

POSITION # F09-027

Faculty Member Contact Information

Name: **Kevin A. Johnson**
Department: **Chemistry and Environmental Sciences**
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Description of the URCA Assistant Position(s)

Number of students requested: **2**

Number of students who will be funded: **1: Only one of the two students for this position will be funded. The professor will determine which student receives funding.**

Will the student(s) earn course credit? Yes No If yes, in which course? **CHEM 29X, 39X, 49X, or ENSC 499**

Location of research/creative activities: **SL1209 and 4209**

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

Determination of the presence and potential effects of pharmaceuticals, veterinary antibiotics, and (or) endocrine disrupting compounds in surface and ground water supplies.

Brief description of student responsibilities:

Students will gather current literature pharmaceuticals, veterinary antibiotics, and (or) endocrine disrupting compounds in surface and groundwater, and appropriate toxicity testing protocols (e.g., culturing the organisms, proper ASTM testing protocols, and any published results). Projects will involve either determining water extraction techniques to test for these compounds in water samples and (or) conducting aquatic toxicity tests (standardized 48- and 96-hr toxicity tests with *D. magna*) with these compounds.

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?

Students will learn how to gather and assess the current literature on pharmaceuticals, veterinary antibiotics, and (or) endocrine disrupting (in general and in water samples). They will learn the appropriate laboratory techniques for either the extraction and determination of the compounds or toxicity testing with these compounds. Students will analyze their data and present their findings in either a poster or powerpoint presentation.

Additional 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:

None

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