PEACH STATE LSAMP IMPACT REPORT 2015

Strengthening the STEM Pipeline in the Peach State: Recruitment, Retention and Research

Member Institutions:
› University of Georgia — lead Institution
› Fort Valley State University
› Georgia Perimeter College
› Georgia Institute of Technology
› Kennesaw State University — Kennesaw campus
› Kennesaw State University — Marietta campus (Formerly Southern Polytechnic State University)
› Savannah State University
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**Peach State LSAMP History**

The Peach State Louis Stokes Alliance for Minority Participation (Peach State LSAMP) is now in its 10th year – originally funded in 2005 with the mission to significantly increase the number of underrepresented minorities (URMs) completing baccalaureate degrees in science, technology, engineering, and math (STEM) programs disciplines. Initially comprised of six University System of Georgia institutions, the Alliance included The University of Georgia (the oldest comprehensive sea- and land-grant institution in the University System of Georgia and the Peach State LSAMP lead institution), Fort Valley State University (state and land grant historically black college or university), Georgia Perimeter College (the largest two-year college in Georgia), Savannah State University (oldest historically black college or university in Georgia), Southern Polytechnic State University (one of the first colleges in the nation to offer the bachelor of Engineering Technology degree, and now is part of Kennesaw State University), and Bainbridge College (a two-year institution that left the Alliance in 2007). Today, the Alliance includes the five of the original institutions with the addition of the Georgia Institute of Technology (a leading technological university) and Kennesaw State University (the fastest growing university in Georgia that now also includes Southern Polytechnic State University). Georgia Tech and Kennesaw joined the Alliance in 2011. The Peach State LSAMP is educating a mix of urban, suburban, and rural populations, with most of its student-population from the state of Georgia. Each Alliance institution has been successful in providing quality education to students, forming productive community relationships and creating partnerships to further their mission. Through their collaborative Peach State LSAMP efforts, they have significantly advanced their academic objectives and collectively achieved greater outcomes than would have been achieved through their individual efforts.

In the last ten years, Peach State LSAMP goals have focused on four major areas: 1) **recruitment** of URM students into STEM majors; 2) **retention** of URM students in STEM majors until graduation; 3) **enrollment** of URM students into graduate school; and 4) **professional development** for students, faculty and staff. The Alliance institutions have made significant progress in broadening the participation of minorities in STEM education and research. Each institution customizes activities to address the needs of their student populations and to build upon their institutional strengths and resources. With an aggregate of 1871 directly-funded Peach State LSAMP scholars in the last 10 years, the Peach State LSAMP institutions have worked to “Build Bridges to Opportunities in STEM.”

**Recruitment** has been a major area of concentration because many of the URMs attending the Alliance institutions are first generation college students coming from low-income families. Most have also attended inner city urban or rural high schools whose academic records include high drop-out and low academic achievement rates. Even though many arrive with high GPAs, the faculty recognizes that the students often did not receive a rigorous STEM education in high school, which can definitely impact their success and potential graduation in STEM disciplines. This has been a challenging yet positive group of students with much potential, and the Alliance is successfully building a systematic pipeline of STEM majors among URM students at the member institutions. Key strategies for recruiting
new students includes partnering with campus units such as admissions, orientation, advising, student affairs, outreach offices, diversity staff, and minority affairs, etc.

**Retention** and persistence of students until graduation is the cornerstone of increasing STEM graduates. The programs include tutoring, drop-in centers and peer/faculty mentoring, workshops to address a variety of academic support and resources, the Annual Fall Symposium and Research Conference and LSAMP Research Conferences, student research including some study abroad opportunities, and synergistic partnerships with other STEM initiatives on Alliance campuses as part of a systematic strategy to provide students with the academic support and opportunities to insure their success. Creating a community of Peach State LSAMP scholars has helped build a sense of shared success and therefore shared accountability among students. This has been accomplished via year-round programming across the Alliance. Providing research opportunities has kept Peach State LSAMP students plugged into the campus STEM community. Students immersed in faculty-mentored research (locally and abroad) as well as bridge programs – both incoming first year and transfer bridge programs for students transitioning from high schools and the two-year institutions to four-year institutions are key contributors in retaining minority students in STEM disciplines.

**Graduate school enrollment** has increased as the Alliance institutions provided support not only for the process of applying to graduate programs, but also for the academic, research and mentoring background that a student needs to be competitive and prepared for graduate study. Approximately 49% of Peach State LSAMP scholars participated in research. Increasingly, students are participating in research in National Laboratories, Science and Technology Centers (STCs), and Research Experiences for Undergraduates (REUs) programs.

**Professional development** takes place at each institution throughout the year. Annually, the Peach State LSAMP Annual Fall Symposium & Research Conference provides professional development workshops for all of the Alliance. This event brings together students, faculty, and staff from the Peach State LSAMP institutions for two days each year. The conference gives Peach State LSAMP and other LSAMP students an opportunity to showcase their research through oral and poster presentations, and expand their contacts with students from other institutions who share common interests. Conference participants may also network at the Graduate and Career Fair with graduate school representatives, faculty, staff, and special guests. Each year the event is planned by the Peach State Alliance Steering Committee and is hosted by a different Peach State LSAMP campus. The highly successful conference has grown significantly over the years. In the last three years, there were more than 450 registered participants (students, faculty and guests) in attendance with more than 90 oral and poster research presentations given by LSAMP students. See Annual Fall Conference brochure covers below.
Activities, Collaborations and Best Practices

The Peach State LSAMP student activities are built upon well-established programs and strategies that focus on three key areas: recruitment, retention and research. The most effective programs and strategies implemented by Peach State LSAMP institutions include faculty and peer mentoring with LSAMP Scholars, summer bridge programs, undergraduate research opportunities, research conferences, and drop-in centers that promote learning communities among Peach State LSAMP scholars and member students and that serve as learning enrichment and resource centers. Some key student activities are highlighted below.

Incoming First Year Student Bridge Program: This activity has been very successful in promoting recruitment and persistence among Peach State LSAMP incoming first year students. Each year, Peach State LSAMP offers a three-week summer bridge program at one or more of the partner institutions. Underrepresented minority high school seniors statewide who have been admitted into a Peach State LSAMP institution are recruited to participate. The program combines academic coursework with an introduction to the campus community. The program features regular workshops and seminars on the nature of academic life, test preparation, writing and research skills, and STEM careers. Students take fieldtrips (on- and off-campus) to introduce them to career and research opportunities.

Figure 1: Ten Years of Peach State LSAMP Research Conferences

Figure 2: Peach State LSAMP Summer Bridge Students on “Behind the Scenes” Field Trip at the Atlanta Aquarium

In addition, students participate in social activities to enhance their involvement and connection to the institution and they are placed in learning communities where they are able to receive more personalized attention. Summer bridge students are assigned mentors (peer and faculty) and advised about academic opportunities.
Transfer Bridge Program: The Peach State LSAMP facilitates an intensive three-week hands-on research training program for Peach State LSAMP students at Georgia Perimeter College planning to transfer to four-year institutions. The bridge program offers the cohort a supportive learning community and increases their scientific literacy and research skills prior to their enrollment at a four-year institution. Activities include participating in collaborative learning (each group works with a faculty mentor on a research project), research investigation and oral and poster presentations; touring STEM companies and manufacturing plants; and visits to Peach State Alliance member four-year colleges and universities. Upon completion of the transfer bridge program, students are better prepared for the curriculum at four-year institutions.

Workshops and Training Sessions: Attendance at workshops and training is mandatory for Peach State LSAMP scholars. Sessions including, but not limited to, preparation for graduate school and GRE training, career and job-seeking preparation skills, developing academic plans, leadership skill development, financial management skills, applying for graduate admission and obtaining financial support, and introductions to various research and research training are provided alliance-wide. In addition to traditional workshops, alliance-wide webinars are offered. Professional development for students and faculty is provided during the Fall Symposium and Research Conference and by leveraging various institutional opportunities to provide professional development for the STEM community.

Learning Communities: Peach State LSAMP administrators promote activities (such as break-out sessions and study groups) that encourage the students to become a part of a learning community when they first arrive on campus at participating Peach State LSAMP institutions. As part of the learning community, each student has the opportunity to form strong and possibly lifelong bonds with other students who have similar academic interests and with the faculty who teach those courses within the learning community. Research has indicated that students who participate in a learning community during their first semester have a higher retention rate as well as higher success rate in courses (Shapiro and Levine, 1999). Also, anecdotal experience of Peach State LSAMP administrators confirms that building a “family” among the STEM students has been beneficial.

Mentoring (peer, graduate student, and faculty): Alliance students typically have at least two mentors: an upperclassman (peer mentor) and one from the graduate student body (if graduate programs are offered on campus), faculty (research- participating faculty) or alumni and industry. These mentors meet with students regularly to monitor progress, and they provide advice and support. They are also available to
answer questions and address concerns. Cohorts of Alliance scholars will form small study groups (especially for “gateway” courses), and in some cases upperclassmen who have had the course can provide information sessions or peer tutoring. They have a regular time for meeting and studying together to ensure their success.

Outreach and Service Learning: These activities ensure practical application of learned skills and concepts, it is mandatory that students participate in service learning and apply for internships, as appropriate. Each semester, the scholars are required to have at least five service learning hours and research and research training counts as service learning hours. A coordinator for service and internships identifies businesses and agencies in the area and helps connect interested students with opportunities to volunteer or work in areas related to their chosen careers. Volunteerism and community outreach is encouraged in the Peach State LSAMP program. The students are providing mentoring as well as math and science tutoring to local school students, girl scouts, boy scouts, boys and girls clubs. Outreach, internship and service-learning programs offer students opportunities to learn more about their chosen majors and allow students to apply what they are learning in the classroom.

Drop-In Centers: Each Alliance institution provides dedicated space with resource materials and information about instructional support services, including cost-free opportunities to meet with tutors on campus, academic course resources, and other Peach State LSAMP programs and activities. Academic advisement and career counseling is available. STEM students are encouraged to take advantage of these services, interact with faculty and alumni and share best practices across disciplines.

Undergraduate Research Training: LSAMP Incoming first year students are introduced to undergraduate research. The undergraduate research activity is promoted and implemented in various methods on each campus, but all of the research activities provide the foundation for students to participate in STEM research with faculty mentors. Research training (either formally or informally) provides the following fundamentals: a) conducting literature search and developing a hypothesis, b) applying research design and statistical/analytical methods, c) presenting data in oral and written formats, and d) learning laboratory safety and ethical issues in science.
Undergraduate Research Experiences:
Engagement in undergraduate research is an essential activity in which all Peach State LSAMP students are encouraged to participate. Students engaged in undergraduate research are more likely to graduate and remain in STEM disciplines (Pender et al., 2010). The Peach State LSAMP program assist the scholars in obtaining research experiences, particularly those that are funded by NSF Research Educational Units, at the alliance 4-year and research institutions. The program supports scholars who are conducting research with a faculty mentor during the fall, spring or summer semester. It is essential that the students who participate in the research training have an opportunity to participate in a research experience at a university, national laboratory, federal agency, or in private industry to expand their options for graduate school and future STEM employment. Also students are expected to present their findings at appropriate regional and national conferences.

Fall Symposium and Research Conference: This annual two-day research conference for students, faculty, scientists and staff is a flagship event for the Peach State LSAMP. Attendance is mandatory at the research conference for all Peach State LSAMP research scholars and they are required to give a research presentation. Each year the conference is hosted by one of the Alliance institutions. The conference is
structured to maximize networking interactions, to facilitate the development of the LSAMP community of scholars, and to reinforce the commitment of students to earning a bachelor’s degree and pursuing graduate study or employment in STEM related fields. The program features plenary workshops and training sessions, poster sessions and oral presentations of Peach State LSAMP student research, and discussion panels with participating graduate students, faculty members, and representatives from government and industry. The judges for the oral and poster research are STEM research faculty and graduate students at the Alliance and other institutions. Students have an opportunity to talk with representatives from graduate schools (specifically those with Bridge to the Doctorate, AGEP and other NSF supported graduate student programs), NSF-funded Research Experiences for Undergraduates Students (REUs), corporations, and government agencies at the recruitment/career fair. Students meet other peers with similar interests in STEM disciplines and reinforce one another’s commitment to stay the course.

**Outcomes and Results**

The Peach State Alliance member institutions work as a team to create programming that is student-centered and promotes academically-prepared students successfully completing baccalaureate degrees and pursuing graduate degrees in STEM disciplines. The Alliance is building a systematic pipeline of STEM majors among URMs at the member institutions. As mentioned previously, In 2011, the Peach State Alliance expanded its Alliance to include seven public institutions in Georgia – the five original institutions: the University of Georgia (UGA), Fort Valley State University (FVSU), Georgia Perimeter College (GPC), Southern Polytechnic State University (SPSU), and Savannah State University (SSU); and two new institutions: Georgia Institute of Technology (GT) and Kennesaw State University (KSU). Note that in 2015, SPSU and KSU merged, so in the remainder of this report, SPSU will be Kennesaw State University – Marietta Campus (KSU-M), and KSU will be Kennesaw State University – Kennesaw
Campus (KSU-K). Also because of the expansion of the Alliance, outcome results in this report will be primarily from 2011 and beyond.

From 2012-2014 the enrollment of URMs in STEM fields at Peach State LSAMP institutions has increased by 38%. Figure 14 demonstrates an increasing enrollment trend. UGA has doubled the number of URMs enrolled in STEM majors during that time period with a 99% increase. The greatest increase in enrollment for the Alliance took place between fiscal years 2012 and 2013, where enrollment increased by 773 students among the member institutions. Having a growing enrollment is the basic foundation for the STEM pipeline and reflects a momentum that the Alliance will continue to build upon.

**Figure 14:** Peach State LSAMP Exceeds its Target Goal with a 38% Growth in Enrollment

The majority of the URMs in STEM disciplines enrolled at the Alliance institutions are Black or African American (65%, a 24% decrease since 2009) and Hispanic or Latino (24%, a 10% increase since 2009). This population trend among minorities is similar to that of the state of Georgia. Table 1 below provides enrollment disaggregated by race/ethnicity among the URMs enrolled in STEM majors at member institutions. Figure 15 indicates that there has been a 94% increase in the percent of URMs receiving baccalaureate degrees in STEM at the Peach State Alliance institutions from 2012-2014. Table 2 provides STEM degree production at each of the Alliance institutions. FVSU, GT, and KSU-M have more than doubled the number of URMs receiving a baccalaureate degree in STEM majors during that time period with a 116%, 119%, and 147% increases respectively.

**Table 1:** Peach State LSAMP Enrollment of URMs in STEM Majors by Race/Ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black or African American</td>
<td>5934</td>
<td>6175</td>
<td>5782</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>1766</td>
<td>2045</td>
<td>2138</td>
</tr>
<tr>
<td>Native American</td>
<td>68</td>
<td>41</td>
<td>43</td>
</tr>
<tr>
<td>Native Hawaiian or Pacific Islander</td>
<td>30</td>
<td>35</td>
<td>118</td>
</tr>
<tr>
<td>More than One Race Reported</td>
<td>417</td>
<td>692</td>
<td>763</td>
</tr>
<tr>
<td><strong>Total URMs in STEM</strong></td>
<td><strong>8215</strong></td>
<td><strong>8988</strong></td>
<td><strong>8844</strong></td>
</tr>
</tbody>
</table>

**Figure 15:** Peach State LSAMP Exceeds its Target Goal with a 94% Growth in Degree Production

**Table 2:** Degree Production of URMs in STEM Disciplines at Peach State LSAMP Institutions

<table>
<thead>
<tr>
<th>Institution</th>
<th>2009-10</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Degrees Awarded</td>
<td>% Increase</td>
<td># of Degrees Awarded</td>
<td>% Increase</td>
<td># of Degrees Awarded</td>
</tr>
<tr>
<td>FVSU</td>
<td>62</td>
<td>135</td>
<td>118</td>
<td>136</td>
</tr>
<tr>
<td>GT</td>
<td>241</td>
<td>412</td>
<td>72%</td>
<td>477</td>
</tr>
<tr>
<td>KSU-K</td>
<td>47</td>
<td>103</td>
<td>119%</td>
<td>84</td>
</tr>
<tr>
<td>KSU-M</td>
<td>66</td>
<td>135</td>
<td>105%</td>
<td>141</td>
</tr>
<tr>
<td>SSU</td>
<td>85</td>
<td>100</td>
<td>18%</td>
<td>99</td>
</tr>
<tr>
<td>UGA</td>
<td>123</td>
<td>163</td>
<td>33%</td>
<td>192</td>
</tr>
</tbody>
</table>

Source: NSF WebAMP - OMB #3145-0136 LSAMP Program
Table 3 summarizes major outcomes and accomplishments of the Peach State LSAMP program over the last 10 years—the life of the program. There were 1871 Alliance scholars who were directly funded as a general or research scholar. Of those 1871 scholars, 1694 were retained from the previous year. The Alliance has had 746 scholars to graduate and 140 of those graduates to enroll in graduate or professional school. There is some data that suggests that Alliance STEM students are taking longer than five years to complete their baccalaureate degrees. Sufficient data must be collected to study such matriculation trends. One hundred and thirty (130) Peach State LSAMP scholars transferred from Georgia Perimeter College to a four-year institution. Other outcomes include 933 funded research opportunities (on-site, off-site, and international), 731 LSAMP workshops, 956 scholars have presented at conferences and 26 have published their research over the last ten years.

Table 3: Peach State LSAMP Outcomes

<table>
<thead>
<tr>
<th>Program</th>
<th>FNU</th>
<th>GPC</th>
<th>GT</th>
<th>KSU-K</th>
<th>KSU-M</th>
<th>SSU</th>
<th>UGA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of PSLSAMP scholars</td>
<td>1871</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of conducted research – on site</td>
<td>588</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of conducted research – off site</td>
<td>244</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of international research</td>
<td>91</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of workshops</td>
<td>731</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of student presentations at conferences</td>
<td>956</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of student publications</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of transfers from 2-year to 4-year colleges</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of students retained</td>
<td>1694</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of students graduated</td>
<td>140</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of students enrolled in graduate programs</td>
<td>746</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Another outcome and accomplishment is that the majority of Peach State LSAMP programming has been implemented alliance-wide (Table 4). The member institutions continue to work collaboratively to ensure that general programming is identified and developed as an Alliance. Because of the uniqueness of the institutions, each customizes planned activities and approaches that are suited for the needs and distinctiveness of its students and its campus culture.

Table 4: Peach State LSAMP Programming Implemented at Alliance Institutions

<table>
<thead>
<tr>
<th>Programs</th>
<th>FNU</th>
<th>GPC</th>
<th>GT</th>
<th>KSU-K</th>
<th>KSU-M</th>
<th>SSU</th>
<th>UGA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer Bridge Programs (incoming freshmen school and transfer)</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty-mentored Research</td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Campus meetings and workshops</td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>GRE &amp; Graduate School Preparation Workshops</td>
<td></td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Faculty/Professional Mentoring Program</td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Peer Mentoring Program</td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>STEM course tutoring services</td>
<td></td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Advisement and academic planning</td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Peer tutoring</td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Travel Awards for professional conferences (ERN, NSBE, ABRCMS, SREB, LSAMP, etc.)</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
</tbody>
</table>

Source: Reported by Peach State Alliance Institutions

Peach State LSAMP
Leveraging Power and Impact

Institutional Economic Impact in the State of Georgia

The Peach State LSAMP institutions have a tremendous economic impact on their local communities and the state. Based on the University System of Georgia’s Economic Impact report developed by the Selig Center for Economic Growth in the Terry College of Business at the University of Georgia (report released March 2013), each of the Alliance institutions generates substantial economic impacts in terms of output, value added, labor income, and employment. The combined economic impact of the Alliance institutions on their host communities in FY
2012 (July 1, 2011 – June 30, 2012) includes:

- $6.96 billion in output (sales);
- $4.94 billion in valued added (gross regional product);
- $3.45 billion in labor income; and
- 64,615 full- and part-time jobs.

These economic impacts equate to jobs, higher incomes, and greater production of goods and services for local households and businesses. A summary of the economic impact contributed by each of the Alliance Institutions in FY 2012 is provided below. The remainder of this section will highlight the economic impacts of each of the Peach State Alliance institutions and campuses.

**Table 5: Economic Impacts of Peach State Alliance Institutions**

<table>
<thead>
<tr>
<th>Alliance Institutions</th>
<th>Output Impact</th>
<th>Value Added</th>
<th>Labor Income</th>
<th>Full- and Part-time Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fort Valley State University</td>
<td>$109,209,987</td>
<td>$109,559,245</td>
<td>$73,672,263</td>
<td>1,877</td>
</tr>
<tr>
<td>Georgia Institute of Technology</td>
<td>$2,177,600,001</td>
<td>$1,849,061,693</td>
<td>$1,117,715,964</td>
<td>20,969</td>
</tr>
<tr>
<td>Georgia Perimeter College</td>
<td>$714,466,223</td>
<td>$519,860,352</td>
<td>$331,080,020</td>
<td>7,221</td>
</tr>
<tr>
<td>Southern Polytechnic State University*</td>
<td>$322,737,194</td>
<td>$253,137,446</td>
<td>$102,030,920</td>
<td>2,070</td>
</tr>
<tr>
<td>Kennesaw State University</td>
<td>$426,110,991</td>
<td>$437,878,074</td>
<td>$426,092,584</td>
<td>8,785</td>
</tr>
<tr>
<td>Savannah State University</td>
<td>$47,546,203</td>
<td>$272,070,674</td>
<td>$27,240,482</td>
<td>1,594</td>
</tr>
<tr>
<td>University of Georgia</td>
<td>$1,501,385,385</td>
<td>$1,575,312,863</td>
<td>$1,359,590,512</td>
<td>22,196</td>
</tr>
<tr>
<td>Totals</td>
<td>$6,962,110,877</td>
<td>$4,946,794,303</td>
<td>$3,454,924,133</td>
<td>64,615</td>
</tr>
</tbody>
</table>

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia (www.selig.uga.edu) March 13, 2013

* Note: This information was reported for Southern Polytechnic State University three years prior to merging with Kennesaw State University.

The **University of Georgia**, located northeast of Atlanta in Athens, GA, is a Research I institution offering baccalaureate, master’s, doctoral, and professional degrees in STEM areas including biological sciences, physical sciences, engineering, agricultural and environmental sciences. In 2012, UGA founded its College of Engineering that offers eight undergraduate and seven graduate degree programs, plus a dual degree program. The university’s Office of STEM Education is part of a statewide, systemic effort to recruit and retain students in STEM disciplines via the University System of Georgia’s Presidents’ STEM Initiative. UGA provides both community-based and technology-based economic development resources with the ultimate goal of creating vibrant and thriving communities to make Georgia a better place to live. The **institution combined (sales, gross regional product, and labor income) economic impact of $4.9 billion produced 22,196 full- and part-time jobs in FY 2012** (see Table 5).

Combining expertise from across its campuses, UGA provides practical, science-based multidisciplinary approaches to addressing major issues faced by society today. For example, UGA has unique strengths in agriculture, forestry, environmental science, engineering, genetics and microbiology enabling the institution to serve as a knowledge hub for bioenergy research and development in Georgia. Other thrust areas such as infectious disease, water, and applied genetic technologies make UGA a major resource for current research and information in areas of importance to the state. UGA has extensive experience with commercializing pragmatic outcomes from its research enterprise. This is done through intellectual property licensing, technology feasibility analyses, and core labs and testing facilities, among other resources. UGA **nearly doubled (99%) the number of URM s enrolled in STEM disciplines** and has had an amazing **81% increase in URM s receiving baccalaureate degrees in STEM disciplines**.

**Fort Valley State University**, located in a rural region of middle Georgia and founded in 1890, is a land-grant university that has fostered remarkable innovations in
agriculture and related fields. Its acclaimed biology and chemistry departments, housed in a high-tech academic building with state-of-the-art technology and laboratories, help FVSU send more students of African descent to medical and dental school than any other state school in Georgia. FVSU continues to drive economic growth in its local community, according to the latest statistics. The institution provided a combined (sales, gross regional product, and labor income) economic impact of $340 million producing 1,877 full- and part-time jobs in FY 2012 (see Table 5). The institution provides 16 baccalaureate programs in STEM areas including animal science, biology, computer science, engineering, horticulture, chemistry, veterinary technology, food and nutrition and math with two masters-level programs in animal science and biotechnology. FVSU has had a major 116% increase (from 62 in 2010 to 134 in 2014) in URMs completing degrees in STEM disciplines.

The Georgia Institute of Technology is a Tier I research university located in Atlanta, GA. GT offers undergraduate and graduate degree programs in the Colleges of Architecture, Business, Computing, Engineering, Sciences, and the Ivan Allen College of Liberal Arts. GT is globally recognized as a leader in producing top science and engineering talent with all of its’ engineering programs ranking in the top 10 in the country. As the largest engineering program in the United States, GT offers a breadth and depth of resources for prospective and current students and alumni in all STEM fields. Specifically, GT offers 35 undergraduate majors, 47 master’s degree programs, and 30 doctoral degree programs in virtually every science, engineering, and technology related discipline.

GT has contributed a significant economic impact to the University System of Georgia and the state of Georgia. During fiscal year 2012, the institution provided a combined (sales, gross regional product, and labor income) economic impact of $5.7 billion producing 20,869 full- and part-time jobs in FY 2012 (see Table 5). GT believes that “Technological change is fundamental to the advancement of the human condition. The GT community – students, staff, faculty, and alumni – will realize their motto of “Progress and Service” through effectiveness and innovation in teaching and learning, their research advances, and entrepreneurship in all sectors of society. They will be leaders in improving the human condition in Georgia, the United States, and around the globe.” This mission statement underscores its’ commitment to educating the nation’s future STEM talent while informing technological advances along the way. GT has experienced a 49% growth in enrollment, and a remarkable 119% increase in STEM baccalaureate degree completion among its URM students.

Georgia Perimeter College, the two year Alliance partner, is the largest associate degree granting institution in the University System of Georgia (USG). GPC is the first choice for many STEM majors because; of its online college, five campuses and affordable tuition. GPC is one of the most diverse institutions in USG with Hispanic, Latino, Asian, and African American student enrollment – above system averages, along with students representing 150 countries. With recruitment efforts at over 280 high schools (public and private) in Georgia, GPC is the primary institution in the state allowing underrepresented minorities access to higher education. As a transfer institution, all STEM associate degree programs are designed so that the
student moves on to the next level – baccalaureate degree program. GPC’s mission centers on student success. With four institutional strategic goals, 1) strengthening student success, 2) creating and fostering a culture of teamwork, leadership, quality service and continuous improvement, 3) enhancing the social and cultural vitality of our communities, and 4) expanding access and enrollment capacity, GPC strives to provide a strong and vibrant learning environment so that students thrive in our global society. The institution provided a combined (sales, gross regional product, and labor income) economic impact of $1.6 billion producing 7,221 full- and part-time jobs in FY 2012 (see Table 5). In 2013-2014, GPC had 2,114 full time, URM students enrolled in STEM majors of biology, chemistry, geology, mathematics, physics, computer science, and engineering representing a 63% increase since 2009-2010.

Kennesaw State University – Kennesaw Campus, the fastest growing university in Georgia, with enrollment growth from 12,000 students in 2000, to over 34,000 in 2015. KSU-K is currently the second largest public university in the Georgia Public University System of 30 universities and is ranked 45 amongst the top 50 largest universities in the USA. It is second in size only to the University of Georgia and is larger than Georgia State University and Georgia Tech, to name two major universities within our system. KSU-K just accomplished one of the largest university consolidations in US history, merging two major universities into one world class institution that now delivers over 120 degree programs at the undergraduate, masters and doctoral levels. This video (New KSU) provides an overview of the new, evolving Kennesaw State University. KSU-K has provided a combined (sales, gross regional product, and labor income) economic impact of $1.9 billion producing 8,788 full- and part-time jobs in FY 2012 (see Table 5). KSU (both the Kennesaw and Marietta campuses) is comprised of 13 Colleges, including a nationally ranked University College (2nd ranked in the USA), the Coles College of Business (24th ranked in the USA), the Bagwell College of Education graduating more STEM educators per year than all other USG universities combined, and over 22,000 students enrolled in the Distance Learning Center’s programs. The College of Continuing and Professional Education currently enrolls an additional 23,000 students independent of the University’s 34,000 enrollment. There are over 60 centers of excellence including the 3rd USA nationally ranked Center for Excellence in Teaching and Learning. KSU-K has experienced a 66% increase in science and mathematics baccalaureate degree completion among its URMs.

Kennesaw State University – Marietta Campus (formerly Southern Polytechnic State University) is located northwest of Atlanta in Marietta, GA, where four of its five schools are STEM-focused. KSU-M houses the Southern Polytechnic College of Engineering and Engineering Technology, the College of Computing and Software Engineering, and the College of Architecture and Construction Management. In addition, the Department of Physics is located there. The institution provided a combined (sales, gross regional product, and labor income) economic impact of $478 million producing 2,070 full- and part-time jobs in FY 2012 (see Table 5). SPSU offers 24 baccalaureate degree programs in STEM disciplines including architecture, chemistry, biology, computer science, computer game design, engineering (civil, electrical, construction, mechanical, mechatronics, systems, and software), engineering
technology (civil, computer, industrial, and telecom), information technology, and physics. KSU-M provides three master’s degree programs in computer science, information technology, and quality assurance. KSU-M has experienced a 56% increase in URMs enrolled in STEM disciplines and an impressive 147% increase in URMs receiving baccalaureate degrees in STEM majors.

**Savannah State University**, a four-year Historically Black College and University (HBCU) and located on the Southeastern Georgia coast, has a high-tech STEM center in their College of Science and Technology, and students have been engaged in STEM research through STEM programs including NSF HBCU-UP, NSF Peach State LSAMP, NIH RIMI, and DOE Environmental Justice. The institution provided a combined (sales, gross regional product, and labor income) economic impact of $316 million producing 1,594 full- and part-time jobs in FY 2012 (see Table 5). SSU offers baccalaureate degrees in biology, chemistry, mathematics, engineering technology (civil, electronics, computer), marine science, environmental science, and forensic science. In addition, they have a master’s degree program in marine science. SSU has experienced a 49% increase in URMs enrolled in STEM majors.

**Peach State LSAMP Direct Economic Impact and Leveraging Power**

The Peach State LSAMP member institutions have a tremendous economic impact on the state and the local communities individually. As an Alliance, the Peach State LSAMP program has a shared influence on the retention and baccalaureate degree attainment of students with STEM majors. The shared influence is evident in the enrollment and degree production increases described earlier. These increases also translate into greater economic impact of the Peach State LSAMP Alliance.

A direct economic impact of the Alliance is demonstrated in the revenue that is contributed to member institutions’ local communities as a result of the annual Symposium and Research Conference. Revenue is generated at hotels, restaurants, and overall tourism in the local community in which the conference is held. As presented in this report, the annual conference is the premier event that brings together students, faculty, and staff from the Peach State LSAMP institutions as well as other LSAMP institutions starting mid-day Thursday and ending mid-day Saturday each year. The event gives students an opportunity to showcase their research. In the last ten years, the conference has been held at UGA (Athens, GA), FVSU (Fort Valley, GA), SPSU and KSU (Marietta, GA), SSU (Savannah, GA) and GT (Atlanta, GA). Over the last ten years the Peach State LSAMP conference has generated approximately $875,000 in revenue to the local community of the hosting Peach State LSAMP institution.

Institutional support for the Peach State LSAMP program is and continues to be strong on each of the Alliance institutions campuses. Alliance member institutions and campuses leverage significant internal resources to support Peach State winning STEM-focused programming and practices, as well as academic support activities for LSAMP students. Leveraged institutional resources include, but are not limited to the following:

- Administrative support services (faculty and staff release time) from all member institutions for program...
management, data collection, travel to conferences, etc.
• Financial support from member institutions to cover food for meetings, professional development workshops, awards programs, etc.
• Dedicated institutional space for the Peach State LSAMP offices, LSAMP Drop-In Centers, as well as campus facilities, laboratories, and equipment
• Instructional science labs and classrooms for classes and training sessions
• Research laboratories equipped with necessary tools, materials, supplies and technology for student research projects
• Supervision of student research projects by faculty research mentors

The Peach State Alliance institutions have been very successful in providing meaningful workshops, relationships, and experiences that are well-planned and engaging for the LSAMP scholars. Partnering and collaborations have been key elements in that success. The Alliance administrators leverage both institutional and externally-provided programs, resources, and services to meet the measurable goals of the LSAMP program and to ensure the success of its STEM students. Highlights of the institutional support and leveraging power of partnerships and collaborations at each of the Peach State LSAMP institutions is described below.

UGA, as the lead institution, provides significant resources, office space, student drop-in center, and staff to support and manage the LSAMP program. The institution funds the Alliance Director and UGA LSAMP Coordinator’s position to work 100% time on the grant, as well as significant expenses for the annual conference (i.e. conference bag, t-shirt, padfolio, food, etc.) The LSAMP administrators have established the following partnerships for the success of the program:
• REUs at UGA and other institutions (research opportunities)
• U. S. Department of Agriculture, Agricultural Research Service Office of Outreach, Diversity and Equal Opportunity (research opportunities)
• Southern Regional Education Board Doctoral Scholars Institute on Teaching and Mentoring (graduate school preparation)
• UGA Graduate School (graduate school application fee waivers for LSAMP alumni)
• Kaplan Test Prep (graduate and professional school admissions test prep)
• U. S. Department of Defense National Laboratories (student and faculty research opportunities)

FVSU administration provides substantial resources and support for the LSAMP program. Because of the success of the program and the stability that it provides to the students in STEM majors, the university has allowed the program to keep indirect cost associated with the program totaling approximately $10,000 per year. In order to sustain the program, administrative support is also provided by the university. The Science building has donated two rooms that serve as the drop-in center for LSAMP students, and faculty members serve as mentors during the semester at no cost. FVSU LSAMP administrators have built partnerships with the following collaborators:
• Clark Atlanta University (research mentors and opportunities)
Visions for the Valley (internship assistance)
American Chemical Society at Fort Valley (tutorial program)
Beta Kappa Chi (travel awards)
Hope Scholarship (financial support for scholars)
U. S. Department of Agriculture (research mentors and opportunities)
Engineering Dual Degree Programs at several institutions
Jackson State University (research mentors and opportunities)
FVSU STEM Faculty (research mentors and opportunities)

GPC has provided countless resources to sustain and integrate services to and for STEM students. The LSAMP funding has afforded significant programming and opportunities to ensure URM STEM students receive the academic skills required to compete at four-year colleges. Because of GPC LSAMP’s pilot programming success, the college has implemented positive changes in recruitment, retention and academic advisement that have led to STEM scholars persisting in their program of study. As a result, GPC dedicated resources to create a STEM lab equipped with laptops and tutors to meet the needs of STEM students. In addition, through the extensive work of GPC administrators to provide continuous improvements and develop LSAMP winning practices, the college has received successful grants awards from NSF and the University System of Georgia (USG) focused on student success in STEM disciplines. The resulting STEM-focused awards include the following:

- Five year $598,000 S-STEM ENLISTEM grant
- $1.5 million competitive STEP grant for five years (3+8 Summer Bridge program)
- $310,000 STEM grant funding the Math, Engineering, Science, Achievement (MESA) program, mini-grants for instructors, the Office of STEM Initiatives, and the hiring of an Executive Director for STEM for the college.

GPC LSAMP has established the following partnerships and collaborations:

- DeKalb Academy for Technology and the Environment (D.A.T.E.)
- MESA program Science and Engineering Clubs at GPC
- Transfer Admission Guarantee (TAG) agreements with all Alliance institutions and other four-year institutions that ensure a seamless transition from two-year to four-year institutions.

GT has invested significant resources for the GT LSAMP program. Its office and drop-in center is housed within the Center for Engineering Education and Diversity (CEED) in the College of Engineering but is open to all STEM majors. CEED is responsible for a host of programs that impact the K-12 community, undergraduates, graduate students, faculty and alumni and has a strong relationship with corporate partners who provide scholarships, internships, and employment opportunities to students. LSAMP students have priority access to the many resources provided by the CEED office.

In 2015, GT’s College of Engineering was awarded a generous gift from the Intel Corporation ($5.5 million over the next five years) directly to the CEED office. The strength of the Intel proposal was based on a winning GT LSAMP practice – the peer mentoring program. The GT LSAMP peer mentoring program has proven to be a very
effective student retention strategy, and was leveraged to create the larger Peer 2 Peer (P2P) mentoring program funded by Intel. Specifically, P2P has adopted the GT LSAMP peer mentoring model that pairs older, academically strong students with freshman, sophomores, and new transfer students. As a result of the P2P/LSAMP partnership, GT has increased student funding levels from $600 to $1500 per semester, as well as, increased the number of supported students from the original 40 to 100 funded undergraduate students each semester. Intel funding created support for up to eight graduate student mentors (many of whom are former LSAMP undergraduate students) who oversee certain aspects of the peer mentoring program.

Another winning strategy is that the GT LSAMP program has partnered with the Summer Undergraduate Research experience in Engineering and Science (SURE) program. SURE is a 10-week, residential summer research program for undergraduate students from Georgia Tech and from around the country. For the past five summers, the Sure program has reserved slots for Peach State LSAMP students (alliance-wide).

KSU-K administration supports the LSAMP program with significant campus-wide resources. The program office and drop-in center is located in the College of Science and Mathematics (CSM). The college supports the LSAMP program by sponsoring a “white coat” ceremony for all of the new undergraduate students in preparation for their research training that begins in their freshmen year. Faculty also volunteer to support the students in research, service learning and academic support activities.

KSU-K LSAMP students take on leadership roles in designing the LSAMP programing and in facilitating the Pre-college STEM Enrichment Program to introduce middle and high school students to STEM laboratory experiences and basic skills.

Partnerships and Collaborations established by the KSU-K LSAMP administrators include:

- U.S. Army Corp of Engineers (research opportunities)
- Lockheed Martin (mentors, plant tours, internships)
- Cryolife (mentors, plant tours, internships)
- Molecular Biology Interest Group MBIG (seminars)
- KSU Study Abroad
- NASA - Georgia Space Grant Consortium
- REU programs (research opportunities)

KSU-M LSAMP receives administration support and resources for program success. Each semester, the administration funds opening and closing LSAMP programs. The program office and drop-in center is located on the Marietta campus where the faculty mentors provide hands-on guidance and research support for LSAMP students for 10 weeks in the summer. KSU-M LSAMP partners with local K-12 schools to provide math and science academic support. Each month the program provides “Journey to Success” seminars that bring in guest STEM professionals from partnering corporations and organizations to share wisdom and lessons learned for career success. Partnerships with KSU-M LSAMP includes the following:

- Marietta Sixth Grade Academy
- Marietta Middle School
- Marietta High School
- Lockheed Martin (field trips and research)
SSU administration provides countless resources and support for the LSAMP program. The program is housed in the College of Science and Technology, and the SSU LSAMP students are afforded STEM research opportunities. SSU LSAMP administrators have built partnerships with the following collaborators to ensure that their LSAMP students have at least one on-site and one off-site research experience, as well as service learning opportunities before completing their baccalaureate degree:

- City of Savannah Housing and Urban Development grant (training and service learning)
- National Science Foundation GK12 grant (college students in K-12 classrooms and K-12 teachers in research)
- National Science Foundation PRISM at Savannah State University
- Department of Education STEM 360 (summer STEM camps for K-12 students)
- NOAA LMRCSC grant (marine science summer camp)
- US Army JETS grant (engineering technology summer camp for local high school students)
- National Science Foundation HBCU-UP (summer workshops for K-12 STEM teachers)
- AAMI (African American male initiative)
- University of Tennessee – Knoxville (Grad Lab)
- Marietta Center for Advanced Academics
- Youth Empowerment for Learning, Leadership and Service (YELLS)
- National Institute of Health RIMI (faculty and student research)

As a result of these significant partnerships and collaborations, SSU has established an Undergraduate Research Mentoring Office institutionalizing the LSAMP mentoring and research activities. In the spring, the institution hosts an annual campus-wide Research Day.

**Impact on Enrollment and Degree Production in the State of Georgia**

Peach State LSAMP has been successful in increasing URM enrollment in STEM as well as STEM degree production in the state of Georgia. Strong administrative and faculty support, partnerships, committed staff, and student-centered programming have been the foundation for the success to date.

As reported above in Figure 14, enrollment of URMs in STEM among the Peach State Alliance Institutions has increased by 38% from 2010 – 2014. Also as presented in Table 2 and Figure 15, baccalaureate degree production for URMs in STEM majors at the Alliance institutions experienced a 94% increase from 2010 - 2014. Therefore, collectively the Peach State LSAMP institutions are significantly impacting the state of Georgia in diversifying the STEM workforce.

**Impact on Students**

The success of the Peach State LSAMP is significant in terms of its effect on STEM graduate production in the state of Georgia, but the true impact is realized in the lives of the individual students who benefit as a result of their participation in Peach State LSAMP activities. The Peach State LSAMP has had a tremendous impact on its member students.
A number of scholars have participated in research as undergraduates and have been included as an author in research publications, received scholarships from notable professional organizations, and have pending patents because of their contribution. Selected scholars from each institution are featured below.
Margaret Akinhammi started UGA in August 2009 where she participated in PSLSAMP, Minority Pre-Med Student Association (MPSA), and Med-Life. She also volunteered at Mercy Health Center, participated in Genetics research, and attended several National Conferences to present research. She graduated with a B.S.A in Biological Science from UGA in May 2013. She then participated in a Post-Baccalaureate Program at Washington University in St. Louis called 'Opportunities in Genome Research' from August 2013 to June 2014. The program is based out of The Genome Institute at Washington University in St. Louis. In July 2014, she began graduate school at Mayo Clinic Graduate School, where she is currently working on a PhD in Biomedical Science, with a concentration in Clinical and Translational Science.

Kristen Bascombe is a 4th year Cellular Biology student in the Franklin College of Arts and Sciences at The University of Georgia. While at UGA, Kristen conducted research on developing an optogenetic tool for protein knockdown in the malaria parasite Plasmodium falciparum under the supervision of Dr. Vasant Muralidharan. She also conducted research with the New York City Office of the Chief Medical Examiner on the use of laser micromanipulation for obtaining high quality DNA profiles from skin cells through the New York University Summer Undergraduate Research Program. She has served as a PS-LSAMP scholar, a member of Service Ambassadors, and vice president for Community Service of the Golden Key Honor Society. Upon graduation, she intends to work as an ER scribe at North Fulton Hospital and attend medical school in the fall of 2015.

Ashley Noel Carter graduated with a B.S. in Food Science and a Minor in Spanish in 2010. She later graduated from the University of Alabama-Birmingham (UAB) with a Master of Science in Clinical Nutrition in 2012. Today, she is a recipient of a Graduate Certificate in Measurement and Statistics and a Doctoral Candidate in Nutrition Science at the Florida State University (FSU). She served as an Adjunct Instructor at the Florida Agricultural and Mechanical University (FAMU) and a Teaching Assistant at FSU. In addition, she has presented cardiovascular research and received awards at national conferences. Recently, Ms. Carter has been selected to serve as a Trainee Representative for the Nutritional Immunology and Inflammation Research Interest Section (RIS) of the American Society for Nutrition (ASN). She soon plans to pursue a postdoctoral opportunity to gain additional training and experience.

Rosa Cromartie graduated May 2015 with a B.S. in Biochemistry and Molecular Biology and a minor in Chemistry from the Franklin College of Arts & Sciences. While at The University of Georgia, Rosa has served as a Peach State Louis Stokes Alliance for Minority Participation Research Scholar since summer 2010. She has been conducting research since sophomore year, interned at Johnson Research and Development Company, as well as served as a teacher assistant to high school students. Rosa worked with and supported Georgia DAZE, served on the recruitment committee for UGA Special
Olympics, a member of Engineers without Borders (EWB), as well as a participant in Student Affiliates of the American Chemical Society (SAACS). After graduation, Rosa interned for the USDA in Gainesville, Florida. She will be attending Florida International University in Miami, Florida pursuing her Ph.D. in Chemistry with a concentration in forensic science. She hopes to one day work for the F.B.I forensics laboratory as an analytical chemist.

Abimbola Ademola Dada is a first-year pharmacy student at the Albany College of Pharmacy and Health Science in Colchester, Vermont. She graduated from The University of Georgia (UGA) with a B.S. degree in Biological Science in May 2010. While attending the UGA, Abimbola was mentored by Dr. Paige Carmichael, Associate Dean of UGA’s College of Veterinary Medicine. As an undergrad, she served as a Peach State Louis Stokes Alliance for Minority Participation (PS-LSAMP) Scholar in addition to conducting research on CD8 T cells with Dr. Klonowski.

Anquilla Deleveaux graduated May 8th 2015, with a Bachelor's of Science in Genetics. After graduation she attended Morehouse School of Medicine working on a dual degree MD/MS. During her years at UGA, she was the founder of the Minority Science Student Association and LSAMP Scholar in addition to being a part of the LSAMP student advisory board. For four years, she was a head mentor at the Thomas Lay Olympics, a member of Engineers without Borders (EWB), as well as a participant in Student Affiliates of the American Chemical Society (SAACS). After graduation, Rosa interned for the USDA in Gainesville, Florida. She will be attending Florida International University in Miami, Florida pursuing her Ph.D. in Chemistry with a concentration in forensic science. She hopes to one day work for the F.B.I forensics laboratory as an analytical chemist.

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Marcus Hines is a first year MD/PhD student at New York University School of Medicine (NYUSOM). He graduated magna cum laude with High Honors from The University of Georgia (UGA) with a B.S. in Cellular Biology in May 2011. While at UGA, Marcus conducted research under the guidance of Dr. Michael Tiemeyer and Dr. Lance Wells and presented his research at a number of statewide and national conferences. As a PS-LSAMP scholar, Marcus served as a summer mentor and tutor.

Whitney Ingram is a Georgia native from Stone Mountain, GA. She is a 5th year doctoral candidate in physics from the University of Georgia. Her research interest includes the design and fabrication of metallic nanostructures, and studies their optical properties for the enhancement of chemical and biological sensors. Whitney attributes her interest in nanoscience and technology to her experience as a PLSAMP scholar as an undergraduate at UGA. Since the second semester of her freshman year
Whitney has performed research every semester since her graduation. It was during her time working with Dr. Yiping Zhao, who is now her current PhD professor, that she gained an interest in the field of nanotechnology. Her experience at the PSLSAMP conference has also given her the confidence to present her research in oral and poster presentations. She is grateful for her experience because I would not be where I am today had it not been for my experience as a PSLSAMP scholar.

Currently, Whitney has published numerous peer-reviewed journals and has been awarded numerous fellowships such as the DOE’s Graduate research fellowship, the SLOAN fellowship, and was also selected to attend the 65th annual Nobel Laureate meeting where she had the opportunity to meet with over 60 Nobel laureates in the field of physics, chemistry, medicine, literature, and peace in Lindau, Germany. After graduation Whitney hopes to work in a national lab as a research scientists, but also would like to eventually teach as a professor at a University.

Catherine Johnson earned a B.S. in Agricultural Engineering with an emphasis in Structural Systems from The University of Georgia’s College of Engineering in 2014. Johnson has served as a Peach State Louis Stokes Alliance for Minority Participation (PS-LSAMP) Research Scholar and Summer Bridge 2014 counselor. She interned with UPS and conducted research with the EPA and UGA’s Civil Engineering Lab. She is a member of the Society of Women Engineers, the National Society of Black Engineers and the American Society of Civil Engineers. In 2015, Johnson will begin pursing her M.S. in Engineering from The University of Georgia’s College of Engineering.

Jonathan Jones is a 2013 Graduate from UGA’s College of Engineering with a B.S. in BioChemical Engineering. After graduation, Jones worked at the UGA Costa Rica Campus in Monteverde as one of the Sustainability Interns where he worked to complete the campus’s carbon footprint analysis. By helping to create the campus’s calculator that would analyze the emissions and offsets, the Sustainability Interns assisted in the campus’s goal of reaching carbon neutrality. Currently, Jones is a Fermentation and Microbiology Production Engineer with Dow AgroSciences in Harbor Beach, Michigan. He currently works to streamline current laboratory techniques while working to optimize fermentation inoculation performance in the seed tanks to increase productivity. In his spare time, Jones is working to create a STEM outreach program with the local community schools in Harbor Beach that will help to increase the number of hands on activities for students and provide an avenue for scientific exploration.

Morgan Joseph served as the president of the Biology and Life Science Association and as a University of Georgia Service Ambassador. She also volunteered at Athens Regional Hospital and served on the LSAMP Student Advisory Board. After graduation, she plans to participate
in a post-baccalaureate program before applying to medical school and studying pediatrics.

**Ahtyanna K. A. Kendrick** majored in Biology while being an active member of the Peach State Louis Stokes Alliance for Minority Participation Student Advisory Board. Delta Sigma Theta Sorority, Inc. (Custodian and Fundraising Chair), as well as an Resident before entering Medical School. Her plans include being involved in pediatrics.

**Mekayla Kirt** graduated in May 2015 with a B.S. in Biology. She was a LSAMP scholar and participated in the 2011 LSAMP Summer Bridge program. She served as treasurer for the Reed Hall Council and was a member of the UGA Rotoract Club which was centered on performing various community service acts. She conducted research in Dr. Maor Bar-Peled's lab. The title of her research project was "Effects of Phosphate Concentrations on Rhizobium leguminosarum Wildtype Gene Expression for Csl1 and Csl2 operons". After graduation, she plans on completing a post-baccalaureate program to prepare her for medical school. She hopes to start her career as a Dermatologist.

**Achevi Kuri** is from Athens, GA. He earned a B.S. in Agricultural Engineering with Electrical Emphasis and minors in Physics and Music from The University of Georgia in December 2014. During his time here, he was involved in the National Society of Black Engineers, Peach State Louis Stokes Alliance for Minority Participation, and Institute of Electrical and Electronics Engineers. With education spanning in multiple areas, he was able to participate in a number of research projects. In his physics studies, he performed research on the energy levels of the NH3 molecule, which was published in the American Physics Journal. As an engineer, he received the Bruce E. Dixon scholarship from UGA’s College of Engineering, which allowed him to participate in various projects dealing with energy efficiency in solar panels, radio frequency modulation, and photodetector sensors. He plans on attending graduate school and earning a master’s in electronics and ultimately plans to work in the industry.

**Michael Kobina Mills** was born in Takoradi, Ghana and moved to the United States from England in 2004. He is a fourth year student and has been involved in 2 Christian clubs throughout college: Christian Students at UGA and Disciples on Campus. He is preparing to apply to graduate schools to pursue a Doctorate.

**Victoria Chioma Ohuoba** is a senior at The University of Georgia from Jonesboro, Georgia. She obtained her B.S.A in Biological in 2015. During her undergraduate career, Victoria participated as a
PSLSAMP Research Scholar and in the ABK Honor Society, African Student Union, and Rotaract. After graduation she plans to do a post-baccalaureate program for a year and then attend medical school in hopes of becoming a pediatrician.

Ijeoma Okoye is graduating in May with a Biological Sciences and Public Health degree. She is from Fayetteville, GA and graduated from Sandy Creek High School in 2011. She was extremely involved on campus during her years here, but her most notable involvements are with African Student Union where she currently serves as president, and with Thomas Lay After School Program, where she served as a head mentor for 4 consecutive semesters. After graduation, Ijeoma will be attending medical school at Medical College of Georgia in Augusta, GA. She has hopes of pursuing primary care through Family Medicine.

Oge Okoye is from Fayetteville, Ga. She received a Bachelor of Science in Biology degree from UGA in May of 2014 and is currently a first year pharmacy student at UGA College of Pharmacy pursuing her Pharm.D. During undergrad, she was involved with LSAMP, African Student Union, Student Alumni Council, Thomas Lay After School Program, and Pre-pharmacy Society.

Babajide Oluwadare is from Ijare, Ondo State Nigeria. He attended Stephenson High School in Stone Mountain, GA before matriculating at The University of Georgia. While at UGA he was involved with the Thomas Lay After School program, African Student Union and Minority Science Student Association formally known as Project RAISE. After graduation he will be attending NYU, School of Medicine.

Jamaal Parker earned a B.S. in Statistics and a Certificate in Leadership and Service at The University of Georgia in 2010. While at UGA, he provided data analysis for a study titled, Palm Pilots to Help People Quit Smoking with the College of Public Health. He is currently attending Saint Louis University as a Billiken Ignatian Scholarship recipient in the School of Public Health, where he is pursuing a Masters of Public Health in Biostatistics and Epidemiology. He graduated in May 2012. At Saint Louis University, he is a research assistant for health literacy and smokeless tobacco projects with the School of Public Health’s Behavioral Science and Biostatistics Departments.
ValaRae Marie Partee is a Spring 2014 graduate from the University of Georgia. With her BS in Environmental Engineering, ValaRae is pursuing a PhD in Environmental Engineering from Vanderbilt University. She was a LSAMP scholar since 2010 and was also involved in several research programs at Georgia Tech, Rutgers University, and Stony Brook University. After completing her graduate education, ValaRae plans to work for CH2M HILL engineering, a company with which she is currently working.

Raymond N. Phillips graduated from The University of Georgia (UGA) in May 2012 with a Bachelor of Science in Computer Science. Raymond is currently employed as an IT Consultant for CTS, Inc. located in Atlanta, Georgia. As an IT Consultant, Raymond is responsible for performing software development and quality assurance activities in addition to implementing solutions, while ensuring client satisfaction.

Daniel Pique graduated from UGA in May 2012 with a B.S. in Genetics. He worked as a post baccalaureate fellow at the National Institutes of Health (NIH) in Bethesda, MD in the laboratory of Dr. Iain Fraser. At NIH, he investigated the role of adaptor molecules in Toll-like Receptor signaling in macrophages. During this period, he also applied to MD/PhD programs and decided to matriculate to Albert Einstein College of Medicine. He also has been active as a medical Spanish interpreter, both at the NIH's Mark O. Hatfield Clinical Center as well as at ECHO, Einstein's student-run free clinic.

Shelina Ramnarine graduated with a double major in Biology and Statistics from The University of Georgia (UGA) in 2010. She participated in a summer undergraduate research program at Washington University in St Louis (Wash U) for two summers while conducting research in statistical genetics at UGA. These research experiences were influenced by her role in the Peach State Louis Stokes Alliance for Minority Participation (PSLSAMP) at UGA. The projects ranged in topics from "Cyclin-Dependent Kinase Phosphorylation of Hcm1" to "The Effect of Family Structure on the Spread of Infectious Disease." She presented her research at five conferences and symposiums including the Annual Biomedical Research Conference for Minority Students. Her summer research at Wash U also resulted in co-authorship in a paper about gene-environment interactions. While at Wash U, Shelina received an honorable mention from the National Science Foundation Graduate Research Fellowship. Shelina continues to further her research while being involved in other activities such as mentoring students.
Eric Montez Refour graduated from The University of Georgia. Inspired by the abilities engineers possess to develop tools to improve society, he has chosen to pursue a major in Mathematics and Computer Systems Engineering. During the summer, he conducted research for his first time by participating in a summer research program called RiSE at Rutgers University. As an undergraduate, Eric served as a LSAMP scholar, a math tutor for the Math Department at UGA, the treasurer and webmaster for his Engineers without Borders UGA chapter, and served on the Hall Council for his residence community. After achieving his undergraduate degree, Eric desires to further enhance his professional and academic credentials by pursing doctoral studies in the engineering.

Daryl D. Singleton is a graduating senior at the University of Georgia. Daryl is from Jackson, MS by way of Lilburn, GA. He is obtaining his B.S.A. in Biological Sciences at the University of Georgia 2015. During his undergraduate career, to name a few, Daryl has served as a shift leader for Campus Kitchen, Freshman Advisory Board in the Black Affairs Council, Community Service Chair for the Black Male Leadership Society, and a radio DJ hosting his own specialty show. Daryl’s future plans include applying to medical school for the 2016 cycle, shadowing physicians, volunteering, and working in a research lab.

Salu Y.C. Smith received a Bachelor’s of Science in Biological Engineering with an emphasis in Biomedical Engineering. As an undergraduate, he participated and held positions in many organizations such as the Peach State Louis Stokes Alliance for Minority Participation, The Italian Club, Black Male Leadership Society where he was Vice President, Alpha Phi Omega Service Fraternity, Engineers without Borders where he held a position as treasurer, and the college of Engineering Entrepreneur or E-Team. He also went on to found and become the first President of the first Biomedical Engineering chapter at the University of Georgia. He participated in the Marine Science ROV Team where he helped design and pilot a ROV for an annual competition that was held every year. During his undergraduate career he did research for Dr. Brock Woodson who runs a costal engineering lab and uses engineering solutions to find ways to sustain coastal environments. After graduation, he hopes to work for a medical device company and then he plans to get a Masters Degree in Biomedical engineering, specializing in the fabrication of medical devices.

Shaniqua Smith graduated from the College of Agriculture and Environmental Sciences with B.S. degree. She decided to get her Master of Public Health Degree with a
concentration in Epidemiology. Upon admission into her program, she received an assistantship through UGA Graduate School and is now completing her first year of graduate school. She also participated in academic research under her faculty advisor concentrating on resilience factors and hospitalization within the elderly community. Upon graduation, she wishes to gain a fellowship position with a federal agency such as the CDC or WHO and pursue a career in Epidemiology. She plans to return to school in a few years to complete a DrPH degree with a concentration in Epidemiology.

Lina Tibavinsky was born in Bogota, Colombia and moved to Lawrenceville, GA. She attended Collins Hill High School and then entered The University of Georgia as a Cellular Biology major and a Public Health minor in 2011. During her UGA career, she has been actively involved within the Hispanic Student Association (HSA) where she held several leadership positions. Through her involvement within HSA, she was invited to participate in the Dean of Students Advisory Board for Student Affairs and in the Diversity Fund Committee. In addition, she joined Dr. Klonowski's immunology lab her sophomore year, where she has been conducting research in order to further understand the immune response against influenza. Through her research, she had the opportunity be a part of LSAMP and to present at the LSAMP symposiums. Furthermore, she enjoyed tutoring first graders at Oasis Catolico and interpreting to Spanish-speaking patients at Mercy Health Center. Lastly, She will be entering the class of 2019 at Medical College of Georgia at GRU.

Valana Vannoy was a student at the University of Georgia College of Pharmacy in Athens, GA. Her pharmacy education was preceded by two years of undergraduate education fulfilling pre-pharmacy requirements. She is a 2011 recipient of the College of Pharmacy’s “Lead Dawg” Award. The Lead Dawg Awards are given to two third year Pharm.D. (Doctor of Pharmacy) candidates, one second year Pharm.D. candidate and one first year Pharm.D. candidate. She was chosen out of 143 first year Pharm.D. candidates. Valana is also involved in professional organizations within the College of Pharmacy; she is a member of the Academy of Managed Care Pharmacy, Student National Pharmaceutical Association and American Pharmacists Association – Academy of Student Pharmacists.

Shanise Walker is the 2015 Graduate Student Mentor of the Year at Iowa State University where she is enrolled in the Mathematics PhD program. She received her undergraduate degree in mathematics from the University of Georgia in May 2012. Ms. Walker ultimately wants to become a professor at a small research university or a liberal arts college.
FVSU Student Profiles

Ms. Rena Ingram was the 2014 FVSU Valedictorian. She graduated with a perfect 4.0 GPA. Majoring in chemistry (with a concentration in forensics), she was the first Georgia student to win the Academic Recognition Award twice in system history. She received a $25,000 United Merck Science Initiative Scholarship from The United Negro College Fund and Merck Company Foundation. The funding paid for the FVSU Wildcat’s room and board, tuition and fees. Only 15 students nationwide received the scholarship. Rena is currently working on her PhD in Chemistry at Georgia Tech.

Brandon Clark, 2014 graduate in chemistry-Research in Geosciences-ROMI: Refraction Microtremor Using Rotational Seismometers @ Sandia National Laboratories, Albuquerque, NM. Brandon was on the Dean’s list all three years and graduated in three years. Served as Mr. Chemistry in 2012. Conducted research using various geophysical methods in South Africa. He is currently completing a second BS in Geosciences at Penn State and will be starting in their graduate Geoscience program in the Fall of 2016.

Mercedes Gainor, 2014 graduate in chemistry conducted research in Geosciences-Hydrocarbon Ices Under Simulated Titan Conditions at the Arkansas Center for Space and Planetary Sciences. Mercedes was on the Dean’s list all three years and graduated in three years. She served as Ms. Chemistry in 2012. She conducted research using various geophysical methods in South Africa. She is currently completing a second BS in Geosciences at Penn State and will enter the graduate program in Fall of 2016.

Carrie Daniels is a 2012 graduate in chemistry. She did research at Jackson State University in Jackson, MS, University of Georgia in Athens, GA and at Clark Atlanta University in Atlanta, GA. Carrie won first place at the 6th Annual LSAMP conference in 2011. She completed a MS at Georgia State University working on Reactivity of Mn and Fe MP8 as Peroxidase and cytochrome P450 catalyst. She is preparing to start her career at the FDA.
Dr. Derrious Lowe is a 2007 graduate of FVSU with a B.S. in Chemistry. While at FVSU Derrious was a Presidential Scholar and a member of the Peach State LSAMP Program. He was known as a leader and a scholar. His strengths include hard work, dedication and perseverance. He says, with the help of LSAMP, he has become confident and willing to face any challenges. He completed his PhD in biochemistry in 2013 at Clark Atlanta University. He is currently at Research Scientist at Battelle.

Dr. Noel Gardner is a professor of Chemistry at Hinds Community College in Utica, Mississippi. She received her Bachelor of Science degree in Chemistry from Fort Valley State University (2006) in Fort Valley, GA, where she was introduced to the Peach State LSAMP. She has presented her research at numerous institutions and became a mentor for the Interdisciplinary Centers of Nanotoxicity summer programs at Jackson State University. Dr. Gardner defended her dissertation (The Effects of Methylation on DNA Bases) successfully in February 2013 and graduated from the Computational Chemistry program in May 2013.

Dr. Geoffrey Will-Morris Turner was awarded the Presidential Scholarship upon entering college, which is the highest scholarship awarded by the college. He completed summer research at the University of Georgia and Iowa State University. On May 2, 2009, he graduated from Fort Valley State University with a Bachelor of Science degree in Chemistry. He credits the Peach State LSAMP program for keeping him grounded and allowing him to participate in research and conferences. Geoffrey completed his Pharmacy Degree from Mercer University and is the Lead Pharmacist at CVS in Macon, GA.

Inside a Jackson State University medical research lab on the Mississippi Delta, Fort Valley State University alumnae Turquoise Alexander is hard at work, conducting research trials on a new cancer-fighting herb that can potentially save lives. Alexander, who is pursuing a PhD in biology at Jackson State, credits her research experiences to the Peach State Louis Stokes Alliance for Minority Participation. Alexander has traveled to California and India to conduct research. Since JSU is a LSAMP partner school, Alexander qualified for the “Bridge to the Doctorate” program, and received a stipend of $30,000 annually for two years to cover expenses, before transitioning to the Doctorate program.
**Jessica Simpson**, a 2012 graduate of FVSU’s LSAMP program is a first generation college student. She received an American Chemical Society Scholarship. She did her research at the University of Arkansas and won 3rd place at a national conference for her work incorporating nanoparticles in adhesives. Jessica is currently completed her PhD at LSU in Polymer Chemistry.

**Shannah Sharpe** participated in summer internships at Fort Valley State University and Jackson State University in Mississippi. She won a first place award for her presentation in Math at Research Day in Fort Valley, GA and third place at the PS-LSAMP conference in Athens, GA. Shannah graduated from the FVSU Mathematics Department in 2013, Magna Cum Laude. She has been awarded the LSMAMP Bridge to Doctorate Fellow at Jackson State University.
Ehiaghe Pamela Adodo is currently a 2nd year Pharmacy student at Lake Erie College of Osteopathic Medicine (LECOM). The Peach State LSAMP (PSLSAMP) program at Georgia Perimeter College (GPC) impacted her academics in countless ways. While a student at GPC, she participated in the PSLSAMP program, which challenged her to become a better student. She has encouraged other students to become an LSAMP scholar because of the benefits the program provides and the exposure to various opportunities that she is thankful for.

Angela Aralu is a graduate of Georgia Perimeter College (GPC), presently majoring in Microbiology at the University of Georgia (UGA) Athens campus. Peach State LSAMP has made a great impact in her life academically. Joining Peach State LSAMP made her discover her love for research. Peach State LSAMP encouraged her to explore the option of earning a MD-PhD or going to graduate school. In a nutshell, PSLSAMP has changed her life for the better, she would not be where she is currently, if it were not for the relentless help and efforts of Peach State LSAMP coordinators.

Bruce Batiste is a research scientist and current industrial and systems engineering major at Kennesaw State University. He graduated from Georgia Perimeter College, with an associate degree in engineering. During his time At GPC he participated in research projects that were very selective National Science Foundation sponsored programs. Bruce spends most of his time honing his skill as a scientific communicator by presenting research at conferences across the country. His latest research effort has earned him co-author recognition on a scientific journal publication, as well as appearances at notable biochemistry conferences across the nation. Although busy spreading the good word of research Bruce’s passion rests in his volunteer work, in which he spreads the importance of minority participation in STEM fields to young up and coming middle school students.

Shannonio Birch started college in 2010 arriving with a passion to mitigate the impact of carbon emission on the destruction of marine ecosystems such as coral reefs. The Peach State LSAMP Program at Georgia Perimeter College (GPC) provided him with the support and relevant opportunities which helped to put his vision into perspective. Because of this, he has transitioned on to graduate studies in Mechanical Engineering at the University of Michigan, where he is studying carrier transport in organic semiconductors. He is very grateful for the opportunities that the GPC LSAMP Program has afforded him to conduct independent research and to mentor aspiring engineers. These opportunities have not only helped him to strategically choose a research topic for graduate school, but also gave him the opportunity to engage other LSAMP scholars in academic research. He stated that: “Looking back I can honestly say that I would not have been in my current position had it not been for the unwavering support of the faculty, staff and scholars of the GPC LSAMP Program.”

Shannah Sharpe participated in summer internships at Fort Valley State University and Jackson State University in Mississippi. She won a first place award for her presentation in Math at Research Day in Fort Valley, GA and third place at the PS-LSAMP conference in Athens, GA. Shannah graduated from the FVSU Mathematics Department in 2013, Magna Cum Laude. She has been awarded the LSAMP Bridge to Doctorate Fellow at Jackson State University.

Jessica Simpson, a 2012 graduate of FVSU’s LSAMP program is a first generation college student. She received an American Chemical Society Scholarship. She did her research at the University of Arkansas and won 3rd place at a national conference for her work incorporating nanoparticles in adhesives. Jessica is currently completed her PhD at LSU in Polymer Chemistry.
Joshua Ebin is a Senior Mechanical Engineering undergraduate student at Georgia Tech with a concentration in Energy/Thermal systems. He currently serves as the Georgia Tech Society of Black Engineers (GTSBE) International Committee Chair and is involved with Peach State LSAMP and OMED activities on the Georgia Tech campus. After graduation, he looks forward to working in the Oil & Gas industry and pursuing a Master’s and PhD in petroleum engineering studying reservoir engineering, characterization and simulation. The Peach State (LSAMP program at Georgia Perimeter College, GPC) helped lay the foundation for his career trajectory. Participating in the Transfer Summer Bridge program provided him with the opportunity to cultivate research and leadership skills as well as develop a professional network. Peach State LSAMP's activities including: seminars, workshops, college and company visits enabled me to be a more competitive transfer applicant to four-year universities. He plans to graduate from Georgia Institute of Technology with a degree in Mechanical Engineering in 2016.

Lidia Fekadu graduated from Georgia Perimeter College with an Associate degree in Biology in 2014. She participated in the Peach State LSAMP (PSLSAMP) program at Georgia Perimeter College (GPC) for one year before graduating. She benefited from this program both academically and financially. This program provides her many opportunities, such as, academic advising, research experience, writing skill, presentation skill (both oral and poster), resume workshops and etc. She performed research with four other students at Georgia Perimeter College during the Transfer Summer Bridge Program in 2013. The title of the research project was “Optimizing the Operating Conditions of a Gow Mac Series 400 Isothermal Gas Chromatograph and Vernier Mini GC”. This was a great opportunity provided her with hands on research experience. Last but not least, PSLSAMP helped her establish strong networks with faculty and students in different departments at GPC.

Rachel Kyerema is currently majoring in Applied Biotechnology at University of Georgia (UGA). It is her intent to specialize in medicine after completing her Bachelor’s degree in May 2017. The Peach State LSAMP program at Georgia Perimeter College (GPC) has impacted her career pathway in many ways. The Peach State LSAMP provided her with many career opportunities and gave me the chance to build a strong social networking with different and reliable people. It also provided her with career advice and supported her financially. During the summer of 2014, she was given the opportunity to participate in the Transfer Summer Bridge program and worked on the following undergraduate research project: “Identifying the Genetics behind a Tasters and Nontaster” under the research guidance of Dr. Seyed Hosseini. This research strengthened my critical thinking, data analysis and improved her writing skills and also built a strong social network with the research professor and other students working on the project.

Courtney Lemon a Peach State LSAMP math major, graduated spring 2011, from Georgia Perimeter College (GPC) with a 3.6 gpa. During the summer of 2010
Courtney interned at Georgia Institute of Technology. She worked on bimodal dielectric for use in capacitors. Georgia Tech and Society for Advancement of Chicanos and Native Americans in Science (SACNAS) sponsored her to go to Anaheim, California during the week of September 29-October 3, 2010. Courtney gave an oral presentation on the research she did during the summer at Georgia Tech at the conference. During the summer of 2011, Courtney participated in an internship at Vanderbilt in Diabetes and Endocrinology. Courtney is currently attending Georgia Tech majoring in Biochemistry. She is currently on track to earn her degree in Biochemistry in 2016.

Yash-yee Logan is currently majoring in electrical engineering at Georgia Institute of Technology. The Peach State LSAMP (PSLSAMP) program at Georgia Perimeter College (GPC) greatly impacted her decision to pursue a Ph.D. in electrical engineering. This is because the PSLSAMP program largely emphasized how interesting research is and gave her adequate training in how to build a strong application that would grant acceptance into national undergraduate research laboratories. In addition to this the PSLSAMP program gave her well needed financial support to assist in paying for school. Yash-yee’s social, communication and leadership skills are also very strong because of the countless opportunities the program provided to shape these skills. Currently, Yash-yee is an active member of the Human Audio and Signal Processing Lab at Georgia Tech where she is furthering her research in synthesizing perceptually natural singing from spoken words and a musical score. She will be graduating with her bachelors in electrical engineering in May 2017.

Randy Montgomery GPC Peach State LSAMP scholar, participated in the summer of 2010 Transfer Summer Bridge (TSB) program. As a part of the TSB program, he worked on an Engineering A.I.R Image Processing Project. Upon completing the program, Randy enrolled at Georgia Tech in Atlanta. From there, Randy graduated with honors, receiving a degree in Electrical Engineering in 2012. He is currently a student at Georgia State University College of Law and plans to graduate in spring 2016. Currently, he works part-time as a patent agent for a large firm in Midtown where he applies engineering principles to a legal framework. Randy has used skills honed in the LSAMP to aid his career in a variety of ways. Randy stated, “Peach State LSAMP taught me to look beyond what may be commonplace or well expected, to dream big, and understand that success is a culmination of skill, preparation, and a disciplined work ethic. Although I may have some inherent skill, LSAMP helped me define and refine what it means to be prepared and disciplined in my efforts.” Randy recently accepted a position as a patent attorney for a large firm in Atlanta where he will begin employment next fall.

Gedeon Nyengele is currently enrolled at Georgia Institute of Technology, majoring in electrical engineering while pursuing a minor in computer science. The Peach State Louis Stokes Alliance for Minority Participation (PSLSAMP) program at Georgia Perimeter College (GPC) had a tremendous impact on both his academic and social life. Through this program he was introduced to research, which he conducted at the University of Pennsylvania, Florida Institute of Technology, and Georgia
Institute of Technology. With the help of genuinely passionate advisors who form the backbone of this program he was able to learn well about mentorship such that he later assisted many other scholars in achieving academic success and now serves as a peer mentor in the LSAMP program at Georgia Institute of Technology. He is currently working in the Smart Antenna Research Laboratory (S.A.R.L) at Georgia Institute of Technology while serving as the lead engineer at MyRng, a local high-tech start-up company. The PSLSAMP program at GPC helped him develop a solid academic and professional background that has helped him serve as a teacher assistant at Georgia Institute of Technology and that has also helped him receive an offer to intern at the Boeing Company.

Amarachi Grace Ochiobi is currently majoring in Applied Biotechnology at the University of Georgia (UGA). The Peach State LSAMP program at Georgia Perimeter College (GPC) helped her discover her love for science. As a student new to the American educational system, this program provided her with all the resources she needed to excel while at GPC. Also, the Peach State LSAMP helped her discover her passion for research. The program exposed her to her first research experience at Georgia Perimeter College. After this experience, she has worked on several projects at different institutions. The GPC Peach State LSAMP helped her decide on the four year institution (UGA) to attend, where she is currently a Peach State LSAMP Student Advisory board member. She will be graduating in spring 2016, and hopes to start her Pharmacy degree in fall 2016.

Chibuzo Ochiobi is currently a student at the University of Georgia (UGA), majoring in Microbiology. The Peach State LSAMP (PSLSAMP) program at Georgia Perimeter College (GPC) gave him the opportunity to get involved in research programs, which helped to develop his research skills and prepared him for things to expect as he progressed in his course of study. Being a member of Peach State LSAMP has been very beneficial to his academic progress. He was fortunate to be chosen to participate in Georgia State University (GSU) Summer 2014 Research Experiences for Undergraduates (REU), where he worked on “Development and Evaluation of Long-Wavelength Carbocyanine Dyes for Phototherapeutic Applications” with Professor Kathryn B. Grant. The research experience made it easier for him to understand his academic and career interests and goals and gave him the opportunity to get in direct contact with experience people in his field of study. Furthermore; the experience he got from this research gave him the opportunity to work and think independently by using his problem solving skills. It also gave him the opportunity to really appreciate the research and practical aspect of science. He will be graduating from UGA with a Bachelor’s degree in Microbiology in May 2016.

Chinaza Darlene Ochiobi is currently an Applied Biotechnology major at the University of Georgia (UGA). The Peach State LAMP at Georgia Perimeter College (GPC), gave her the opportunity of having a social mentor, a REU experience at Emory University in summer 2012 and most importantly helped her to understand the importance of graduating from GPC before transferring to a four-year institution. Being a Peach State LSAMP scholar
gave her a deeper desire to pursue a STEM career. She also had the opportunity of attending several conferences and participated in activities that have impacted her life and gave her the confidence needed to present at conferences and research symposia. Peach State LSAMP also helped her in academically by providing the tutors and advisement needed. After completing her undergraduate degree, her intent is to attend Pharmacy school.

Onyinyechi Gift Ochiobi, is a senior Applied Biotechnology student at the University of Georgia (UGA). She graduated from Georgia Perimeter College (GPC) in 2014, with an A.S in Biology. Along her academic pathway, she enjoyed remarkable experiences that have fueled her passion for science. In spring 2013, she became a Peach State LSAMP scholar at GPC, a decision that has had one of the most significant influences on her scientific journey. The Peach State LSAMP offered all the academic, financial, and advisory tools she needed to succeed in her classes. In addition, she was introduced to the amazing world of scientific research. Her first research project was during the Transfer Summer Bridge (TSB) program in 2013. As a senior graduating in the spring of 2016, reflecting on her research experiences and academic success, she owes a lot of gratitude to the Peach State LSAMP program for giving her the basic foundation needed to excel. She has been able to attend and share her research findings with scientific audience of colleagues, expert and non-experts in the field.

Kika Okolo is a Peach State LSAMP Chemistry major and graduated with honors in spring 2015 from Georgia Perimeter College (GPC). He is currently a Biochemistry and Molecular Biology major at the University of Georgia (UGA). The Peach State LSAMP served as a resourceful avenue for academic and scientific information; it also helped him network with professionals in various science fields and conduct scholarly team work with peers. Peach State LSAMP created opportunities for him to conduct his first research project. He is currently working on “Structural Characterization of LysR-Type Transcriptional Regulators in Acinetobacter Baumannii” with Dr. Cory Momany at UGA’s Pharmaceutical and Biomedical Science Department. He’s also actively volunteering at the Cardiac and Pulmonary Vascular Diagnostic Lab at Athens Regional Medical Center.

Oludolapo Onafowokan is currently majoring in Chemical Engineering and a research assistant at Tennessee Tech. The Peach State LSAMP (PSLSAMP) program at Georgia Perimeter College (GPC) provided him with academic support which helped him to improve his grades through advising, tutorial support, and provided countless networking opportunities. In the summer of 2013, he was exposed to undergraduate research (Transfer Summer Bridge), as a result of the Peach State LSAMP program at GPC, he conducted research on “The Development of Piezoelectric Crystal” project under the supervision of Mr. Fred Bull and Ms. Susannah Lomant. The Peach State LSAMP program field trips provided him with the opportunity to travel out of the state to see other schools as well as various STEM companies. He will be graduating with a Bachelor’s degree in Chemical Engineering in May 2016 from Tennessee Tech.
Omolola Falade-Osiefa graduated from Georgia Perimeter College (GPC) with an associate degree in chemistry in 2014. She is currently majoring in Biochemistry and Molecular Biology and Biotechnology at the University of Georgia (UGA). Participating in the Peach State LSAMP while at GPC helped her in several ways. First, she went on field trips that made it easier for her to make up her mind about her program of study. Second, she was able to meet study and socialize with students from all parts of the world. Third, stipends from LSAMP provided resources needed to purchase textbooks and other school materials. Fourth and most importantly, she is still a part of LSAMP at UGA; this really made adjusting to a big school easy for her, considering the fact that UGA is not a well-diversified institution when it comes to racial groups. By and large, the Peach State LSAMP program helped her understand how to collaborate with people from all parts of the world.

Marshall Prude recently completed the Technical Career Field (TCF) Program, extended to a handful of candidates each year nationally, by the Department of Veteran Affairs. Upon completion, Marshall’s leadership, and hard work was rewarded with the immediate appointment as the Research Industrial Hygienist, at the VA Medical Facility, in Loma Linda, CA.

The Peach State LSAMP program provided Marshall with leadership, mentoring, research opportunities, and financial resources. These critical essentials have not only allowed Marshall to achieve both professional and academic success, but also stay involved in the community. During his academic career, and into the present, he mentored and educated numerous individuals along his way; specifically, 4 inner-city minority high-school youths, from the Atlanta, GA area. His efforts included the emphasis on the importance of higher education, the necessary requirements to achieve academic success, and the significance of minorities serving, in STEM fields.

Marshall extends his sincerest gratitude to all, that were involved in his achieving professional and academic success, specifically, the Peach State LSAMP, which was an important aspect in his evolution, as a leader, mentor, and role model.

Tshibambe Nathanael Tshimbombu is currently a Dartmouth student majoring in Neuroscience. During the summer of 2015, he participated in the PaRadiGM (PrepARAtion for Graduate and Medical education) summer program at University of Alabama school of Medicine in Birmingham, Alabama (UAB). PaRadiGM is a NIH (National Institute of Health) program conducted at UAB, and it introduces outstanding undergraduates from diverse and underrepresented minority backgrounds to the exciting career options of being a scientific investigator while also being a practicing physician. The passion for research came from his involvement in the Peach State LSAMP program at Georgia Perimeter College (GPC). His experience in the Peach State LSAMP program has been full of opportunities. A program such as LSAMP does not only encourage students to be involved in research, but brings diversity into the research field by helping minority students to be involved. He credits Peach State LSAMP for helping him to discover his passion for research.
GT Student Profiles

Vernon Gentry completed his B.S. in Civil Engineering from the Georgia Institute of Technology in December 2015. He has accepted an offer to work for ExxonMobil as a Field Sales Engineer. He plans to take the Engineer in Training (EIT) Exam and pursue his Professional Engineer (PE) License while working full-time. While in LSAMP, he conducted research through the Summer Undergraduate Research Experience (SURE), under the advisement of Dr. Watkins of the Georgia Tech School of Civil and Environment Engineering working to enhance transportation through the use of mobile technology.

Shuntol Holloway is a 2014 graduate of the Georgia Institute of Technology with a B.S. in Biomedical Engineering. She currently works in Atlanta, GA at Emory University Hospital as a Cardiac Device Engineer. As an LSAMP Scholar, Shuntol worked with Dr. Hanjoong Jo of Emory University to study "The Role of Shear Stress on Thombospondin-1's Expression in Human Aortic Valvular Endothelium".

Shavonne Henry will be graduating in summer 2016 with a B.S. in Mechanical Engineering and a minor in Biomedical Engineering, from the Georgia Institute of Technology. After graduation, she is planning to work as a Manufacturing Engineer for Northrop Grumman Aerospace Corporation. During her undergraduate career, she has conducted research with Dr. Ayanna Howard to create mobile applications to facilitate pediatric rehabilitation.

Richard Flowers is a fall 2015 graduate of the Georgia Institute of Technology School of Material Science and Engineering. He plans on entering the ceramics industry. During his time in LSAMP, Richard conducted research with Kyriaki Kalaitzidou on solution casting of grapheme and polylactic acid and injection-extrusion molding and testing of nylon and kaolin composites.
Fabien Durand graduated from the Georgia Institute of Technology with a B.S. in Mechanical Engineering in December 2013 and a M.S. in Mechanical Engineering in summer 2015. He currently works as a Senior Specialist – Technology Project Manager for AT&T. Fabien was a Scholar and Peer Mentor and served as a graduate student mentor when he began his master’s degree program at Georgia Tech. He conducted biomechanics research with Dr. David Hu, learning about self-cleaning mechanisms in animals and insects.

LaDeidra Monet Roberts graduated from the Georgia Institute of Technology with a B.S. in Biomedical Engineering in the spring of 2015. While at Georgia Tech, she conducted research with Dr. Manu Platt on pro-atherogenic shear stress and HIV proteins that synergistically upregulate cathepsin K in endothelial cells. She is currently pursuing a Doctoral degree in Biomedical Engineering at Cornell University in Ithaca, NY.

Celine Irvene is a fall 2015 graduate of the Georgia Institute of Technology with a B.S. in Computer Engineering. She will continue on her education by returning to Georgia Tech for graduate school and serving as a graduate student mentor to the LSAMP program. While in LSAMP, she conducted research with Dr. Raheem Beyah, focusing on Cyber security and the Internet of Things.

Maya Carrasquillo graduated from the Georgia Institute of Technology in spring 2015 with a B.S. in Environmental Engineering. She was awarded the Master’s Level National GEM Consortium Fellowship, Florida Education Fund McKnight Doctoral Fellowship, and the Alfred P. Sloan Minority PhD Fellowship, and is pursuing a PhD in Environmental Engineering at the University of South Florida. During her time at Georgia Tech, Maya was a part of Dr. Ching-Hua Huang’s Environmental Chemistry research group conducting research to study the solidification/stabilization process of flue gas desulfurization brines to examine the immobilization of heavy metals from industrial wastewater streams.

Nicholas Hines is a Fall 2015 graduate of both the Georgia Institute of Technology with a B.S. in Mechanical Engineering and Morehouse College with a B.S. in Mathematics-through the dual degree engineering program. He is currently pursuing a doctoral degree in Mechanical Engineering with Dr. Samuel Graham at Georgia Tech and remains a graduate student mentor with the LSAMP program.
Ivan Rush is a spring 2015 graduate of the Georgia Institute of Technology with a B.S. in Electrical Engineering. He currently works for Altera/Intel as a Technical Account Manager in San Jose, CA. Ivan was both a Scholar and a Peer Mentor.

Chinelo Ononye is a Chemical Engineering student at the Georgia Institute of Technology who plans to graduate with a bachelor degree during the spring of 2016. Chinelo has conducted with Dr. Dawson on various biophysics topics.

Joshua Suttle is a Mechanical Engineering student at the Georgia Institute of Technology, graduating in fall 2016. He plans to continue his education at Georgia Tech and get his Master’s degree in Mechanical Engineering through the BS/MS program. He has had research experience as a student assistant for the Georgia Tech Research Institute, working on various Department of Defense projects with the ATAS Lab.

Jamie Clark graduated from the Georgia Institute of Technology in spring 2015 with a B.S. in Civil Engineering. Currently, she is pursuing a M.S. in Civil Engineering from the University of Illinois Urbana Champaign (UIUC), where she plans to continue on to get a PhD. During her undergraduate career, Jamie worked with Dr. Kimberly Kurtis in the School of Civil and Environmental Engineering to study environmental sustainability of novel alternative cementitious materials, the exploration of chemical and mechanical properties of Portland limestone cement, and the analysis of the microstructural properties of geopolymer cement via x-ray microtomography.
KSU-K Student Profiles

Bianca Mondesir is a fourth-year medical student at Morehouse School of Medicine. Bianca Mondesir, has found a way to merge her interest in medicine and the sciences, with her passion for community outreach. During her undergraduate career at Kennesaw State University, Bianca successfully conducted two research projects, while engaging in community outreach efforts. In 2011, she became President of the STEM Scholars, a program that sought to integrate research and community service. Upon graduation, Bianca earned many honors and awards including the leadership award for her participation in the NASA Fellows and STEM Scholars program.

Alex Gilmore is a second-year medical student at the Medical College of Georgia at Augusta University. His travel to India helped to fuel his dreams of international medicine. Alex was featured in an October 2014 article in the Augusta Chronicle, which referenced the fact that there is a significant decline of African-American males entering medical school. Alex was one of two African-American males in his entering class.

Ezigboiara Umegjiego (Ezii) graduated in May 2014 with a BS in biology. Through KSU LSAMP, Ezii participated 4 research internships at KSU, Morehouse Medical School, Merck Research Laboratories, and the National Cancer Institute. He is currently completing his second year of research at NIH. Ezii presented a poster at the 2015 NIH Summer Research Program entitled The role of tumor-derived exosomes in inducing ITGB8 production in SMC.

Chidi Amah has been accepted to Meharry Medical School and is set to begin in Fall 2016. Under the tutelage of Dr. Daniella Tapu, Chidi presented with a team of undergraduate researchers on their research entitled New polycyclic N-heterocyclic carbenes: Synthesis, characterization and coordination chemistry at the 66th Southeastern Regional Meeting of the American Chemical Society (SERMACS) in Nashville, TN on October 16-19, 2014.

Stephen Gitau is a second-year student at the School at Lipscomb University College of Pharmacy. Stephen enjoyed a robust undergraduate research experience and won several awards for his work.

Deontae Pharr is a computer science major at Kennesaw State University. He has had the opportunity to conduct research under Dr. Hassan Ghasemzadeh at Washington State University. Deontae also presented a poster presentation of his research on Real-Time Collection of Sensor Data for Android Based Wearables at the 2015 Peach State LSAMP Fall Symposium and Research conference.
Kamir Hiam is a Biochemistry major at Kennesaw State University. He has conducted research under Dr. Manu Platt at Georgia Institute of Technology. Kamir presented his research on REPSA-Directed Identification of DNA-Binding Specificity for *E. coli* Transcription Factor LexA at the Southeastern Undergraduate Research Conference.

Nathaniel O Latinwo is a Biochemistry major at Kennesaw State University. He conducted research on the HPLC/UV Method Development for Analyzing Actives in Cough and Cold Medicine under Dr H.Z. Msimanga.

Fatoumata Sylla is a Biology major at Kennesaw State University. She has conducted research on Molecular characterization of *Aspergillus flavus* and Parasiticus in peanuts under Premila Achar and presented her research at the 10th annual LSAMP research symposium and conference.

Aleema Dyer is a Biology major at Kennesaw State University. She has had the opportunity to conduct research on the Conserved gene expression patterns in the pelvic and unpaired fins of the American paddlefish, *Polyodon spathula* under Marcus Davis at KSU. She presented her research at the Fall 2015 Research Symposium, KSU.

Reesheda Gilbert is a Biology major at Kennesaw State University. She has conducted research on A genetic screen for barrier function using *Drosophila* model under Dr. Andrian Halme with the University of Virginia School of Medicine. She has presented her research at Vasculata Symposium, Charlottesville, VA, Peach State LSAMP Conference, Athens, GA, and the MidWest LSAMP Conference, Indianapolis, Indiana.

David Richmond is a mathematics major at Kennesaw State University. He presented his research on Fibonacci number of the chorded cycle under Dr. Joe DeMaio at the 10th annual LSAMP research symposium and conference. He is an aspiring Data Scientist and is pursuing a dual degree in Mathematics and Economics, with a minor in Spanish.

Chidi Amah graduated from Kennesaw State University in 2014. He will be beginning Meharry Medical College in 2016.
KSU-M Student Profiles

Marian Alicea is currently an NSF Civil Engineering PhD student at Virginia Tech in Blacksburg VA. She completed her Master’s degree in 2015 at Virginia Tech.

Caleb J. Burke is a Senior at Southern Polytechnic State University studying Electrical Engineering Technology. He has participated in STEM organizations such as PLSAMP and NSBE since his freshman year. From the various experience gathered from these organizations he secured a Co-op working as a Controls Engineer and will have over a 1yr worth of work experience by graduation in May 2012. Future plans include remaining in a STEM field and going on pursue a Ph.D. in Electrical Engineering.

Update: Caleb is a System Engineer at Transdyn in Atlanta, GA.

Teshaun Francis graduated from Southern Polytechnic State University in spring of 2014 with a degree in Electrical Engineering, and is pursuing a biomedical graduate degree to explore the boundaries between physiology and technology. His interests are non-invasive monitoring and medical imaging technologies. He is a recipient 2014 of the McKnight Fellowship. Teshaun Francis is involved in Clinical Research; investigating the relevance of pulse-oximetry (photoplethysmography). His goals are to use the pulse waveform to replicate important diagnostic with the intent of replacing expensive and invasive methods and to derive novel parameters with which to diagnose various cardiovascular diseases. In partnership with Nicklaus Children’s Hospital physicians, he is currently testing the applicability of these parameters by investigating them in patients admitted to the Pediatric Intensive Care Unit. Outside of school, Teshaun has been actively involved in STEM outreach through “Engineering on Wheels”, volunteering as a judge for multiple collegiate and pre-collegiate science fairs, and serving on as a representative at various FIU University Graduate School events. Teshaun Francis is a doctoral student in the field of Biomedical Engineering at Florida International University.

Isaiah Gober is currently working on his PhD in Chemistry at the University of North Carolina – Chapel Hill. He graduated in the Spring of 2012 with a 4.0 in Chemistry. In the summer of 2011, he was selected to perform research at Georgia Institute of Technology in Atlanta, GA, where he was mentored by Dr. Paul Kohl. The name of his project was, "Synthesis and Characterization of a Novel Quaternized Poly (vinylbenzyl chloride)-block-polypentafluorostyrene Ionomer for Alkaline Fuel Cells." After graduation, Isaiah plans to obtain a PhD in Chemistry and pursue a career as a research scientist.

Joshua Gober is currently working on his PhD in Chemistry at the University of North Carolina – Chapel Hill. He graduated in the Spring of 2012 with a 4.0
in Chemistry at Southern Polytechnic State University in Marietta, GA. In the summer of 2011, he was selected to perform a research project at Emory University in Atlanta, GA, entitled, “Characterization of Self-Assembling Peptide Fibers Based on Coiled-Coil Structural Motifs.” He was mentored on the project by Dr. Vincent P. Conticello. After graduation, Joshua plans to obtain a PhD in Chemistry and pursue a career as a research scientist.

Nekeshia Nicole Griffin is a Senior Biology student at Southern Polytechnic State University (SPSU) in Marietta, Ga. Shortly after beginning matriculation at SPSU, Nekeshia became a PSLSAMP scholar and a young leader in the Metro Atlanta area. She has interned for Keep Cobb Beautiful as an Associate Board Member for two consecutive years and was recognized as the most valuable intern during the 2010-2011 school year. Under the advisement of Dr. Peter Sakaris, Nekeshia has begun research on the human impact on local streams in Cobb County and will be presenting their results at the Southern Division of the American Fisheries Society Conference in February of 2012. She has also reached back to pull the next generation forward by mentoring students at North Cobb High school as a research seminar advisor and is a current board member and the future Pre-college Initiative Chair for the SPSU chapter of the National Society for Black Engineers.

Update: Nekeshia is currently matriculating at Fort Valley State University in the Masters of Public Health- Environmental Health program. Her study will focus on the implementation and impact of the 2002 Brownfields Law which focuses on the health impacts of brownfields. Upon graduation she would like to continue my work in Environmental Compliance with the Georgia Environmental Protection Division (EPD) and join the EPD or GEMA Strike Team.

Andrew Guiste is senior at Kennesaw State University studying physics with a concentration in Mechanical Engineering. He has participated with PSLSAMP since 2012. He plans on graduating in spring of 2017. His post-graduation plans are to pursue a PhD degree in physics studying nano-technology. Andrew is a passionate lover of music. He is a keyboard artist, vocalist and writer.

Marcus Herndon is a former PSLSAMP Student at Southern Polytechnic State University studying Mechanical Engineering. He graduated SPSU December 2013 before accepting the NSF Bridge to Doctorate Fellowship, which provides financial support while pursuing my graduate degrees. He started Fall 2014 and currently he is at the end of his Masters of Science degree at Florida International University, studying Mechanical Engineering. His thesis title is “Effect of Thermal Depolymerization of Wasted Food Extracts on Alternate Fuel Production.” He plans on continuing to receive his PhD over the next 2+ years. PSLSAMP has helped me by opening my eyes further to innovation, research and development, publicizing works, and allowed me to realize my passion in sustainable and renewable energy. Post-Grad school, he plans on working in research and design further creating sustainable energy technologies. On the side, he plans on continuing to use his entrepreneur mindset and outgoing abilities to realize his other creative products, like the playing card game he currently sells called Choosin’- The Game of Choices!
Brett Jones graduated from Southern Polytechnic State University in 2013 with a BS degree in Electrical Engineering. He completed his Master’s degree in EE from Florida International University. His current research focus is on the integration of complex 3D culture systems with electrical impedance spectroscopy (EIS) to assess chemotherapeutic efficacy. Microarray EIS device are used to determine the electrical signature of Doxorubicin treated multicellular tumor spheroids (MTS). The microarray chamber enclosed electrospun poly(lactic-co-glycolic) acid (PLGA) fibers, represent the filamentous extracellular matrix (ECM). Spheroids derived from lung (LLC-1) and prostate (PC3) cancer cells are seeded onto the PLGA scaffold. These results indicate that EIS can be incorporated into 3D systems to better reflect and support the response to therapy dosage and personalized treatments. Brett participates in numerous community outreach events and mentor undergraduate students.

Ukaku Kalu is a Junior Electrical Engineering Technology major at Southern Polytechnic State University in Marietta, GA. During the Summer of 2011 he worked on a research project called, “Interfacing PC Bluetooth Communication with 8051 Microcontroller.” He was mentored by Dr. Adeel Khalid, an Engineering professor at Southern Polytechnic State University. Ukaku plans on enrolling in an Engineering PhD program upon his graduation.

Nathan Louis is a senior majoring in Electrical Engineering at Kennesaw State University. He is a 3.89 GPA student. He participated with the PSLSAMP summer research during the summer of 2013; the research project was entitled “Smart Sensors - Design and Development.” Nate is also a cop-op student Shaw Industries as an automation engineer. Upon graduation, he plans to pursue a PhD in Electrical Engineering.

Update: Ukaku is a Product Engineer- EDP at John Deere in Waterloo, IA

Aaron Love IV is a Senior at Southern Polytechnic State University (SPSU) in Marietta, GA, who has plans on entering an advanced degree program in a STEM area after receiving a dual B.S. degree in Electrical Engineering Technology and Mathematics with a minor in Nuclear Power. Mr. Love completed his first research project with an oral and poster presentation for the 2009 PSLSAMP Fall Symposium in the Science and Technology section. More recently he conducted research during the Summer of 2011 in Washington, D.C. with the U.S. Department of Energy (DOE) and U.S. Environmental Protection Agency (EPA), where he was mentored by an SPSU faculty Dr. Deidra Hodges and members of the EPA's Office of Indoor Air & Radiation. In addition to his research ventures, Aaron was recently selected to participate in the Phase I 2011-2013 Minorities Striving and Pursuing Higher Degree's mentorship program that will assist in his plans for pursuing a M.S. in Nuclear Engineering and eventually a PhD.

Update: Aaron is a Field Service Engineer at Eaton Corporation in Marietta, GA.
**Yemeserach Mekonnen** is currently pursuing her PhD in Electrical and Computer Engineering. She joined the Electrical Engineering program as the NSF funded Bridge to Doctorate Fellow in Spring 2014. Before joining the EE program, Yemeserach worked for oilfield service giant Schlumberger as a junior field specialist in the gas lift segment. She was involved in gas lift application and production optimization for newly drilled and old wells. Yemeserach received her Bachelors in Civil Engineering Technology from Southern Polytechnic State University in Marietta, GA. Her research interest is in renewable energy where she is currently looking into novel structure designs with photo voltaic cells to maximize surface area for higher efficiency.

**Toussaint Moseley** is a Product Development Engineer at Intel Corporation in San Francisco, CA. For the summer of 2011, he was selected to perform research at the Environmental Protection Agency in Washington, DC. He was mentored by Dr. Deidra Hodges from Southern Polytechnic State University on the project entitled, “On to Generation IV: A primer on the Integral Fast Reactor and a comparison to the back-end of the Light Water Reactor Fuel Cycle.” He is a recipient of the Nuclear Regulatory Commission’s Nuclear Power Generation Scholarship. Upon graduation, he plans to pursue a PhD in Electrical Engineering.

**Taofeek Orekan** is a Senior at Southern Polytechnic State University in Marietta, GA. As an Electrical Engineering major, he spent the summer of 2011 being mentored on a research project entitled, "Experimental Investigation of Two & Three Bladed, Horizontal Axis Wind Turbines" by Dr. Cyril Okhio at Southern Polytechnic State University.

**Chelsea Patterson** is a senior electrical engineering student at Kennesaw State University. She is boasting an array of research experience from working on the development of CZTS thin film solar cells to working on developing an actuation system for a solar Panel System that was featured in the EPA P3 competition. Upon graduation, she is seeking full time employment working on or with medical devices.

**Dontreece T. Smith** obtained his B.S. degree in Biology from Southern Polytechnic State University. As an undergraduate, he served as a Peach State Louis Stokes Alliance Minority Program (PSLSAMP) scholar and tutor. He conducted research with Dr. Peter Sakaris on the population dynamics of the snail bullhead catfish *Ameiurus bruneus*. Dontreece is a SALTEc Field Technician with Georgia Coastal Ecosystems LTER (University of Georgia).

**Rashad Tatum** is a software engineer and aspiring mathematician that enjoys studying algorithms, operating system design, systems programming, distributed systems, and discrete mathematics. He is currently seeking another position working with Big Data, and is also interested in data analysis. His long term goals include starting a software company and pursuing a PhD in Applied Mathematics with an emphasis in Computer Science.
SSU Student Profiles

**Rossmery Alva** was a PSLSAMP scholar at Savannah State University and graduated with a Bachelor of Science in Civil Engineering Technology in May 2010. She carried out summer research on Integration of LabVIEW Simulation in Civil Engineering, and made presentations at the PSLSAMP 2007 Annual Conference. She placed second on the poster and oral presentations. She is currently pursuing graduate studies in Environmental Engineering at the New Jersey Institute of Technology in Newark, NJ.

**Sterling Brooks**, Electronic Technician I at JT3, Las Vegas, Nevada obtained his B.S. degree in Electronics Engineering Technology from Savannah State University in 2013. During his undergraduate career Sterling participated in undergraduate research training as a LSAMP Research Scholar through a research internship at the National Institute of Standards and Technology and NIST Center for Nanoscale Science and Technology.

**Stacy Cobb** graduated from Savannah State University in three years and received a Bachelor of Science degree in Mathematics and a minor in Biology in May 2008. She began graduate studies at Stony Brook University and she was awarded a full $30,000 SBU fellowship. She received her Master’s degree in Statistics in May 2010. She then decided to work in industry for a while. She gained a year contract at Harvard School of Public Health in their Epidemiology department. Stacy's research consisted of case control studies dealing with birth defects. After a year’s work of research, she decided she wanted to go back to school to obtain her PhD in Statistics. Now she is at the University of Georgia as a first year doctoral student.

**Janet Vontrice Cowins** graduated from Savannah State University. She carried out her undergraduate summer research in the field of Organic Chemistry. She is currently a second year graduate student at Clark Atlanta University, pursuing her Ph.D. in Polymer Chemistry. Her current research involves the conduction of a study on solubilizing β-Cyclodextrin drug delivery vehicles via the development of an aptamer functionalized polymer for use in cancer therapeutics.

**Brittany Epps** is an Adjunct Math Professor at Savannah Technical College. She obtained her B.S. degree in Mathematics from Savannah State University in 2013. She also obtained her Master of Arts in Teaching (M.A.T), Secondary Education: Math from Armstrong State University in 2015. During her undergraduate career Antoine participated in undergraduate research training as an LSAMP Research Scholar. She was also awarded the NOYCE scholarship to continue her Masters at Armstrong State University.
De'Anna Franklin, Research Intern at the U.S. Department of Energy. De’Anna obtained her Bachelor of Applied Science Degree in Environmental Science from Savannah State University in 2014. During her undergraduate career De’Anna participated in under graduate research training as a LSAMP Research Scholar.

Allice Gholson is an Assistant Operations Officers (soon to be Operations Officer in January 2016) on Coast Guard Cutter Hamilton. Allice obtained her B.S. degree in Civil Engineering Technology from Savannah State University in December 2011. She also graduated from Officer Candidate School at the U.S. Coast Guard Academy, earning her commission as a Coast Guard Officer. During her undergraduate career, Allice participated in undergraduate research training as an LSAMP Research Scholar. She was then selected for the Coast Guard Civil Engineering Post Graduate Program.

Rhecia Goodley, Graduate Assistant, North Carolina A&T State University, Teaching Chemistry Laboratories. She obtained her B.S. Degrees in Chemistry and Mathematics from Savannah State University in 2012. Rhecia obtained her Master of Arts in Teaching Chemistry, from North Carolina A&T State University in 2014. During her undergraduate career Rhecia participated in undergraduate research training as an LSAMP Research Scholar.

Shaka Gore obtained her B.S. degree in Chemistry from Savannah State University in 2010. Shaka obtained her Master of Science (M.S.), Inorganic Chemistry from North Carolina Agricultural and Technical State University in 2012. She also obtained advanced certification in Waste Management from North Carolina Agricultural and Technical State University in 2012. She worked as a Laboratory Assistant in 2013 and as an Adjunct Chemistry Professor at Georgia Piedmont Technical College in Clarkston, GA. During her undergraduate career Shaka participated in undergraduate research training as an LSAMP Research Scholar. In 2010 she was awarded the National Oceanic Atmospheric Administration Interdisciplinary Scientific Environmental Technology (NOAA-ISET) Graduate Assistantship.

Shaleatha Holmes graduated from Savannah State University in May 2011 with a Bachelor of Science in Chemistry. She participated in research as a PSLSAMP scholar. Her undergraduate summer research at SSU was in organic chemistry, where she synthesized molecules and analyzed their activities in relation to retrovirus pathways as well as the development of green methods for the production of biodiesel fuel. With her advisor she coauthored three publications. She also conducted research at Ohio State University for two summers. She is currently pursuing her graduate studies in Biomedical Sciences at University of North Texas Health Science Center.
Corvell Houston is a Civil Engineer II at the Georgia Department of Transportation. He obtained his B.S. degree in Civil Engineering Technology from Savannah State University in 2013. During his undergraduate career, Corvell participated in undergraduate research training as an LSAMP Research Scholar.

Tomul T. Howard graduated from Savannah State University with a Bachelor of Science degree in Biology in May 2009. He has participated in summer research at Savannah State University and attended the ABRCMS conference in 2008. He won 3rd place for a poster presentation in Chemistry at the PSLSAMP 3rd Annual Research Conference in Savannah, GA. His summer research titled *Fluorescence and Singlet Oxygen Quantum Yields of Sulfonated Metal-Phthalocyanines* was later published in Journal of Undergraduate Chemistry Research in 2009. He is currently working in the City of Atlanta Department of Watershed Management, as a plant operator.

Christopher Jean-Louis graduated from Savannah State University in May 2007 with Bachelor of Science degree in Biology. He carried out his undergraduate summer research on Photodynamic Theory and presented the same at the 2006 PSLSAMP Annual Conference with an award for the 2nd place. He was also awarded for his research presentation at the 2007 ABRCMS conference in Austin, TX. He completed his Master’s degree in Medical Sciences from University of North Texas in 2009 and is now a 3rd year medical student at the Texas College of Osteopathic Medicine at the University of North Texas Health Science Center.

Vanda Johnson, NROTC. She obtained her B.S. Degree in Mathematics from Savannah State University in 2015. During her undergraduate career Vanda participated in undergraduate research training as an LSAMP Research Scholar and completed a research internship at Purdue University Lafayette.

Amanda Magabo started her undergraduate studies in Civil Engineering at Savannah State University in 2007. As a PSLSAMP scholar her research was on ‘Smart Cones in a Construction Zone’ in 2008. She collaborated on design and development of building a physical model of a Smart Cones in a construction zone and presented at 3rd Annual PSLSAMP conference and won 3rd place. She moved to the Georgia Institute of Technology and graduated with a Bachelor of Science in Civil Engineering in May 2011. She is currently working as Field Engineer with Schlumberger Technology in Denver, CO.

Rowena Palko graduated from Savannah State University in Dec 2007 with a Bachelor of Science in Electronics Engineering Technology with 3.68 GPA. During summer 2007 she had an
internship with the Instrumentation and Control System Department at Bechtel SAIC Co., LLC, in Las Vegas, Nevada. Currently she is working as an Engineer II at Gulfstream Aerospace Corporation in Savannah, Georgia. She incorporates new test equipment, designs new rigging procedures, performs investigation, and then solves technical problems associated with the manufacture of Gulfstream aircraft.

**Edwinna Chenelle Patterson** graduated from Savannah State University in 2009 with a Bachelor of Science degree in Biology. She was a member of the PSLSAMP program from 2007-2009. In the summer of 2008 she conducted research on “The Effect of a Halogenated Aniline Analog on Rat Erythrocyte Skeletal Membrane Proteins.” After graduation she enrolled in Gwinnett Technical College’s Bioscience program where she received a Bioscience Regulatory Assurance Certificate, which she puts to use in working in a laboratory environment making animal vaccines to help prevent Merck’s Disease. She is currently pursuing her Master’s in Public Health at Argosy University in Atlanta, GA as well as working at Merial Select in Gainesville, GA.

**Natasha Leaha-Sheretta Patterson** graduated from Savannah State University in 2009 with a Bachelors of Science degree in Mathematics and a minor in Computer Science. She was a member of the PSLSAMP program from 2006-2009. Her research “Perfect Triangles” was published in 2008 in the Georgia Journal. In August 2009, Natasha began a Master of Arts program in Secondary Mathematics and graduated with a 3.7 G.P.A. She is currently teaching Mathematics at Towers High School in Decatur, Georgia.

**Vernecia N. Person** graduated from Savannah State University with an ACS certified B.S. degree in Chemistry in May 2008 (Cum Laude). In 2007 she participated in a research project called “The Regeneration of cellulose from ionic liquids for an accelerated enzymatic hydrolysis”. This work was published in the Journal of Biotechnology. She is currently attending Clark Atlanta University pursuing a Doctoral Degree in Polymer Chemistry. Currently her research focuses on the study of the properties of polymer nanocomposites.

**Darkeysha Peters, Pharmaceuticals Professional, Atlanta, Georgia.** She obtained her B.S. Degree in Chemistry from Savannah State University in 2011 and a M.S. in Clinical Research Administration from Walden University in 2013. During her undergraduate career Darkeysha participated in undergraduate research training as an LSAMP Research Scholar.
Marquese Pollard, Transportation Engineer Associate at Georgia Department of Transportation. He obtained his B.S. degree in Civil Engineering Technology from Savannah State University in 2013. During his undergraduate career Marquese participated in undergraduate research training as an LSAMP Research Scholar and completed research internships at Florida State University (High-Performance Materials Institute) and Duke University (Mechanical and Material Science Department).

Alton J. Render graduated from Savannah State University with a Bachelor’s degree in Computer Science in December 2010. He participated in summer undergraduate research at Savannah State University and presented his research at the 2008 National HBCU-UP Conference in Atlanta, GA and 2008 PSLAMP National Conference at Savannah, GA. Now he is doing his graduate studies in a Computer Science Program at the University of Texas at San Antonio. His specialization is in Software Engineering.

Perri Schoolfield, Educational Assistant, Ames Community Schools, Ames, Iowa. She obtained her B.S. degrees in Mathematics from Savannah State University in 2013. Perri is obtaining her Master’s degree in Educational Leadership and Administration from Grand Canyon University.

Casey Smith, Process Control Engineer at TimkenSteel Corporation, Canton, Ohio Area. In 2006 Casey started at Savannah State University GTREP Electrical Engineering Program. In 2009 he transferred to Georgia Institute of Technology where he obtained his B.S. in Electrical Engineering in 2011. Currently he is enrolled in the MBA program at Ohio State University. During his undergraduate career, Casey participated in undergraduate research training as an LSAMP Research Scholar.

Yusef Smith, Accounting Clerk, Curtis V Cooper Prim Hc, and Independent Marketing Representative, 5LINX Enterprises Inc., Co-Founder of ANY-TAKERS MILLIONAIRE GROUP. He obtained his B.S. Degree in Biology from Savannah State University in 2014. During his undergraduate career Yusef participated in undergraduate research training as an LSAMP Research Scholar.
Ruth Pamela Tilus graduated from Savannah State University in May 2010 with a Bachelor of Science degree in Biology. She attended the 2009 PSLSAMP Annual Conference and the 2009 ABRCMS conference. She was engaged in a 10-week research project at the Materials Science Institute at NYU in Summer 2010. She is currently a second year Bridge to Doctorate and Cota Robles Fellow at the University of California Santa Cruz. Her PhD program relates to molecular, cellular and developmental biology.

Antoine Toombs, Quality Engineer on the F-35 Program, Lockheed Martin Aeronautics Corporation in Fort Worth, Texas. He obtained his B.S. degree in Civil Engineering Technology from Savannah State University in 2009. He also obtained his M.S. Degree in Applied Engineering with a concentration in Engineering Management from Georgia Southern University in 2013.

Randon Young, Public Health Consultant, Greater Los Angeles Area. He obtained his B.S. Degree in Biology in 2011 from Savannah State University. He is currently attending American Intercontinental University in London, England for a Master of Business Administration Degree in International Business. In 2013 he was a Project Administrator for Zambia Emory HIV Research Group in Lusaka, Zambia.

Therin Young, Graduate Research Assistant in Biological and Nanoscale Materials, Des Moines, Iowa. He obtained his B.S. Degrees in Electronics Engineering Technology and Mathematics from Savannah State University in 2013. Therin is currently a master's student in mechanical engineering at Iowa State University. In May 2013, he was awarded the Magna Cum Laude Award. During his undergraduate career Therin participated in undergraduate research training as an LSAMP Research Scholar.
Closing Remarks

The Peach State LSAMP team is a strong partnership of diverse resources and competencies. The Alliance institutions have demonstrated significant strengths and capabilities in increasing the enrollment of and graduation URM students in STEM disciplines. The Peach State LSAMP plans to refine its winning practices to strengthen and extend the STEM pipeline in Georgia with a targeted focus on mentorship, research, and graduate school for its students. In addition, the Peach State LSAMP program will continue to build inter-institutional relationships and work together to improve and create successful student programming that can be scaled up and shared with others to implement. Alliance members will maintain collaboration and communication at multiple levels (administrative, faculty, staff and student) within and across the member institutions while recognizing institutional autonomy and cultural differences. The Peach State LSAMP will be a mechanism for innovation and will continue to “change the equation in STEM” for Georgia.

References


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