

### **Faculty Member Contact Information**

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### **1 Funded, 2 Unfunded URCA Assistant(s)**

**Are you willing to work with students from outside of your discipline? If yes, which other disciplines?**

- Yes

**How many hours per week will your student(s) be required to work in this position?**  
(Minimum is 6 hours per week; typical is 9)

- 6

**Will it be possible for your student(s) to earn course credit?**

- Yes, in 493-020 for 0-2 credit hours.

**Location of research/creative activities:**

- Flexible working environment, either Home or Aranda Research Lab - SW1390

**Brief description of the nature of the research/creative activity?**

- My research focuses on student learning in biology, and I allow students to work on projects that suit their interests. I am interested in investigating how faculty can create inclusive spaces for our students to learn. For example, this includes the impact of curricula, environmental conditions, instructor messaging and pedagogy on students' sense of belonging and identity.

**Brief description of student responsibilities?**

- Researchers in my lab work in collaborative groups analyzing data, either on students' science identity, students' perceptions of stress, or students' metacognitive abilities. My research primarily includes on qualitative analysis, which focuses on understanding

students' words and voices through open-ended questions on homework or surveys. They will read through transcripts and identify patterns and emerging themes from student data. Since my research involves human subjects, my students will also complete human subject's ethics training and learn about ethical issues involving human subjects. Finally, if students are interested, I am also happy to discuss pedagogy and provide practical strategies for future science teaching.

**URCA Assistant positions are designed to provide students with *research or creative activities* experience. As such, there should be measurable, appropriate outcome goals. What exactly should your student(s) have learned by the end of this experience?**

- By the end of this experience, my students will work in groups to complete either a year or semester-long research project that fits their interest. They will learn how to qualitatively analyze human data, how to manage survey data, how to complete and submit a research IRB, and how to present their analysis in tables/graphs. We will also meet weekly to discuss scientific literature and skills related to biology education research. Finally, students in my lab will complete CITI human subjects research training and they will learn about ethical issues surrounding human subjects' research.

### **Requirements of Students**

**If the position(s) require students to be available at certain times each week (as opposed to them being able to set their own hours) please indicate all required days and times:**

- My work is entirely flexible. As long as students have a computer and internet access, they are able to work from home or in my research lab in Science West. We will schedule weekly meetings around students' schedules.

**If the location of the research/creative activities involves off campus work, must students provide their own transportation?**

- N/A

**Must students have taken any prerequisite classes? Please list classes and preferred grades:**

- It is helpful if students have completed at least one science course, but it is not a requirement.

**Other requirements or notes to applicants:**

- I encourage students from all backgrounds to apply. While my work focuses on education, you do not need to be interested in a teaching career to apply. My research is

applicable to anyone interested in investigating how students think or how to improve student experiences here at SIUE.