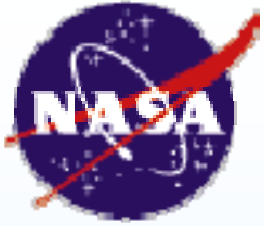
- The Six NASA Education Operating Principles
  - ✓ Customer Focus
  - ✓ Content
  - ✓ Pipeline
  - ✓ Diversity
  - ✓ Evaluation
  - ✓ Partnerships/Sustainability
- Focus today on Pipeline, Diversity and Partnerships/Sustainability
- Focus on Pipeline **Gap**: Freshman & Sophomore



# New Goddard Programs

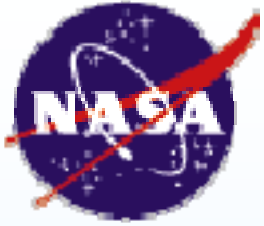
*Freshman and Sophomore Level Focus  
(Pipeline GAP Reducers)*

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



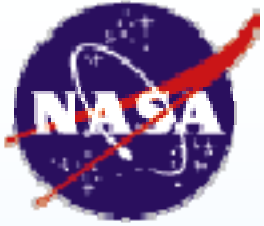
# College Freshman Internship Program

- 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



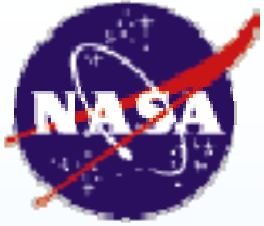
# NASA Robotics Internship Program

- 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

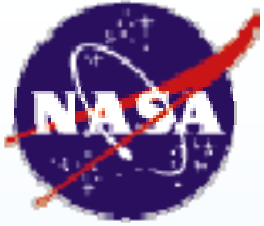
- Prof. David Hammer (UMCP) currently slated to run workshops for Education Specialist at GSFC  
December 04 – May 05
- Plan to extend this directly to National Explorer School teachers through summer workshops
- Explore possibilities of Midwestern SG interest/involvement in this effort



# 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

Home Page

[Account](#)

General Application

- [Select Programs](#)
- [Contact Information](#)
- [Personal Information](#)
- [Academic History](#)
- [Resume](#)
- [Recommendations](#)

[Selected Programs](#)

- NASA Academy
- SIP
- Robotics
- IV&V
- APL
- MSBRT

Welcome to the University Programs Online Application. Here you can apply to several of the 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**

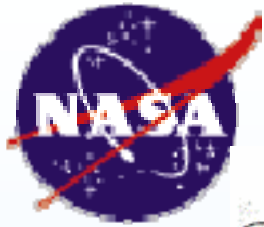
**Login:**

E-mail:

Password:

Login

Create New Account



# New 2005 Online Application System



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

Main Menu

NASA Academy Ames	NASA Academy Ames: <input checked="" type="checkbox"/>
NASA Academy Glenn	NASA Academy Glenn: <input checked="" type="checkbox"/>
NASA Academy Goddard	NASA Academy Goddard: <input checked="" type="checkbox"/>
NASA Academy Marshall	NASA Academy Marshall: <input checked="" type="checkbox"/>
APL	APL: <input checked="" type="checkbox"/>
MSBRT	MSBRT: <input checked="" type="checkbox"/>
Robotics	Robotics: <input checked="" type="checkbox"/>
SIP	SIP: <input checked="" type="checkbox"/>
Personal	<input type="button" value="Update Selection"/>
Demographics	
Institution	
Application	
Recomendation	
Academy	

**Contact Information:**

*Identification*

First Name:

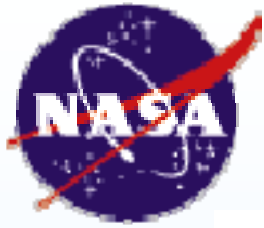
Middle Name:

Last Name:

Honorific:  (Example: Mr./Ms./Dr./Lt./etc.)

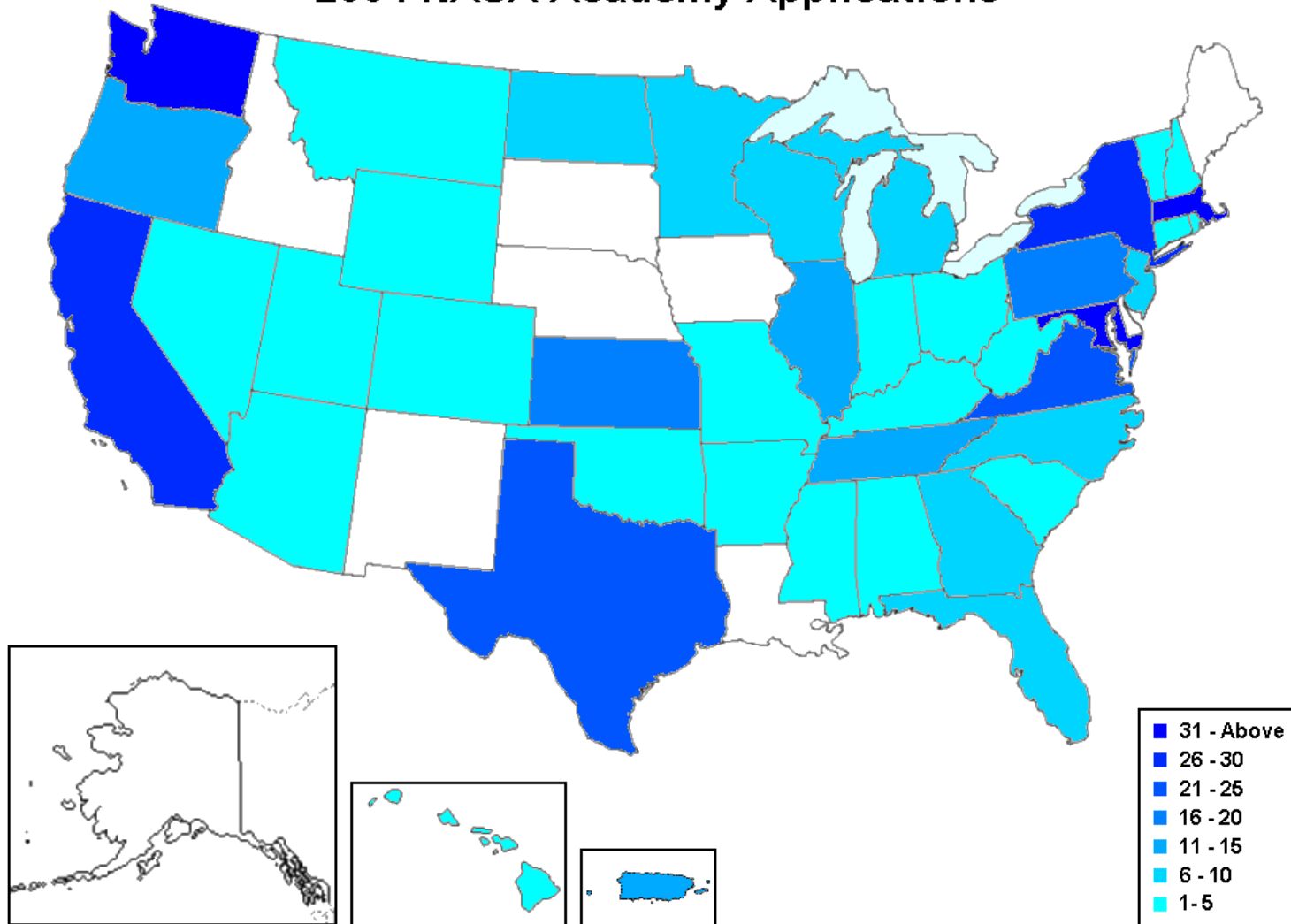
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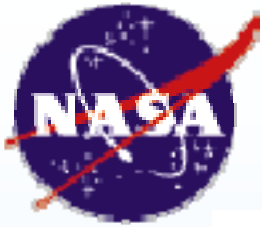
*Current Address*



# Results of 2004 Online Applications

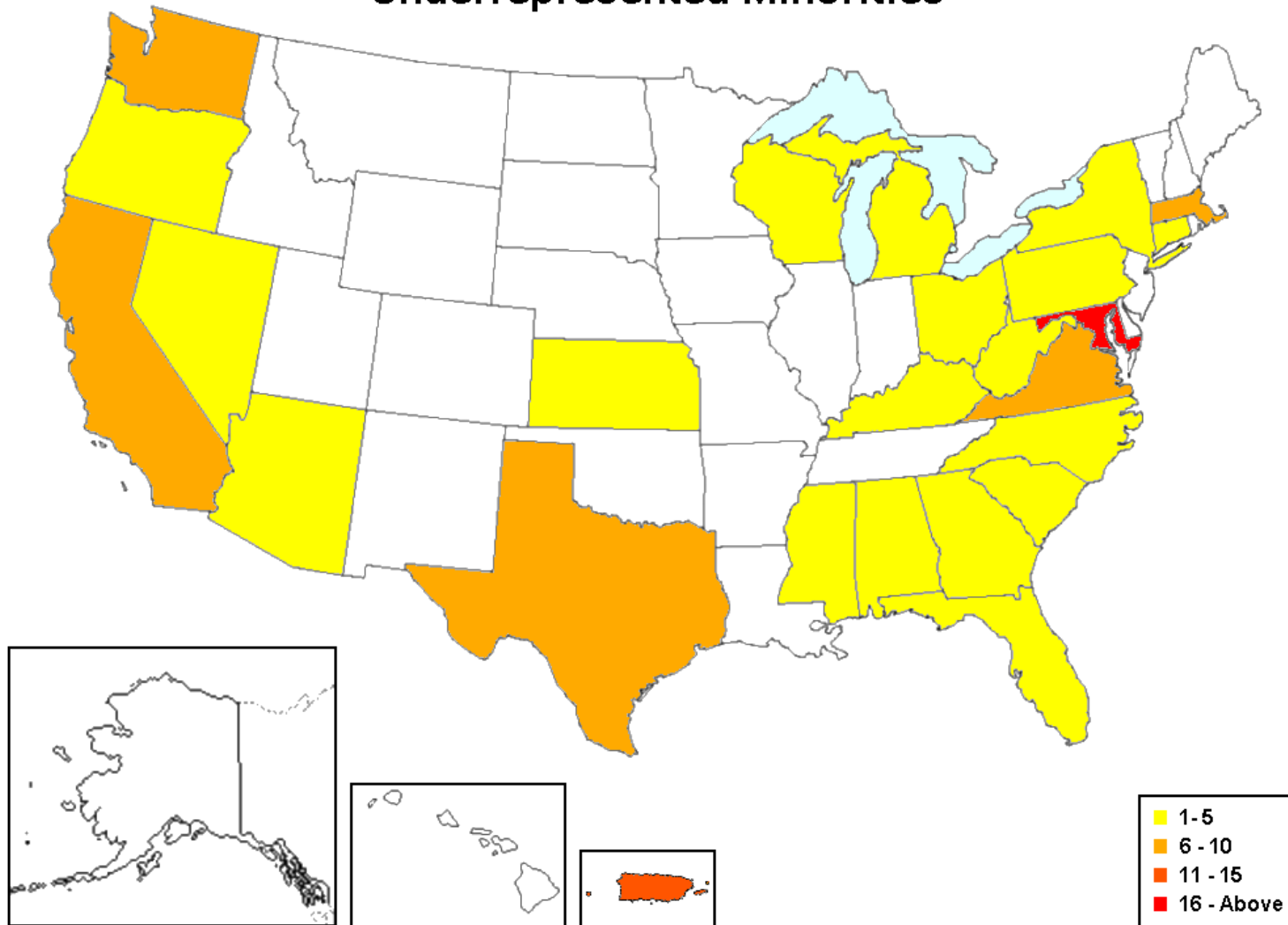
2004 NASA Academy Applications

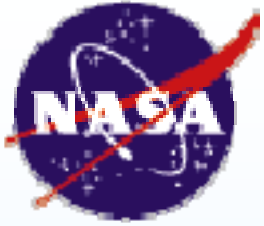




# Results of 2004 Online Applications

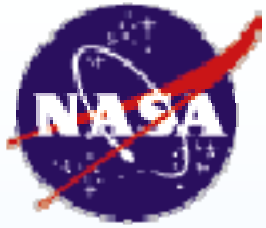
## Underrepresented Minorities





# 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