## Faculty Member Contact Information

<table>
<thead>
<tr>
<th>Name</th>
<th>Dr. Richard Essner</th>
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<tbody>
<tr>
<td>Contact Info</td>
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<tr>
<td>SIUE Email</td>
<td><a href="mailto:ressner@siue.edu">ressner@siue.edu</a></td>
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<tr>
<td>Campus Box</td>
<td>1651</td>
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<tr>
<td>Department</td>
<td>Biological Science</td>
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</tbody>
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### 1 Funded, 4 Unfunded URCA Assistant

<table>
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<tr>
<th>X</th>
<th>This position is <strong>ONLY</strong> open to students who have declared a major in this discipline.</th>
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<tbody>
<tr>
<td></td>
<td>This project deals with social justice issues.</td>
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<tr>
<td>X</td>
<td>This project deals with sustainability (green) issues.</td>
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<td></td>
<td>This project deals with human health and wellness issues.</td>
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<td>This project deals with community outreach.</td>
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<td></td>
<td>This mentor’s project is interdisciplinary in nature.</td>
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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 hours

Will it be possible for your student(s) to earn course credit?
- Yes, BIOL 497 (up to 3 credit hours)
Location of research/creative activities:

- SIUE campus

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

This research will examine the movement patterns and habitat use of Gray Ratsnakes in an urbanized environment (SIUE Campus). The student will be checking cover boards for snakes. Snakes that are encountered will be live captured, taken to the St. Louis Zoo for surgical implantation with radio transmitters, and released at the point of capture. The student will then track the movements of the snakes throughout the spring semester.

Brief description of student responsibilities?

The student will participate in animal care training, submitting permit applications, and will learn how to trap, mark, measure, and handle snakes in the wild. They will learn how to track animals fitted with radio transmitters and to measure habitat features. The student will also gain experience in analyzing ecological, 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 collect, handle, and mark snakes for identification
2) how to conduct radiotelemetry research to track animal movement
3) how to measure habitat features
4) how to use a GPS unit
5) how to take field notes
6) know how to use Excel, GIS and statistical software, for data analysis
7) 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 C in both.

Other requirements or notes to applicants:

- N/A