

Call for Applications: 2012 National Science Foundation Research Experiences for Undergraduates Program at the Nebraska Redox Biology Center at the University of Nebraska - Lincoln

Grantor: Nebraska Redox Biology Center at the University of Nebraska - Lincoln

Closes: 3/1/2012

Maximum: \$5,000.00

Call for Applications: 2012 National Science Foundation Research Experiences for Undergraduates Program at the Nebraska Redox Biology Center at the University of Nebraska - Lincoln

Program Dates: June 4, 2012 - August 8, 2012 inclusive

The Nebraska Redox Biology Center at the University of Nebraska - Lincoln, offers qualified undergraduates an opportunity to pursue independent research projects in redox biochemistry. Research areas range from molecular medicine to environmental biochemistry and plant biochemistry.

Students will participate in exciting projects at the cutting edge of research in redox biology. They will formulate and test hypotheses, develop experimental problem-solving skills, and receive training in biochemical, biophysical and molecular biology techniques. Students will also be exposed to a variety of instrumentation such as HPLC and FPLC systems, EPR spectroscopy, mass spectroscopy and microscopy which are located in the Beadle Center.

The ten-week summer program is sponsored by the National Science Foundation and Department of Defense and will place the student with a faculty mentor in whose lab the student's research project will be pursued. The student will participate fully in the life of the mentor's lab. In addition, there will be informal meetings of all program participants to exchange information on the research being done and to discuss areas of biochemistry/redox biology that are of particular interest and excitement. There will also be weekly meetings in which various scientists describe the latest advances in their own research or career opportunities in biomedical or biotechnology fields. Social, recreational and cultural events with program participants and faculty will further enhance informal interactions. The summer experience will be capped by a luncheon and poster presentation session in which program participants will present a poster on their project and receive certificates of completion.

REQUIREMENTS FOR AND METHOD OF APPLICATIONS

Students seeking a summer research fellowship should have completed, at a minimum, college chemistry through organic chemistry and one year of college biology by the end of the Spring 2012 term. Students with a strong interest in graduate programs are particularly encouraged to apply. A minimum cumulative grade point average of 3.0 is required. Students who will graduate at the end of the Spring 2012 term are not eligible for this program. Applicants must also be a U.S. citizen or permanent resident of the US or its possessions. Students who will help the University of Nebraska achieve its mission of excellence through diversity are encouraged to apply.

To apply for the fellowship, complete the on-line application form by March 1, 2012. The on-line application form is available at our web site at <http://www.unl.edu/summerprogram/apply.shtml>. If you have questions call Hannah at 402-472-3173 or Donald Becker at 402-472-9652 or email at redox2@unl.edu. You may also send materials to:

Summer Undergraduate Research Program
Nebraska Redox Biology Center
Attn: Hannah Kahler
University of Nebraska - Lincoln
E247 Beadle Center
Lincoln, NE 68588-0662

PROGRAM REQUIREMENTS

The primary requirement for the program is ten weeks of full-time work in a research laboratory at the University of Nebraska - Lincoln. Students must attend the entire program (June 4 - August 8, 2012). In addition, students will attend/complete:

Orientation and safety training (June 6). All of the participants will start their research programs the afternoon of June 6.

Evening workshops/seminars on preparation for postgraduate studies – writing resumes and personal statements and preparing applications for graduate and/or professional schools.

Weekly Seminars – the seminars are hosted by faculty members of the Redox Biology Center will focus on research in their laboratories.

Biweekly luncheon seminars on ethical and social issues in science, careers in the life sciences and other interdisciplinary topics.

Poster symposium and farewell luncheon (August 8).

Voluntary participation in scheduled social events including a program picnic, tours, sporting events and other activities.

PARTICIPATION SELECTION AND LABORATORY PLACEMENT PROCESSES

Evidence of academic achievement is important. Candidates are also evaluated on the strength of their personal statement and letters of recommendation. Preference is given to students who will have completed three years of full-time undergraduate study by the summer of 2012.

Other basic selection criteria include evidence of preparation to carry out research in areas of interest; evidence of

communication and teamwork skills; strong interest in postgraduate studies in the life sciences; academic credentials in keeping with requirements for admission to graduate programs; and breadth of interest as evidenced by the student's course of study and extracurricular activities, hobbies or life experiences.

Every effort is made to ensure that students accepted into the NSF/DOD-REU are placed in a research laboratory whose interests match those of the student. Applicants should bear in mind that the University of Nebraska faculty mentor makes the final placement decision. It is not always possible to place everyone with the mentor of their choice.

All students accepted into the NSF/DOD-REU will be offered placement in a residence hall on the Lincoln campus. Students may decline this offer and make separate arrangements to live off campus. Students are cautioned that while there are program funds available to cover housing costs, these are restricted to dorm expenses and will not be provided for any off-campus living arrangements.

STIPENDS, TRAVEL AND LIVING ALLOWANCE

Students will receive a stipend of \$5,000 for the ten-week summer program. In addition, the program will provide double-occupancy modern dormitory accommodations, a full meals program, parking on campus (as needed), and access to the University Health Care and Recreation Centers. A travel allowance may be available for those students who are not able to drive to the University of Nebraska - Lincoln campus.

Link: <http://redoxbiologycenter.unl.edu/summer>

Categories: Basic Science, Biochemistry, Chemical Sciences

Audience: Novice Researcher, Student Researcher, Undergraduate, Undergraduate Researcher