

NSF-HBCU-UP (iApply) Program eNews – May 2022



iApply: Early Interdisciplinary Applied Strategies to Strengthen STEM Education and Research at SSU

SSU has received \$2.25 million from the NSF to support efforts to increase the number of underrepresented students who earn STEM BS degrees and enter STEM graduate programs and STEM careers. The over-arching goals emphasize maintaining student interest in STEM career paths and increasing SSU STEM student retention to improve graduation rates while enhancing the future diversity of the STEM research workforce. We are set to begin year two of this five-year grant. This project incorporates innovative strategies that include:

Curriculum Reform

- Introductory STEM lab courses are being redesigned to emphasize active learning and virtual reality (VR) enhancements.

Faculty Development

- Faculty are being trained on course redesign principles for the lab enhancements and can participate in the iApply Faculty Awareness and Commitment to Excellence (FACE) training program.

Student Development

- Students are exposed to applied inter-disciplinary research training through a team-based approach.



iApply Student Scholar Benefits:

- ✓ Participation in comprehensive academic year and summer trainings
- ✓ Research experience in multidisciplinary teams across departments
- ✓ Mentoring and professional development using advanced technology
- ✓ Travel support for presentations at national conferences
- ✓ Creative development of useful products with an emphasis on scientific integrity and ethical conduct

iApply Student Scholar Requirements:

- ✓ Full-time sophomore/junior students majoring in Biology, Chemistry, Forensic, Behavior Analysis and Computer Science
- ✓ Minimum GPA of 2.8 or higher
- ✓ Student with under-represented status
- ✓ US citizen or Permanent Resident

Student Cohort II	Major/Classification
Kyle Frazier	Biology, Sophomore
Lyric Wardlaw	Biology, Sophomore
Michelle Jackson	Biology, Junior
Nabriya Crump	Biology, Sophomore
Ja'Niyah Thurman	Biology, Junior
Ethan Kepp	Biology, Sophomore
Jalen Magee	Computer Science, Sophomore
Marae Woodson	Biology, Sophomore
Jatavion Williams	Biology, Junior
Aaron Franklin	Forensic Science, Sophomore
Aubrielle Cunningham	Forensic Science, Sophomore
Christina Bonner	Computer Science, Sophomore
Sidney Harville	Biology, Sophomore
Destiney Gaines	Biology, Junior

SSU PROJECT PROGRAM TEAM

Dr. Chellu S. Chetty (PI)

Regents Distinguished Professor of Biology (Retired)

Dr. Manoj Prasad (Co-PI)

Assistant Professor of Chemistry, Department of Chemistry & Forensic Science

Dr. Teresa Shakespeare (Co-PI)

Associate Professor & Chair, Department of Biology

Mr. Anthony Palacios

Virtual Reality Immersive Technology Research Technician

Mr. Alex Pierce

Project Coordinator

Dr. Lisa Yount

Faculty Research Mentor

Dr. Phyllis Blumberg

Education Researcher/Consultant (Philadelphia, PA)

External Advisory Board Members:

Dr. Jamboor K. Vishwanatha

University of North Texas Health Science Center (Fort Worth, TX)

Dr. Monica Mitchell

MERA Associates, (Vienna, VA)



Faculty Awareness and Commitment to Excellence (FACE) Training Program

This program provides annual professional development and education research support for seven STEM faculty to inspire and sustain continuous curriculum reforms that will meet the needs of our undergraduates. Training sessions are conducted to:

- 1) Update STEM course curriculum, refresh and reform teaching and learning environments

- 2) Facilitate strengthening the ability of students to be dynamic learners, thinkers, and creative innovators, well-prepared to be productive members of the scientific community.

This summer, FACE faculty will participate in a week-long set of workshops June 6-10, 2022. Topics include the following: “Teaching STEM Students How to Learn,” “Course and Module and Assignment Planning,” “Integrating Virtual Reality into your Course Curriculum,” and a series of Cohort I Presentations.

FACE Faculty, Cohort I	FACE Faculty, Cohort II
Edugie Ekuase	David Hongo
Alyssa Johnson	Darkus Jenkins
Johnny Johnson	Desiree Lonon
Siva Param	Mazair Moaveni
Veena Thapliyal	Andrea Moore
Antonio Valesquez	Tilahun Muche

