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

Haim Baruh, Director
Joseph S. Miles, Program Coordinator
• 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 NJSGC
• Joseph S. Miles, Program Director
  • Spends half his time with NJSGC, 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
Outcomes Two Programs in FY 2013

- 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

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<tr>
<th>Category</th>
<th>FY 2013</th>
<th>Augmentation</th>
<th>Totals</th>
<th>Percentages</th>
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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