



New Jersey Space Grant 2014 Fall Mid-Atlantic Meeting Activities and Future Outlook

Haim Baruh, Director
Joseph S. Miles, Program Coordinator



NJ Space Grant Consortium Staff

- Lead institution: Rutgers, New Brunswick
- Two offices: at Rutgers and at Stevens
- Haim Baruh, Director
 - Office at Rutgers, spends 20% of time [often more] on NJS GC
- Joseph S. Miles, Program Director
 - Spends half his time with NJS GC, other half as faculty member at Stevens, office located at Stevens
- Aiesha F. Long, Project Coordinator
 - Transitioning to the Rutgers U. Dean's Office
- Leora Wenger, Webmaster
 - Works from home



Summary of FY 2013 Activities

- Number of programs is presently 15, reduced from 23 two years ago, but up from 7 four years ago
- Establishment of new contacts via congressional and other visits, especially for community colleges
- Improvement on record with females and diversity record from prior years
 - 32% Underrepresented minorities (28% NJ Target Goal)
 - 45% Females (45% NJ Target Goal)
 - Better distribution of our funding statewide

NJSGC Affiliates

- Astronomy Education Center at Raritan Valley Community College
- Bloomfield College
- Essex County College
- Georgian Court University
- Liberty Science Center
- NASA GISS at New York City
- New Jersey City University
- New Jersey Institute of Technology
- Princeton University
- Ramapo College
- Rowan University
- Rutgers University
- Seton Hall University
- Stevens Institute of Technology
- The College of New Jersey
- Union County College



Consortium Composition

- 16 Affiliates: 13 Academic, 1 Government, 1 planetarium, 1 Science Center
- Contacts with 10 of 19 Community Colleges to develop a Community College Proposal; 6 joined the proposal; others did not provide a letter of commitment.
- More active in National Space Grant Network



Outcome One Programs in FY 2013

- Community College Research Program at 2 Community Colleges (new initiative to promote science education & research)
- Downsizing of some research clusters (Rowan, TCNJ, NJIT-Ramapo, Seton Hall were maintained)
- Bridge Programs: K-12 to college, entering college students, and college to graduate school programs (Equal Opportunity Fund Program and RU Girls in Engineering)
- Partners in Science at Liberty Science Center (6 students)
- Increase in academic year fellowships to 25 (has become our most popular program)
- Downsizing summer and graduate fellowships
- Expansion of academic institutions receiving fellowships



Outcome One Programs in FY 2013

- RiSE Program – Research in Science and Engineering – Summer internship program for minorities at RU
- NJIT & Ramapo College bridge program
- Design (Senior) project support
- Reduction in industry-supported internships due to budget cuts
- Eliminated travel support to students for conferences to make presentations
- Over 80 direct funded undergraduate and graduate students; 90% go to graduate school or are employed in STEM



Outcome Two Programs in FY 2013

- Rock On in 2010 – Rock SAT in 2011, 2012, and 2014
- NYCRI, where teams of K-12 and college students work on research and robotics projects (7 students)
- Teacher Training at Astronomy Center Education (ACE at RVCC)
- Rutgers TARGET (The Academy at Rutgers for Girls in Engineering and Technology) for high school females (15 students)



Outcome Three Programs in FY 2013

- Raritan Valley Community College Planetarium
- Edelman Planetarium at Rowan University



Conferences Held and Participated in During in FY2013

- Academic Year Fellowship Poster Session – April 2014
 - 25 college students from 14 different academic institutions presented their research
- New York City Research Initiative – August 2014
 - Seven NJSGC sponsored students presented their research at a poster session
- Summer Research Conf. & Poster Session – August 2014
 - 10 undergraduates from six different academic institutions presented their research with a talk and a poster session
- RiSE (Research in Science and Engineering) Program at Rutgers - August 2014
 - Five NJSGC-funded students made presentations at a one-day symposium
- Community College Telecoms for agreeing on CC Proposal



New Initiatives for FY2014

- **Programs**

- As NJSGC matures and NASA funding levels decline, we have phased out some programs in FY2013

- **Moving Forward**

- NJSGC developed the Community College Program in response to NASA RFP and it was funded. Six Community Colleges participated in the project and NJSGC will focus during 2014-2015 in implementing nine new CC programs statewide
- Established contact with Princeton Plasma Physics Lab – placed 1 summer fellowship



Administrative Actions

- **NJSGC Staff:**
 - Director (Haim Baruh)
 - Program Director (Joseph S. Miles)
 - Program Coordinator (Aiesha Long)
 - Web Master (Leora Wenger)
- More proactive and engaging with affiliate representatives
- Telecoms to community colleges to implement programs for the funded proposal (CCs are more geographically diverse therefore costly to visit)



NJSGC FY 2013 Funding and Budget

	FY 2013	Augmentation	Totals	Percentages
Fellowships	110,000		110,000	25.6%
Research	66,000		66,000	15.4%
Higher Ed (Outcome 1)	35,000		35,000	8.1%
Higher Ed (Outcome 2)	39,000		39,000	9.1%
Pre-College	17,000		17,000	3.9%
Informal Education	4,500		4,500	1.1%
Operating	111,000		110,000	25.8%
Overhead (26.5% MTDC)	47,500		47,500	11.0%
Total	430,000		430,000	

We will rely on prior year unused funds in FY2013 so that we do not cut too many programs



NJSGC Diversity Initiatives and Results

- Substantial overall improvement in minority and female awards over the last three years
- Collaborative efforts include
 - Establishing new procedures with community colleges for that programs implementation
 - New bridge program with Seton Hall University
 - Excellent collaboration with NJ City University (majority Hispanic)
 - Bloomfield College (large minority enrollment) into the fold
 - Minority graduate student (RiSE) development and bridge programs
 - Successful in attracting minority students to graduate fellowships



Improvement Needed

- Additional sources of funding to support the Consortium expansion – Upgrade from a Program Grant State to a Designated State
- To encourage affiliate representatives to publicize programs more aggressively
- Advisory board



Summary and Overall Outlook for the Future

- Maintaining activity level with reduced funding
- Implementing the Community College Program
- Continuous work on encouraging alliances and affiliations
- Improvements in programs and diversity