Guidelines for CEED Student Research Grants

I. CEED Student Research Fund Characteristics and Objectives: CEED Student Research Grants support undergraduate research in the sciences by providing funds for the purchase of research materials and supplies. Research proposals must be written and submitted by the student in consultation with a faculty mentor. Proposals may include more than one student. Proposals must be submitted by the posted deadlines (twice per year, typically in November and March). **Budget requests must be limited to a maximum of \$600.**

For these awards, research topic should fall within the Marine and Natural Sciences discipline and the Council on Undergraduate Research's definition of undergraduate research will be used: Undergraduate research is an inquiry or investigation conducted by an undergraduate that makes an original intellectual or creative contribution to the discipline.

After each submission date, each proposal will be reviewed by RWU faculty. CEED Grant proposal review will be coordinated by the CEED Director. Students may be asked to revise their proposals prior to receiving funding. Proposals will be accepted for funding based on their scientific merit, feasibility, probability of success, quality of the proposal, and academic records of the student researchers. Acceptance will be announced by Dec 15 or May 1.

II. Student Eligibility: Any first-year, sophomore, or junior in good academic standing (GPA > 2.75) and interested in conducting research in the sciences can apply. Seniors who have made significant progress on a research project may apply, but they must include with their proposal a detailed report of all previous results demonstrating that significant progress has been made and that the project can be completed prior to graduation.

III. Faculty Mentors: Faculty mentors will help the student conceive the project, suggest appropriate background reading and references, design experiments, and ensure that the research is scientifically sound.

While faculty mentors should not "rewrite" student proposals, they should carefully review student proposals prior to submission. It is appropriate for the faculty member to recommend changes in experimental design, proposal organization, and/or suggest additional references. It is the responsibility of the faculty mentor to ensure that the proposed research is scientifically valid and feasible at RWU (in terms of equipment, expertise, and time).

Mentors should ensure students complete laboratory safety training prior to starting research. In addition, mentors are expected to provide training for students who require the use of specialized pieces of equipment and are expected to be available to directly oversee students working in the laboratory. Faculty mentors also should ensure that student progress reports and final reports are submitted on time. **IV. Proposal Outline**: Each proposal must adhere fully to the following:

- 1. Standard Cover Page and Budget Page
- 2. Detailed information about the research project including:
 - a. description of the project;
 - b. brief review of previous studies directly relevant to the proposed research;
 - c. specific objectives and anticipated outcomes;
 - d. research methods/procedures;
 - e. laboratory space and/or equipment required to complete the project;
 - f. rationale for how funds requested support stated objectives;
 - g. timeline for completing research; and
 - h. cited references.

3. The proposal must state clearly whether or not living subjects are involved in the proposed research. If they are, full description of their role in the research must be provided and written approval from the Animal Care Board must be obtained.

4. The proposal should include links to MSDS sheets for any hazardous materials utilized in the research and an explanation of the disposal of these materials.

5. The proposal must state whether or not it involves continued funding for an on-going project. An application that requests continued funding of a grant that has been awarded by CEED or other funding agency in any previous year must be accompanied by a detailed report of all previous results. This applies even if the previous grant was held by students other than the current applicant(s).

6. The proposal must state whether or not the applicant is a current recipient of funds from another source or has applied to another source for funding of the proposed project. In the event that the project is awarded funding from an alternate source, the equipment or supplies covered by the other grant will not be supported by the CEED funds, although non-duplicated budget items may be considered without conflict.

7. A description of the qualifications, including current *curriculum vitae*, of the student applicant(s) and, where applicable, any additional participants.

- 8. A budget including reliable estimates of itemized project costs funded by:
 - a. CEED Student Research (\$600 maximum)
 - b. Any other specified source.
 - (Note: Funds will not be allocated for summer housing, student stipends, or travel)

V. Application Timeline: There deadline for Summer or Fall proposals is March 29, 2024.

VI. Requirements for Grant Recipients

Students must complete the RWU EH&S MNS laboratory safety course from <u>this EH&S page</u> prior to starting research. If living subjects are involved in the research, the Human Subjects Review or Animal Care guidelines must be followed. This requires submitting a written proposal to and receiving approval from the appropriate board prior to starting the project.

Students will work in consultation with their research mentor to coordinate purchase, and with the assistance of Kelly Meyer, MNS/CEED Administrative Assistant. Equipment and supplies purchased with CEED Grant funds are ultimately the property of the University and the disposition of these, upon the completion or termination of the research activity, is up to the University.

A progress report will be due the last day of classes of the semester following the award. This progress report will include any products (presentations, publications, patents, etc) and a summary of the results, specifically addressing the aims stated in the research proposal.

Additionally, students will present at least one 10-12 minute oral presentation at an MNS Seminar event, at RWU SASH, and/or other official RWU student research presentation venues.

Funds will be used solely for the accomplishment of the project as approved. Any unused funds will be returned to the CEED Student Research Fund by the date stipulated in the award letter. In addition, if the conditions of the grant are not fully met, the awarded funds will be returned by the recipient to the CEED Student Research Fund.

Acknowledge the CEED Student Research Fund in any presentation or publication of the research: "This work was supported in part by the Roger Williams University Center for Economic and Environmental Development Student Research Fund."