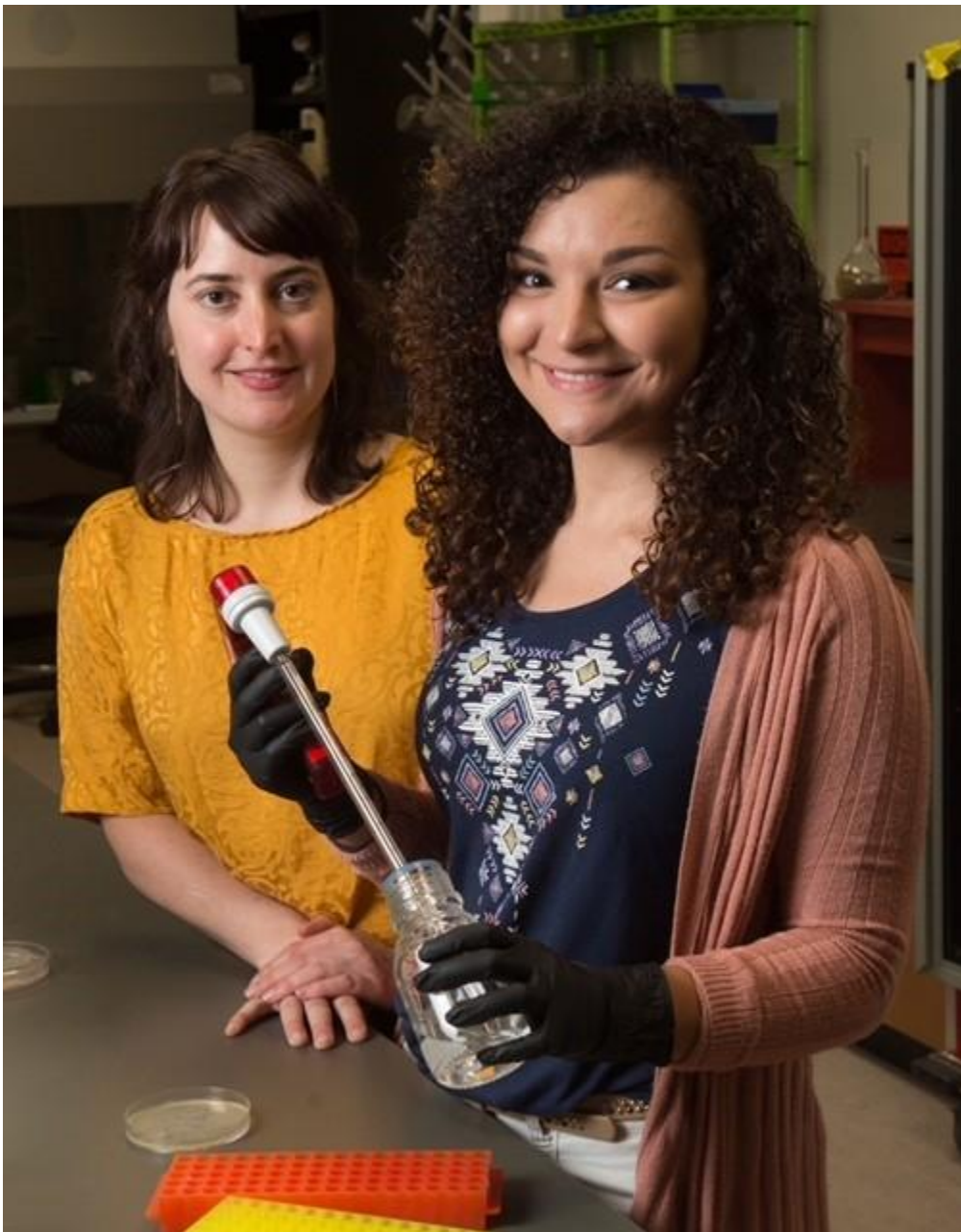


# SIUE undergraduate earns national research scholarship

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EDWARDSVILLE - Southern Illinois University Edwardsville College of Arts and Sciences senior Sydni Rubio's ultimate goal is to achieve a PhD and join a pediatric oncology research team. But, the Troy native knows she needs to take her academic journey one step at a time, gaining knowledge and research experience along the way, beginning as an undergraduate.

Rubio has received \$3,000 from the [Microscopy Society of America](#) (MSA)'s [Undergraduate Research Scholarship Program](#) in support of her lab work as an Undergraduate Research and Creative Activities (URCA) Assistant at SIUE.

Her winning research proposal is entitled, "Visualizing Infection Processes and Host Specificity of Burkholderia Symbionts of Slime Molds." The MSA funding will be used for lab supplies and a student stipend to support her summer training on a confocal microscope.

"I'm passionate about biology, because it's a never-ending learning experience," said Rubio, who is pursuing a bachelor's in biological sciences, specializing in genetics and cellular biology. "It is amazing that my research is being recognized at the national level. I'm grateful for this opportunity and funding support."

Rubio's URCA mentor Susanne DiSalvo, PhD, assistant professor in the Department of Biological Sciences, emphasizes the impact of inquiry-based research experience on undergraduate science students.

"I attended a primarily undergraduate state college and was fortunate to get a place in one of the few research labs on campus," said DiSalvo. "That experience was pivotal for me, transforming me from a somewhat ambivalent biology major to a full-fledged enthusiast with a higher level of self-confidence and technical and conceptual competence. It is amazing and gratifying to see that transformation now occurring for students in my own lab."

"Through my research with Dr. DiSalvo, we are taking different bacterial strains and infecting them with five phenotypically different amoebae," Rubio explained. "After a waiting period, we evaluate the symbiotic relationships of the bacteria and amoeba. We can further determine how detrimental the infections were by using a flow cytometer to analyze spore counts and a confocal microscope to obtain a visual representation of infected cells."

DiSalvo commends Rubio for taking the initiative to apply for national funding, and showing a high level of independence and dedication to her research.

“Undertaking a research project as an undergraduate provides a truly unique experience that helps students become more self-actualized,” DiSalvo said. “Thus, whether or not a student remains in the sciences, the skills and confidence they acquire through these research experiences position them perfectly for pursuing future passions and tackling future challenges.”

Central to SIUE’s exceptional and comprehensive education, the [College of Arts and Sciences](#) has 20 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.