New Jersey Space Grant
FY 2010 Activities

Joseph S. Miles, Program Coordinator
NJSGC Summary of Activities

• Expansion of Consortium (from 5 to 9 to 13 members)
• Expansion of Programs 7(2008), 16(2009), 21(2010), 24(2011)
• Establishment of New Contacts via Personal Visits
• Warmly Received Visits to Local Congressional Offices
• Improvement on Diversity Record due to Targeted Alliances
  • 25% Underrepresented Minorities (28% NJ Target Goal)
  • 36% Females (45% NJ Target Goal)
  • Better Distribution of our Funding Statewide
Expansion of Consortium and New Contacts

• 13 Affiliates: 11 Academic, 1 Government, 1 Planetarium
• The four most recent academic affiliates are (The College of N.J., Seton Hall, N.J. City University, & Rowan University)
• One affiliate departed – Plainsboro Public Library
• Awards made to community colleges (Essex County College, Middlesex County College)
• Contact visits made to community colleges (Hudson, Morris, Raritan Valley, & Union) – Phone contact made with other Community Colleges
• More active in National Space Grant
• Contacts established with:
  - Federal Aviation Administration
  - Sea Grant
Expansion of Outcome One Programs in FY 2010-2011

- Reallocation of funds from Administrative Expenses to Higher Education Bridge programs
- Bridge Programs: High School to College, College to Graduate School and Inter-Collegiate Programs
- Course Development at Undergraduate Level
- Summer Courses for Freshman, Equal Opportunity Fund (EOF) Sponsored Courses, and College Level STEM courses
- Princeton Suborbital Flight – Design best payload
Expansion of Outcome One Programs in FY 2010

- RiSE Program – Research in Science and Engineering – Summer Internship Program for Minorities
- NJIT & Ramapo College Bridge Program
- Travel support to students for conferences and paper presentations
- Research Cluster Programs tailored to affiliate needs (as long as they meet NASA guidelines)
- Over 100 direct funded undergraduate and graduate students
Expansion of Outcome Two Programs in FY 2010-2011

- Rock On in 2010 – Rock SAT in 2011 (6)
- Partners in Science Program at Liberty Science Center (10)
- GIST – Girls involved in Science and Technology at Georgian Court University (6)
- NASTAR – Astronaut Teacher Training (15)
- Hanover Township Teacher Training at Johnson Center (5)
- Rutgers Pre-Service Science Teacher Training (12)
Expansion of Outcome Three Programs in FY 2010-2011

- Edelman Planetarium at Rowan University
- Raritan Valley Community College Planetarium
- Museums (in progress)
Conferences Held and Participated in During 2011

• Academic Year Fellowship Poster Session – April 2011
  • 40 college students from 12 different academic institutions presented their research
• New York City Research Initiative – July 2011
  • Six NJSGC sponsored students presented their research at a poster session
• Summer Fellowship Conf. & Poster Session–August 2011
  • 18 undergraduates from 6 different academic institutions presented their research with a talk and a poster session
• Astronaut Camarda Program for HS Students–September 2011
  • Six teams of six high school students presented a robotics project via NASA sponsored video conference
New Initiatives in FY2010-2011

- FY 2011 base proposal successfully submitted; working on augmentation proposal
- Competed in the 2010 Consortium Development Competition. We were one of seven winners
  - FY 2010 budget was $845,000
  - FY 2011 budget is $615,000
Unrewarded Initiatives in FY2010-2011

- Global Climate Change – Collaboration of New Jersey City University (lead), Rutgers University, and Stevens Institute of Technology
- Summer of Innovation – Attempted collaboration between interested parties within the state
Anecdotal Success Story

• Outcome 1 – Educate & Employ – Ms. Regina Pynn
  • ESMD Program                      - 2008 & 2009
  • Co-Op Program on NASA project     - 2009 & 2010
  • Academic Year Fellowship          - 2010

• Outcome 2 – Engage & Educate
  • NYCRI Program – Summer of 2008, 2009, 2010 – Mr. Michael Creech
  • Rock On and Rock SAT Program – Mr. Mike Giglia, Mr. Ethan Hayon, Mr. Bob Hopkins, Ms. Jenny Jean, Mr. Mark Siembab, and Mr. Sean Watts
## NJSGC FY 2011 Funding and Budget

<table>
<thead>
<tr>
<th>Category</th>
<th>FY 2011</th>
<th>Augmentation</th>
<th>Totals</th>
<th>Percentages</th>
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<td>Fellowships</td>
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<td>Operating</td>
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<td><strong>Total</strong></td>
<td>430,000</td>
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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
• Personal visits to affiliates and partners achieves success
• The NJSGC team has been persistently on the road, making site visits
NJSGC Diversity Initiatives

- NJSGC went from 12% to 25% for direct funded minority students in two years (our target is 29%).
- Excellent collaboration with NJ City University (a majority Hispanic academic institution)
- Support of minority graduate student development and bridge programs
- Successful in attracting minority students to graduate fellowships
- Unfortunately, NJSGC’s record with female students dropped from the previous years to 36% (target is 45%) in spite of our best efforts.
  - Some female applicants rejected our fellowship offers and accepted other opportunities; others attended summer classes.
Areas Needing Improvement

• Additional sources of funding to support the Consortium expansion
• Getting affiliates more enthusiastic and to encourage affiliate representatives to publicize programs
• Efforts to establish an advisory board
• Diversity record with female students
• Writing proposals to N.J. industry and government
Summary and Overall Outlook for the Future

• Continuous work on encouraging alliances and affiliations
• Numerous program improvements and expansion of programs
• Several new contacts
• Improvement in geographic diversity
• Major increase in funded students
• Efforts to collaborate with government agencies