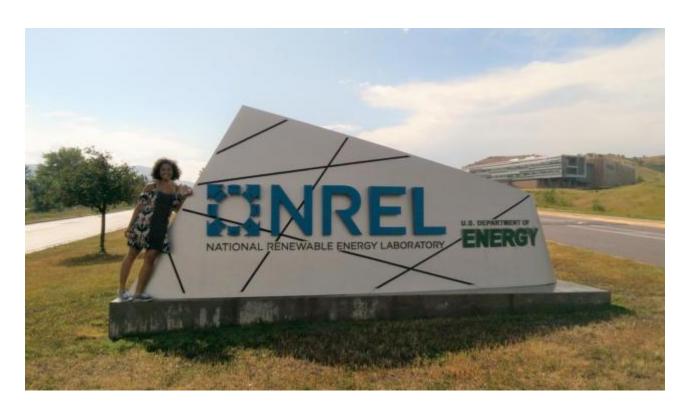


SIUE Noyce Program participants inspired by nationwide learning experiences

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EDWARDSVILLE - Hands-on research opportunities and real-world experiences are among the driving forces behind Southern Illinois University Edwardsville students' motivation to achieve their career aspirations.

Participants in the University's Robert Noyce Science and Math Scholarship Programs had the chance to gain both during summer 2017 when they traveled across the country to work at nationally-known research institutions. The students were chosen to participate in the Science Teacher and Researcher (STAR) program after a competitive national process coordinated by California Polytechnic State University.



"Through this program, SIUE students had the opportunity to work and learn in some of the most prestigious laboratories in the U.S.," said Sharon Locke, PhD, director of the SIUE STEM Center. "In addition to working alongside STEM professionals, they were contributing to national STEM education efforts by developing lesson plans based on the most current science."

Noyce scholar Breanna Blackwell, of New Berlin, worked at the National Renewable Energy Laboratory (NREL) in Goldon, Colo. on a study pertaining to the heat transfer fluids in concentrating solar power systems.

Fellow scholar and chemistry secondary education major Amelia Teare, of Kirkwood, Mo., helped analyze and test a new monopropellant for possible use in space flight at the Air Force Research Lab on Edwards Air Force Base in California.

Meanwhile, Noyce summer scholar Ricardo Wells, of Chicago, traveled to Boulder, Colo. to gain experience at the National Center for Atmospheric Research.

"SIUE's education and science courses have more than prepared me for my future as a chemistry teacher," Teare said. "But, joining the Noyce program and working in a lab this summer gave me more experience and further instruction that have elevated my preparation. The combination of classroom instruction, the Noyce program and lab experience has confirmed that I was placed on this earth to teach, and I have doubt in my ability to do so."





"My summer experience greatly enhanced my academic education," added Blackwell. "I have a whole new perspective on what it means to be a scientist. The connections made and opportunities that were made available will benefit me and my future students. I, and my fellow scholars, were provided a chance to grow in ways I never thought possible."

"What makes me passionate about education is that I have the opportunity to enrich the youth that will hopefully make change in the world," Wells said. "My experiences were all eye opening and knowledge enhancing, as I created lesson plans, my own work schedule, agenda and deadlines. I feel better equipped to complete any work that comes my way."

SIUE's Noyce Science and Math Scholarship Programs utilize an enhanced curriculum that includes research, intensive teaching experiences, and outreach and service to build efficacy among pre-service science teachers as they prepare to teach and lead in areas of high need in the Southern Illinois area.

"The STAR Program provides aspiring teachers with opportunities to do authentic research, while helping them translate their research experience into classroom practice," said Jessica Krim, EdD, interim assistant dean of the SEHHB and secondary education program director. "These experiences build confidence among aspiring teachers, which encourages persistence in a STEM teaching career.

"The support that the STAR Program provides in translating authentic research to classroom practice is key, as it creates greater interest and learning, facilitating how K-12 students understand and make sense of complex STEM concepts."

"Participating in this experience boosted my self-confidence, as I have always been a little unsure of my personal contributions and significance, and especially my ability to teach," Teare said. "This pushed me outside my comfort zone and showed me what I was capable of. As a future teacher, I want to positively influence my students and encourage them to go after their dreams."

For more information on the SIUE Noyce Science and Math Scholarship Programs, visit siuenoyce.org.

The Southern Illinois University Edwardsville Center for STEM Research, Education and Outreach comprises an independent group of researchers and educators, innovating ways to engage students and the public in science, technology, engineering and math (STEM). Within the SIUE Graduate School, the Center brings together research faculty, graduate students and practitioners to conduct education research. The Center contributes educational expertise to SIUE undergraduate classes and provides professional development for K-12 teachers. The Center boasts a significant library of equipment and resources, which are available for loan at no cost to campus and regional instructors. For more information, visit https://www.siue.edu/stem/about.shtml or contact STEM Center Director Sharon Locke at (618) 650-3065 or stemcenter@siue.edu.

The <u>SIUE School of Education</u>, <u>Health and Human Behavior</u> prepares students in a wide range of fields including public health, exercise science, nutrition, instructional technology, psychology, speech-language pathology and audiology, educational administration, and teaching. Faculty members engage in leading-edge research, which enhances teaching and enriches the educational experience. The School supports the community through on-campus clinics, outreach to children and families, and a focused commitment to enhancing individual lives across the region.

Central to SIUE's exceptional and comprehensive education, the <u>College of Arts and Sciences</u> has 19 departments and 85 areas of study. More than 300 full-time faculty /instructors deliver classes to more than 8,000 undergraduate and graduate students. Faculty help students explore diverse ideas and experiences, while learning to think and live as fulfilled, productive members of the global community. Study abroad, service-learning, internships, and other experiential learning opportunities better prepare SIUE students not only to succeed in our region's workplaces, but also to become valuable leaders who make important contributions to our communities.