



Undergraduate Research and Creative Activities

What is URCA?

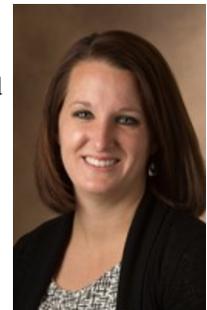
URCA is a program designed to get undergraduate students involved in research and creative activities. There are two ways in which students can participate in URCA: as Associates and as Assistants.

Associates: These are year-long positions in which a student designs his or her own research or creative activity project and then works with a mentor to see it through. Associates are required to attend monthly meetings and to present their scholarly work at the Spring Symposium. Associates earn a stipend and can also receive money for project-related equipment and travel. Only a maximum of 10 students are accepted into this very competitive program each year.

Assistants: These are semester-long positions in which students assist faculty with their research or creative activities. Approximately 90 students each semester receive stipends for being Assistants; however, each semester several students also participate as unpaid Assistants. It is also possible for Assistants to earn course credit for their participation.

URCA Student Becomes URCA Mentor!

Dr. Kelley McGuire is a former URCA Associate now turned URCA Mentor! Kelley participated in the Associate program from 2008-2009. “In 2009, I remember receiving a notification about the Undergraduate Research and Creative Activities Associate program. With nothing more than a brief research question in mind, I reached out to my mentor in the School of Nursing, Dr. Christine Durbin... Within one meeting, I felt like I had the information I needed to take my research question and draft a proposal. After being accepted to the program as an Associate, I was able to live the experience of leading a research project as an undergraduate. When I think back on my experience as an URCA Associate, there are two things that always come to mind: completing the IRB process, and presenting my final work at the Midwest Nursing Research Society’s annual conference. It was during this conference that I realized I wanted to be a researcher. Flash forward 9 years; I will be presenting the findings from my doctoral work at the 2020 MNRS Annual Conference in April!



My experiences in the Undergraduate Research and Creative Activities program at SIUE shaped my career trajectory. As an Associate, I studied the effects of stress on new-graduate nurses. I continue to study the effects of stress on performance in nursing students as well as how insufficient sleep impacts learning and other outcomes. This program helped me to grow as a student and as a professional. I transitioned from shy and timid in an academic setting to confident, determined and tenacious. This semester, I am fortunate enough to have an URCA Assistant working with me, and I can only hope that I am offering them a memorable learning experience.”

URCA Across the Generations

Dr. Robert Ware’s (Department of Philosophy) unique mentorship style which includes having former URCA Assistants mentor his current ones! Recent SIUE graduate and URCA alum Tom Feldman lives locally and is able to regularly attend Dr. Ware’s meetings, while SIUE and URCA alum Savannah Bogus Skypes into the meetings from her office at the University of California, San Diego. What a wonderful experience for his current Assistants, Justin Beckemeyer and Kara Keiser, to be able to see firsthand the trajectory of professionals who not so long ago were in their shoes!

For More Information Visit: <http://www.siue.edu/urca>

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URCA



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Featured Associate: Kristina Springer

Mentor: [Dr. Kyong-Sup Yoon](#), Biology

URCA Associate Kristina Springer is currently working on a project titled "Investigation of Epigenetic Alterations in Female *Drosophila Melanogaster* Following Exposure to Sublethal Levels of Imidacloprid" with her mentor Dr. Yoon. The goal of her project is to explore whether exposing fruit flies to a low-level of insecticides affects their gene expression in an epigenetic manner. Kristina is adding to existing research on insecticide resistance in insect pests, a prominent issue in agriculture. She is currently in the last stage of data collection and working towards data analysis and completing her poster to present at the 2020 Student Research Symposium and the 2020 Illinois State Academy of Science meeting in April.



Kristina has been with the URCA program for two years, both as an Assistant and now as an Associate. She says, "I've gained practical experiences that will help me in my future career goals, and I have also gained experience working in a collaborative team environment. Without the URCA program, I would not have pursued a research experience when I did and I don't think I would be nearly as competitive as I am now. I highly recommend URCA to anyone who wants to get hands-on with their studies."

Kristina will be attending St. Louis University's Cell and Molecular Biology Doctoral program in the fall!

Featured Lab: Dr. Elora Voyles, Psychology

In Dr. Voyles' Lab, URCA Assistants have been helping URCA Associate Hannah Queen on her study, "The Effects of External Stress on Student Performance." For this study, Hannah has chosen to measure aggression via video games where participants purposefully stress out another player. The lab uses MarioKart on a Nintendo Switch to create a situation in which participants can choose how much to aggress against another player. URCA Assistants either run the study as the researcher or serve as a confederate by playing the role of another participant. The participant engages in a race on MarioKart, during which the confederate turns off their TV screen as they play. They then switch places with the confederate and the participant is given the instructions to turn off the TV screen during the confederate's race as many times as they want.

When asked about her experience with URCA, Dr. Voyles stated: "URCA is an outstanding opportunity for undergraduate students to get hands-on experience with research. In addition, URCA creates a community of students within labs where students mentor each other and learn from one another." Her Assistants have expressed their excitement and gratitude for working in her lab. They have been exposed to different aspects of research including helping run a research study, reviewing student surveys, assisting in indexing a text book authored by Dr. Voyles and Dr. Nadler, and assisting in editing a textbook chapter written by Dr. Voyles.



Back row from left to right: Henry Schilling, Michael Robinson, Michael Schneider, and Cody Edgeston. Front row from left to right are Sophia Buehler, Abigail Martens, and Michelle Duong. Not pictured: Olaoluwa Animashaun, Samantha Johnson, Marcus Washington

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