

Position # S10-050

Faculty Member Contact Information

Name: **Darron Luesse**
Department: **Biological Sciences**
E-mail Address: dluesse@siue.edu

Description of the URCA Assistant Position(s)

Number of students requested: **2**
Number of students to receive funding: **1**
Will the student(s) be eligible to earn course credit? Yes **X** No If yes, in which course? **Biol493E**
(If students are to earn credit hours for participating, they should earn 3 credit hours.)
Location of research/creative activities: **Luesse Laboratory – SL3216**

Brief description of the nature of the research/creative activity:

Plant physiology research on the *gravity persistent 5 (gps5)* mutant that displays an overachieving response to gravity.

Brief description of student responsibilities:

Students will be responsible for literature research for the project, experiment preparation (PCR, plant seeds, make media, etc), data collection (Gel electrophoresis, measuring gravity response, creating time-lapse movies) and data analysis (entering experimental results into excel, statistical analysis).

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?

After this research experience, students should be able to develop a testable hypothesis to answer a research question, design an adequate experiment to test that hypothesis, and correctly analyze the data. They will also gain practical experience with common molecular biology techniques such as PCR and gel electrophoresis.

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:

Students may set their own research hours

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

N/A

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

Students must have completed Biol 220 with a grade of C or better.

Other requirements:

Student must have previously worked in Dr. Luesse's lab

Notes to applicants (i.e., any other information you'd like applicants to know about you or the position before applying):

None