

Faculty Member Contact Information

Name: **Kelly Barry**
Department: **Biological Sciences**
E-mail Address: **kbarry@siue.edu**

Description of the URCA Assistant Position(s)

Number of students requested: **1**
Number of students who will be funded: **1**
Will it be possible for your student(s) to earn course credit? Yes No
If yes, in which course? **Biol 493**
Location of research/creative activities: **SL3223 (my research lab)**

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

Develop a procedure for embryogenic suspension culture propagation of Solomon's Seal (*Polygonatum biflorum* var. *commutatum*) from seedling roots.

Brief description of student responsibilities:

Student will use aseptic technique to isolate rapidly growing root tips, systematically investigate medium composition and plant growth regulators for embryogenesis in suspension culture, collect and analyze relevant data (mass, stages of development, etc), initiate plant regeneration from embryogenic suspension cultures

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?

The student will maintain an organized lab notebook, learn aseptic techniques relevant to plant tissue culture, establish and photograph suspension culture cells in various stages of embryogenesis, regenerate plants from suspension cultured embryos, and report results as a poster or oral presentation at appropriate conferences (Society for In Vitro Biologists, Midwestern American Society of Plant Biologists, Illinois State Academy of Science).

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:

None

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

Yes _____ No _____ **N/A**

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

Biol 120 with a B or higher

Other requirements:

None

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

None