





Faculty Member Contact Information

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Contact Info	
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Department	Biological Sciences

1 Funded, 1 Unfunded URCA Assistant

	This position is ONLY open to students who have declared a major in this discipline.	M
	This project deals with social justice issues.	
	This project deals with sustainability (green) issues.	
	This project deals with human health and wellness issues.	
	This project deals with community outreach.	
	This mentor's project is interdisciplinary in nature.	I

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

- No

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)

- 9

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

- Yes, 3 credit hours of BIOL 493

Location of research/creative activities:

- SW 0220

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

This research will examine locomotion in the Northern Cricket Frog, *Acris crepitans*. Cricket frogs are the smallest native vertebrates in north America. My lab is interested in the role of body size in the evolution of frog jumping. Students will film cricket frogs in the lab with high-speed video to evaluate size-related locomotor constraints in this species.

Brief description of student responsibilities?

Students will participate in animal care training and will learn how to care for captive frogs. They will learn how to quantify animal locomotor behavior in the lab. They will also gain experience in analyzing morphological and behavioral data and will be expected to present the results of their research at a scientific meeting. They will also assist with manuscript preparation for publication in a scientific journal.

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 know:

- 1) how to care for and handle live animals
- 2) how to quantify locomotor (kinematic) behavior with high-speed video
- 3) how to take morphological measurements
- 4) how to use Excel, MATLAB, and statistical software for data analysis
- 5) how to take laboratory notes
- 6) how to prepare a poster for presentation at a scientific meeting

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:

- N/A

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:

- BIOL 150 and 151 with at least a B

Other requirements or notes to applicants:

- None