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Nuclear Science Week 2017

Minority Serving Institutions Partnership Program helps lab build nuclear workforce



SUBMITTED PHOTO

Savannah River National Laboratory Associate Scientist Bryt'Ni Hill conducts a routine check of an immersion test setup. Hill joined the lab following a summer internship through the Minority Serving Institutions Partnership Program.

BY JAMACIA JIMERSON

When Bryt'Ni Hill arrived at Savannah River National Laboratory in the summer of 2016, she was hoping to gain valuable experience and skills for her job search. What the recent graduate of Newberry College did not expect was to leave with a career.

Working in the lab's Analytical Development division, Hill and another intern improved a method to measure plutonium concentrations for use at the Savannah River Site (SRS). By the end of the 10-week internship, Savannah River National Lab offered her a position as associate scientist in the Materials Science and Technology directorate.

Hill's story is just one of the many successes made possible by the U.S. Department of Energy Office of Environmental Management's (DOE-EM) Minority Serving Institutions Partnership Program (MSIPP).

Managed by Savannah River National Lab, the MSIPP program provides DOE National Laboratory internship opportunities to science, technology, engineering and math (STEM) students enrolled at minority serving institutions (MSIs).

MSIs are institutions of higher education enrolling significant percentages of minority students or serve certain populations of minority students, such as Historically Black Colleges and Universities and Tribal Colleges and Universities.

"This program is a way for Savannah River National Lab and the Department of Energy to actively develop a community of minority students who understand our unique nuclear mission," said Vivian Cato, MSIPP's program manager. "They are excited about what we do and having the opportunity to contribute to our work."

During the summer of 2017, MSIPP placed 40 student interns at six National Laboratories including Los Alamos, Oak Ridge, Pacific Northwest, Idaho and Argonne. Savannah River hosted 11 MSIPP interns in 2017 from MSIs as far away as the University of Puerto Rico at Mayaguez.

MSIPP interns at Savannah River conducted research in areas such as Environmental Modeling, Environmental Sciences and Biotechnology, Analytical Development and Advanced Characterization & Process Technology.

Unique opportunity to learn nuclear

For Hill, the internship through MSIPP was a one-of-a-kind experience providing her valuable career development and training in nuclear chemistry.

"I had the chance to find the strengths I bring to a team and how to apply them," she said. "I've gained new connections with people that I would have not met or only talked to in passing if I had gotten my position without the internship." Success stories such as Hill's are the cornerstone of the MSIPP program.

"Bryt'Ni is a perfect example of the great opportunities created through MSIPP," said Cato. "This program fosters a 'win-win' situation for both student interns and the Office of Environmental Management."

Hill is very glad that a program like MSIPP exists and that she had the opportunity to be a part of it. "MSIPP helps minority students get internship opportunities in STEM fields. Internships are very, very competitive, but MSIPP bridges that gap by having research presentations throughout the year and unique hands-on research for students to apply their classwork."

In her current role, Hill helps determine corrosion chemistry control limits for the radioactive liquid waste stored in large, carbon-steel tanks at SRS and DOE-EM's Hanford Site near Richland, Washington. She prepares and runs electrochemical and immersion tests to measure the need for inhibitors in tankwaste solutions to reduce corrosion in the underground tanks.

2017 Savannah River National Lab Internships by the Numbers

While the Minority Serving Institutions Partnership Program (MSIPP) is Savannah River's signature intern program, the lab is engaged in a variety of intern opportunities. In 2017, the lab hosted its largest intern class.

58 interns

26 universities

12 U.S. states and territories

50+ volunteer mentors

22

interns from the Savannah River Environmental Sciences Field Station

Programs included: • DOE-EM MSIPP • DOE Office of Science

- Science Undergraduate Laboratory Internships (SULI)

• Energy Efficiency and Renewable Energy Robotics Program (EERE)

• DOE Fellows – Florida International University • Nuclear Workforce Initiative – Augusta University