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Report prepared by Leondra Gully & Karen Udoh
The Louis Stokes Alliance for Minority Participation (LSAMP) is a National Science Foundation initiative aimed at increasing the quality and quantity of students successfully completing science, technology, engineering and mathematics (STEM) baccalaureate degree programs, and increasing the number of students interested in, academically qualified for and matriculated into programs of graduate study. LSAMP supports sustained and comprehensive approaches that facilitate achievement of the long-term goal of increasing the number of students who earn doctorates in STEM fields, particularly those from populations underrepresented in STEM fields.

As part of the KY-WV alliance, the University of Louisville has developed a program consistent with LSAMP goals. The program is administered through a collaboration between the Cultural Center and Health Science Campus Office of Diversity & Inclusion. The mission of the program is to help diversity the science, technology, engineering and mathematics industries through efforts aimed at increasing the number of students earning baccalaureate degrees in these disciplines. Program activities and resources focus on outreach, academic support, peer connections, undergraduate research experience, research presentation and conference attendance opportunities. All majors in a STEM discipline are eligible to participate in the program.

Benefits for University of Louisville students in the LSAMP Program include:

- Receive up to a $900 stipend each year
- Access to conference and travel funding
- Supplemental instruction or tutoring
- KY-WV Annual Research Symposium attendance
- Personal coaching from program staff and mentors
- Access to personal and professional development workshops
- Networking opportunities with STEM faculty and staff
- Industry & facility tours in the Louisville area

About the Program

Leondra Gully, M.Ed
Campus Coordinator
Karen Udoh, Senior Student Assistant
Katie Leslie, Ph.D.
Campus Coordinator
V. Faye Jones, M.D., Ph.D., M.S.P.H.
Campus Coordinator
Leondra Gully, M.Ed
Campus Coordinator
Karen Udoh, Senior Student Assistant
<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>Monthly programs hosted by the LSAMP program</td>
</tr>
<tr>
<td>14</td>
<td>Partnerships developed within student affairs &amp; academic units</td>
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<tr>
<td>3.18</td>
<td>Fall 2017 mean cumulative grade point average for participants</td>
</tr>
<tr>
<td>70</td>
<td>Undergraduate URM student participants in the program</td>
</tr>
<tr>
<td>2,464</td>
<td>Community service hours completed by participants</td>
</tr>
<tr>
<td>10</td>
<td>Participants selected for full-time summer research programs</td>
</tr>
<tr>
<td>187</td>
<td>Professional development workshops attended by participants</td>
</tr>
<tr>
<td>3.30</td>
<td>Spring 2018 mean cumulative grade point average for participants</td>
</tr>
<tr>
<td>10</td>
<td>Participants served as LSAMP Ambassadors</td>
</tr>
<tr>
<td>1,385</td>
<td>Tutoring &amp; supplemental instruction hours completed</td>
</tr>
<tr>
<td>6</td>
<td>Participants completed academic-year internships in STEM areas</td>
</tr>
<tr>
<td>10</td>
<td>Participants completed academic-year faculty mentored research</td>
</tr>
<tr>
<td>2</td>
<td>Participants selected to present at the NSF REU program in France</td>
</tr>
</tbody>
</table>
2017-2018 LSAMP Scholars

Aaliyah Mack
Biology
Freshman

Alana Gipson
Biology
Freshman

Alyssa Delph
Chemistry
Sophomore

America Silva
Biology/Biochemistry
Junior

Anoa Zakee
Biology
Junior

Austin Bullitt
CIS
Junior

Bertha Aguazul
Biology
Freshman

Bobbi Wall
Biology
Freshman

Brooke Armenta
Biology
Sophomore

Caitlin Powell
Chemistry
Sophomore

Cherie McMurry
Biology
Freshman

Christabel Kusi Appiah
Biology
Freshman

Clayton Epps
Electrical Engineering
Freshman

Dennis Mashindi
Biology
Freshman

Desiree Cole
Bioengineering
Freshman

Eliceo Jaramillo
Engineering
Freshman

Emma Kubash
Biology
Freshman

Ephraim Otieno
Chemistry
Sophomore

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LSAMP Ambassador Program

LSAMP Ambassadors serve as leaders on the University of Louisville campus. They help current LSAMP participants get connected with research and resources; assist in the planning, organizing, and implementation of workshops and events for the LSAMP program. Ambassadors expected to:

- Regularly communicate with LSAMP participants
- Co-coordinate LSAMP activities (service opportunities, social events, and study sessions)
- Attend and participate in student-led programming
- Represent the program and pre-determined events (information fairs, recruitment events, etc.)

2017-18 AMBASSADORS

Fadumo Abdullahi
Christabel Kusi Appiah
Austin Bullitt
Manuela Botaka
Noela Botaka
Emma Kubash
Ruth Metellus
Kiara Smith
Erika Tucker
Shante Williams
The Student Awards and Recognition social is a student led celebration of academic success and student engagement. These awards and superlatives acknowledge the hard work, dedication, engagement and perseverance of students within the program—those who demonstrate their commitment to being an active and engaged LSAMP scholar.

Winners for the 2017-18 academic year included:

**Awards**

- LSAMP Scholar of the Year: Shannon Derkson
- Most Involved Award: Janae Boyd
- Academic Achievement Award: Brooke Armenta
- Most improved Involvement: Ruth Metellus
- Community Service Award: Anoa Zakee

**Superlatives**

Shannon Derkson ◇ Esther Tabugbo ◇ Mina Ibrahim
Manuela Botaka ◇ Kiara Smith ◇ Karen Udoh
Fall 2017 Events
September & October 2017 Events

Program Kickoff Meeting
September 27
Attendance: 39
First meeting of the academic year to discuss program overview and serve as a meet & greet for program participants and staff.

Study Session
October 3
Attendance: 20
Collaborative group learning space which allows students of all learning styles to share notes & ideas with their peers for a better understanding of course material.

Industry Tour: First Build
October 13
Attendance: 19
FirstBuild is a global co-creation community that speeds products from mind to market & enables customization through small batch production.

Student Success Seminar: Study Skills
October 16
Attendance: 13
Learn general study skills and metacognitive strategies that will help you study smarter and get more from your study time.

Program Meet & Greet
October 27
Attendance: 7
Meet & greet for program participants KY-WV LSAMP Director Fara Williams.

Service Project: Supplies Overseas
October 20
Attendance: 7
Supplies Over Seas (SOS) is a non-profit organization that collects and distributing surplus medical supplies & equipment to medically impoverished communities.

Graduate & Professional School Information Session
October 26
Attendance: 9
Session are designed to provide general information about the process of applying to a graduate program, answer questions, and highlight UofL programs.
November & December 2017 Events

**Study Session**  
November 6  
Attendance: 15  
Collaborative group learning space which allows students of all learning styles to share notes & ideas with their peers for a better understanding of course material.

**Faculty Research Panel**  
November 14  
Attendance: 28  
Panel discussion featuring UofL STEM faculty whom discuss their career paths and information related to their research interests.

**Facility Tour: Paris Stimulation Center**  
November 17  
Attendance: 20  
Facility for training of current & future healthcare professionals at UofL. It features 4 simulation suites with a control room, classroom and computer controlled mannequin.

**General Body Meeting**  
November 21  
Attendance: 21  
Meeting held as a check-in with program participants and to discuss upcoming events.

**Holiday Social**  
December 1  
Attendance: 24  
Fun afternoon of hors-d’oeuvres and games to celebrate the end of the semester. Test preparation information also distributed.

**Study Session**  
December 4  
Attendance: 10  
Collaborative group learning space which allows students of all learning styles to share notes & ideas with their peers for a better understanding of course material.
Spring 2018 Events
January Events

General Body Meeting
January 9
Attendance: 20
First meeting of the Spring semester year to discuss program overview and serve as a meet & greet for program participants and staff.

Stress Resilience Workshop
January 17
Attendance: 8
Discussion of the science of stress resilience as it relates to learning & thriving. Students identify pressing stressors & explore creative responses that actually work.

Resume Writing Workshop
January 19
Attendance: 9
Session on how to transform resumes into a tool that will help secure interviews. Students learned about various resume formats and how to identity the best fit for them.

Student Success Seminar: Taking Effective Notes
January 24
Attendance: 14
Session discussing various methods for taking notes in class, the importance of note taking and how taking and using notes can increase your learning.

Study Session
January 29
Attendance: 15
Collaborative group learning space which allows students of all learning styles to share notes & ideas with their peers for a better understanding of course material.

PLAN Workshop: How to Get Into Graduate School
January 31
Attendance: 11
Workshop designed to provide information, advice, and resources to help students apply and get into graduate school.
February Events

Minority Pre-Health Symposium
February 10
Attendance: 12
Undergraduate university students interested in health sciences careers are invited to receive information & tools necessary to succeed in the professional and graduate school.

Self-Care Workshop
February 16
Attendance: 12
Workshop held to discuss several self-care techniques that can be helpful for students in relieving and managing stress in a variety of situations.

Social: Game Night & Movie
February 23
Attendance: 14
Event for students to get to know each other and have a little fun after studying.

Study Session
February 27
Attendance: 12
Collaborative group learning space which allows students of all learning styles to share notes & ideas with their peers for a better understanding of course material.

Faculty Research Panel
February 20
Attendance: 20
Panel discussion featuring UofL STEM faculty whom discuss their career paths and information related to their research interests.
March Events

General Body Meeting
March 1
Attendance: 22
Meeting held to discuss the Annual KY-WV LSAMP symposium details, travel arrangements and logistics.

KY-WV LSAMP 10th Annual Research Symposium
March 2– March 3
Attendance: 34
Annual research symposium held by the KY-WV LSAMP Program.

Study Session
March 19
Attendance: 10
Collaborative group learning space which allows students of all learning styles to share notes & ideas with their peers for a better understanding of course material.

Zing! Re-Charge Your Energy on Purpose Workshop
March 23
Attendance: 9
Workshop to identify key energy drainers and learn how to fix the leaks by plugging into UofL wellbeing resources.

Research 101: How to Start
March 28
Attendance: 8
Workshop presented on how on how to identify and contact a faculty member and how to explore various programs including UofL research opportunities.
Facility Tour: Paris Stimulation Center
April 6
Attendance: 6
Facility for training of current & future healthcare professionals at UofL. It features 4 simulation suites with a control room, classroom and

Service Opportunity: Kentucky Science Center
April 13
Attendance: 5
Students assisting staff with designing and painting various crafts and structures used for their exhibits.

Student Success Seminar: Preparing for Finals
April 10
Attendance: 10
Workshop to examine strategies and systems that can help students maximize their efforts and study methods for final exams.

Study Session
April 16
Attendance: 14
Collaborative group learning space which allows students of all learning styles to share notes & ideas with their peers for a better understanding of course material.

Career Planning Workshop
April 17
Attendance: 10
Workshop to help students identify the best career path for them in addition to being provided with tools to help students develop their own career plan.

End of the Year Social
April 20
Attendance: 18
Event held to acknowledge the end of semester and accomplishments of program participants.
KY-WV LSAMP 10\textsuperscript{th} Annual Research Symposium
The KY-WV Louis Stokes Alliance for Minority Participation Research Symposium was held at the University of Kentucky on March 2-3, 2018. Speakers at the event included Dr. RaiAnna Arscott-Hopson, Kathy DeBoer, Cagney Coomer, Kayla Titiali, and Trevor Claiborn. This year the UofL LSAMP Program traveled with 34 students and 4 staff to the symposium. During the event students participated in workshops on communications and dress etiquette. Participants also attended oral and poster presentations presented by LSAMP students from other alliance institutions included five students from the University of Louisville.

Role of Mating Loci and Ammonium Transporter Expression in Stressor Sensitivity of Haploid Cells of Ustilago Maydis and Levels of Pathogenicity
Author: Lloyd Bartley
Funding: National Science Foundation, KY-WV LSAMP

Exploring Concordance between Sputum Eosinophil Analysis and Fractional Exhaled Nitric Oxide in Older Adults with Asthma
Authors: Noela Botaka, Anna Jorayeva, Bryan Beatty, Diane Endicott, and Barbara Polivka
Funding: National Institute on Aging under Award Number R01AG047297 and the National Cancer Institute R25 CA-134283 Cancer Education Program Grant.
Mentor: Dr. Barbara Polivka, School of Nursing

Neuronal Degeneration and Short-term Memory Impairment after TBI
Authors: Obiamaraije Igwe and Nino Muradashvili, M.D.
Funding: UofL Summer Cardiovascular Research Program, NIH, AHA, UofL SOM Basic
Mentor: Nino Muradashvili, M.D., UofL Health Science Campus, Physiology Department

Linking Epigenetic Regulation of Short-Chain Fatty Acids Receptors with Hydrogen Sulfide Supplementation in Hypertensive kidney
Authors: Jaleyea Foster; Gregory Weber, Ph.D.; and Utpal Sen, Ph.D.
Funding: ULSOM department of physiology, National Institute of Health
Mentor: Dr. Uptal Sen, University of Louisville

Regulation of Protein Acetylation by the RASSF1A Tumor Suppressor
Authors: Manuela Botaka, Geoffrey J. Clark and M. Lee Schmidt
Funding: R25-CA134283 UofL Cancer Education Program
Mentor: Geoffrey J. Clark
Campus Involvement Highlights:
- Multicultural Association of Premedical Students (MAPS)
- Alpha Epsilon Delta
- Kappa Theta Alpha Sorority
- SeoUL-K
- Miss Black UofL Pageant participant

What are your future plans?
While pursuing a Masters Degree in Physiology I will working to apply for medical school.

What was your favorite aspect of the LSAMP program?
I really valued that the program is a diverse group of students that work together towards a common goal of academic achievement in the STEM field.

What advice would you give to incoming participants?
Never be afraid to ask for new opportunities whether it be research, conferences or internships. Make a positive impact on your professors and mentors so that they know you are putting in the work to achieve your goals!
Campus Involvement Highlights:
- Association for Computing Machinery (ACM)
- National Society of Black Engineers (NSBE)-UofL Chapter
- Alpha Phi Alpha Fraternity, Incorporated

What are your future plans?
I am currently working as an Applications Developer at UPS. I will be pursuing a masters degree in Computer Engineering and Computer Science at UofL.

What was your favorite aspect of the LSAMP Program?
I really enjoyed the community service opportunities offered through the program.

What advice would you give to incoming participants?
I would encourage students to really take advantage of the program and attend as many events as possible.
SENIOR SPOTLIGHT
KAREN UDOH

Campus Involvement Highlights:
- Kappa Alpha Theta Sorority
- Voices in Action
- RaiseRed Dance Marathon
- Student Activities Board Diversity Committee
- Muhammad Ali Scholar Program

What are your future plans?
I will be conducting research in Greece as part of the Fulbright Scholars Program and attending the University of Louisville School of Medicine in 2019.

What was your favorite aspect of the LSAMP Program?
I really enjoyed being able to meet such a diverse group of scholars and helping them with their undergraduate experience.

What advice would you give to incoming participants?
Always be proud of who you are and where you come from. Never let your mistakes define you. You can instead learn from these experiences to help you reach your full potential.