SIUE Hosts Undergraduates from Across the Nation for Hands-On Research Opportunity Supported by the National Science Foundation

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EDWARDSVILLE, Ill. (PRWEB) July 03, 2019 -- For Southern Illinois University Edwardsville senior Emily Fulton, conducting research through fish sampling and archaeological excavation are experiential learning opportunities she couldn’t let pass by.

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The research experience caters toward first-generation college students and is hosted at SIUE in collaboration with the Illinois Natural History Survey, University of Illinois at Urbana-Champaign. It’s the final summer of a three-year program funded by a $287,690 National Science Foundation (NSF) Research Experiences for Undergraduates (REU) grant awarded to the two institutions.

“Our primary goal is to prepare undergraduates for success as graduate students, in employment and as future scientists,” said Carol Colaninno, PhD, principal investigator (PI) of the program and research assistant professor in the SIUE STEM Center. “The students are engaging in field archaeology and long-term fish monitoring programs, and learning methodologies and theoretical perspectives that bridge archaeological and ecological concepts.”

According to co-PI John Chick, PhD, director of the Great Rivers Field Station in Alton, “Working on a project like this gives students a much greater feel for actual research. A typical field class is great for learning sampling techniques, but it doesn’t allow students to experience the day-to-day consistency in sampling methodology or the setup and breakdown at the start and end of each day. The students involved in this program will leave with an excellent understanding of what a standardized monitoring or research program is and how it operates.”

For SIUE’s Fulton, of Canton, this summer research opportunity perfectly enhances her studies as a biology major, specializing in ecology, environment and evolutionary science.

“I was intrigued by this REU, because it involves researching the Anthropocene, which is the new geological time period we’re said to be in. It’s literally the time of humans,” she explained. “I want to know exactly how we’re influencing fish populations. It’s incredible to be able to get this hands-on experience on SIUE’s campus, a place that’s so familiar to me.”
Roland Sanchez is a sophomore at Fort Lewis College in Durango, Colo. His primary interest falls on the archeology side of the REU, but he understands the value of the interdisciplinary learning opportunity.

“I’ve always been obsessed with history, so being able to handle the actual artifacts people created, destroyed and lost is amazing,” Sanchez explained. “Because I’m earning this experience, I’m already getting prepared for field school and a variety of graduate schools. Taking learning outside the classroom and practicing how to clean scrap, shovel skim and excavate features at SIUE’s archeological site is incredibly valuable to my future.”

The REU program also offers student and career development sessions, including a panel on job search strategies and applying to graduate school, an “ask a professor anything” event and more.

Senior personnel involved in the collaborative project include Corey Ragsdale, PhD, assistant professor and Julie Zimmermann, PhD, professor, both in the SIUE Department of Anthropology; Andrew Casper, PhD, of the Shed Aquarium; Sergiusz Czesney, PhD, director of the Lake Michigan Biological Station; and James Lamer, PhD, site manager of Western Illinois University’s Kibbe Field Station.

During the eight-week program, all 10 participants will complete an original research contribution. Their work will be featured during the REU Symposium being held from 1-3 p.m. Thursday, July 25 in the Morris University Center’s Mississippi Room. The symposium is open to the public.

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 siue.edu/stem or contact STEM Center Director Sharon Locke at (618) 650-3065 or stemcenter@siue.edu.

The mission of the Illinois Natural History Survey (INHS), part of the University of Illinois’ Prairie Research Institute, is to investigate and document the biological resources of Illinois and other areas, and to acquire and provide natural history information that can be used to promote the common understanding, conservation and management of these resources. For more information, visit inhs.illinois.edu.
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