Peach State LSAMP: Strengthening the STEM Pipeline in Georgia

2012 Regional STEM Institute of Teaching and Learning
April 14, 2012
Angela Birkes, Director Peach State LSAMP
History of LSAMP

Former U.S. Rep. Louis Stokes played a pivotal role in the quest for civil rights, equality, and social and economic justice throughout his tenure in the United States Congress.

• LSAMP is funded by the National Science Foundation
• Assist universities and colleges in diversifying the STEM workforce
• Transform STEM education through innovative recruitment/retention strategies and enriched experiences
• Targeted groups: African-Americans, Alaskan Natives, Native Americans, Hispanic Americans, and Native Pacific Islanders.
• 40 Programs across the United States
• Michael F. Adams (PI), Michelle Cook (Lead Co-PI), Cheryl Dozier (Co-PI, SSU), Maureen Grasso (Co-PI), William Kisaalita (Co-PI)

• Phase I Funding in 2005; Phase II Funding in 2011
Peach State LSAMP Mission

Significantly increase the number of underrepresented minority (URM) students who complete baccalaureate degrees in STEM disciplines.

Key Areas of Focus

• Recruitment
• Retention
• Research
Recruitment

• Partner with institutional recruitment and outreach offices
• Partner with the two-year transfer institution, GPC
• Provide science and math tutorials for area K-12 students
• Host Summer Bridge programs
  • High School Bridge Program
  • Transfer Bridge Program
Retention

• Provide regular workshops and training sessions
• Provide general and research stipends
• Build learning communities
• Mentoring (peer, graduate student, and faculty)
• Outreach and Service Learning
• Drop-In Centers (each institution)
• Undergraduate Research Training and Experiences
Research

• Undergraduate Research Training and Experiences
  • Semester Undergraduate Research Training (SURT)
  • Semester and Summer Undergraduate Research Experience (S-SURP)
• Fall Symposium and Research Conference
Annual Symposium and Research Conference 2006 - 2011
<table>
<thead>
<tr>
<th>Outcome</th>
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<tbody>
<tr>
<td>Number of PSLSAMP scholars</td>
</tr>
<tr>
<td>Number of conducted research – on site</td>
</tr>
<tr>
<td>Number of conducted research – off site</td>
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<tr>
<td>Number of international research</td>
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<tr>
<td>Number of workshops</td>
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<tr>
<td>Number of student presentations at conferences</td>
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<tr>
<td>Number of student publications</td>
</tr>
<tr>
<td>Number of transfers from 2-year to 4-year colleges</td>
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<tr>
<td>Number of students retained</td>
</tr>
<tr>
<td>Number of students graduated</td>
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<tr>
<td>Number of students enrolled in graduate programs</td>
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</tbody>
</table>
URMs Enrolled in STEM Majors at Peach State LSAMP Institutions
(107% Increase from 2006 - 2011)

Source: NSF WebAMP - OMB #3145-0136 LSAMP Program
Data does not include students reporting more than one race.

URMs Graduating with Baccalaureate Degrees in STEM at Peach State Institutions

Source: NSF WebAMP - OMB #3145-0136 LSAMP Program and NCES IPEDs Data Center
Data does not include students reporting more than one race.
### URM Students Graduating with Baccalaureate Degrees in STEM

<table>
<thead>
<tr>
<th>PSLSAMP Institutions</th>
<th>BS Degrees for URM Students in STEM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2006</td>
</tr>
<tr>
<td>Fort Valley State University</td>
<td>58</td>
</tr>
<tr>
<td>Georgia Perimeter College</td>
<td>N/A</td>
</tr>
<tr>
<td>Savannah State University</td>
<td>78</td>
</tr>
<tr>
<td>Southern Polytechnic State University</td>
<td>82</td>
</tr>
<tr>
<td>University of Georgia (<strong>86% increase</strong>)</td>
<td>56</td>
</tr>
<tr>
<td>Total Degrees in STEM</td>
<td>274</td>
</tr>
</tbody>
</table>

Source: NSF WebAMP - OMB #3145-0136 LSAMP Program and NCES IPEDs Data Center
Data does not include students reporting more than one race.
Daniel Piqué, Peach State LSAMP Scholar

Honors and Awards:
• Dean’s List
• President’s List
• CURO Scholar
• 2010 Leadership Alliance Scholar
• 2011 Amgen Scholar
• Travel and Presentation Awards from National Conferences
• INRO Scholar

Undergraduate Research:
• Department of Genetics (UGA)
• Department of Cellular Biology (UGA)
• Developmental Biology Program (Sloan-Kettering Institute)
• Division of Plastic and Reconstructive Surgery (Stanford School of Medicine)

Future Plans:
• One-year post-baccalaureate traineeship at any laboratory within the NIAID
• Pursue a MD/Ph.D. Program
Honors and Awards:
• Top 5 percent of 2010 HS Graduation Class
• Scholar, PEACH SLSAMP Building Bridges
• Scholar, Research in Science and Engineering
• New Jersey Space Grant Consortium Scholar
• Dean’s List
• Federation of American Societies for Experimental Biology MARC Scholar
• Top 15% of Engineering Students
• National Society of Collegiate Scholars Member

Undergraduate Research:
• Research in Science and Engineering (RISE) (Rutgers University)

Summer Plans:
• Summer Undergraduate Research Experience (SURE) (Georgia Institute of Technology)
Questions?