

Extension Award

PROBe program, stage II

2021/2022 GUIDEBOOK **Table of Contents**

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Overview

The *Extension* Research program was created by the University of South Carolina Aiken department of Biology and Geology to enrich the academic experience of our undergraduates in biomedical disciplines. It represents stage II of the Passport to Research Opportunities in Biomedicine (PROBe) program. By providing access to faculty mentoring relationships and a professional research experience, PROBe enables students to creatively explore their interests in biomedical research at a more in-depth level than can be attained in the classroom. Students in their second or third year of biomedical research (primarily sophomores and juniors) are eligible to apply for funding through the PROBe *Extension* award program. *Extension* awards are available to any student with at least one year of biomedical research experience, regardless of previous PROBe funding. Graduating seniors are not eligible to apply for the *Extension* award.

The PROBe program is administered through the USC Aiken Center for Research Excellence (www.usca.edu/center-for-research-excellence).

Each *Extension* Award will be funded for up to \$4000 to fund his or her research project. Competition for this award will be through submission of a research, scholarship, or creative project proposal developed in collaboration with a USCA faculty mentor. Selection is based on the project's educational and intellectual merit, the potential impact of the project, and the student's previous academic success.

There will be a call for proposals each fall semester, with applications **DUE 5 November 2021**. Awards will be announced in December and have a start date of January 1. All funds must be spent by August 31.

Eligibility

Student eligibility:

- Area of interest: any related to biomedicine as determined by the PROBe committee
- any academic year (primarily will be juniors and seniors)
- undergraduates ONLY
- minimum GPA of 3.0
- good standing with the University (no academic or judicial probation)
- must not hold a *Primer* award
- Magellan Scholars are encouraged to apply; however, adjustments will likely be made to the award amount

Mentor requirements:

- USC Aiken faculty members
- The involvement of multiple mentors is encouraged when additional expertise is valuable or appropriate for the project.

Acceptable projects include:

- mentor-designed projects (students can work directly on a mentor's project and do not have to provide a separate question/topic)
- student generated projects or questions
- any combination of the above

Funds Available

Applicants may request up to \$4000 with a project period of up to 8 months (1 Jan 2022– 31 Aug 2022)..

- *Extension* awards may be used to purchase supplies and student salary for the research project.
- *No cost share or matching funds are required.*
- Materials and supplies purchased through this award remain USCA property (*NOT the student's property*).
- Students may receive credit while receiving a stipend/salary UNLESS this is not allowed by your department. Check with your department for their policy.

➤ **Allowable Costs**

- Undergraduate student salary (including fringe benefits)
- Project supplies (computer software is permitted but NOT computers or peripherals) – *all purchases remain USC Aiken property*
- Student travel
- Participant incentives

➤ **Unallowable Costs**

- Faculty or graduate student compensation
- Tuition for non-research related programs
- Salary for anyone other than applicant(s)
- Alcoholic beverages

Application process

- Projects can be part of large, on-going research (questions do NOT have to be student generated).
- The student must be the primary author of the proposal but it is expected (and required) to work with his/her mentor during the proposal & budget writing process.

Proposal or project description

- Centered at top of first page, include your project title. Under title: student's full name, major, mentor's name, and department.
- Page Limitations: May not exceed two (2)* single-spaced pages. References may be on an additional page and are not included in the two page limit.
- Format:* Use a readable font (Arial, Helvetica, Times New Roman, etc) and a font size of 11 points or larger with 0.5 inch margins (top, bottom, left, and right) for all pages.
- A clear, concise description of the proposed project, including the following required sections, section titles required; the following order is suggested but may be altered for narrative flow:
 - Background (OR Relationship to previous research, Knowledge in the field, or Literature Review)
 - Research question (OR Research statement)
 - Project goals and objectives
 - *Project design (OR Methodology)
 - Project timeline
 - Anticipated results/Final products and Dissemination (Dissemination refers to how you will share your work)
 - References cited (OR Works cited, Bibliography, etc) (*Not included in page limit; can be an extra page*)

***Project Design:** This is the most important section of your proposal. Please provide sufficient detail regarding the steps and tasks of your project for the reviewers to evaluate the anticipated project plan and your understanding of it.

Supporting materials (**REQUIRED**):

- An itemized budget and justification of anticipated expenditures (MUST use budget form provided on the Center for Research Excellence web page); the budget is in addition to the two page proposal. Please see below for additional budget details. Total salary must include fringe benefits.

To complete and submit proposal:

NOTE: Do NOT scan your proposal

- Create **ONE** Word or PDF file of proposal and supporting materials. File must be named after the student, as follows: "Last Name_First Initial". For group projects, name the file: "Last name student 1_ Last name student 2."
- Go to <https://www.usca.edu/center-for-research-excellence/cre-program/usca-inbre/>
- Click on "Apply for USC Aiken INBRE Funding" button
- Complete application form and upload proposal file.

ONCE AWARDED:

Extension Award winners are required to

- 1) Present their results at USC Aiken's Scholar Showcase
- 2) Attend Summer Scholars Institute weekly workshops
- 3) Present their results at USC Aiken INBRE Summer Symposium

FOR MENTORS

- 1) Please email William Jackson (billj@usca.edu), April DeLaurier (aprild@usca.edu), or Nathan Hancock (nathanh@usca.edu) if you have any questions.
- 2) *Extension* proposals are not submitted or managed through USCeRA
- 3) Awards will be made available to the student through existing departmental/school accounts.
- 4) **Mentors and mentees are strongly encouraged to participate in the Summer Scholars Institute.**

Steps for successful submission of the *Extension* proposal:

- 1) Although your input is expected, please refrain from writing the proposal for the student. It is unfair to those faculty mentors who do require their student to write his/her own proposal.
- 2) Proposal submission will be through the website (see link above). The completed proposal should be attached as a single Word or PDF document.
 - The document should contain:
 - i. Student's project description
 - ii. Budget form
 - This document should be named: Student last name_first initial: Doe_J; for groups: Doe_Smith_Jones
 - Please do not scan. Proposals are acceptable in Word.
- 3) Once received, both you and the student will receive a confirming email.

Group Projects

A small team of 2-4 students may be considered but will only be eligible for up to \$4000 total. For group submissions:

- Describe the group project in ONE “Proposal or project description”
- FILE name should be Student 1 last name_Student 2 last name_etc
- Additional pages are permitted for proposal; 1 page per additional student (2 students=3 pages; 3 students=4 pages; etc.)
- Under the section “Methodology or project design,” clearly state duties and role of each student (if doing same, state such); provide justification for size of group
- For budgetary reasons, the maximum award for group projects will be \$4000

Projects involving vertebrate animals, human subjects, or biohazards

For research projects involving vertebrate animals:

- *Extension* proposals may be submitted prior to approval by the Institutional Animal Care and Use Committee (IACUC).
- Include a statement within your project description/timeline that you are submitting for IACUC approval and will comply with all rules, regulations, and training requirements.
- NOTE: Projects involving animals must maintain compliance with regulations at all times or funding will be revoked.
- For more information, mentors may contact the Chair of the USC Aiken IACUC: Dr. April DeLaurier (aprild@usca.edu).

Beginning September 1, 2021, SC INBRE will no longer support research involving human subjects.

Due to the difficulties in obtaining NIH approval for research involving human subjects and the extended time to obtain this approval, SC INBRE has determined that it will no longer provide summer funding for research involving human subjects.

For research projects involving biohazardous material:

USC Aiken is required to follow strict state and federal guidelines related to the use of biohazardous materials. Student proposing the use of biohazardous materials must receive training prior to initiating the project. Contact William Jackson (billj@usca.edu) to arrange a training session.

Faculty working with biologically regulated materials must have a protocol approved by the Institutional Biosafety Committee (IBC). This includes all work with recombinant DNA, cell lines, and regulated plants. For more information about this requirement, contact William Jackson (billj@usca.edu).

For each of these situations, the student/mentor must have the appropriate approvals before funding will be made available.

Application Review Process

Applications from eligible students that are complete and responsive to these guidelines will be evaluated for merit by the Review committee. The Review committee will provide a prioritized list of recommendations for funding to the Center for Research Excellence, based on the quality of the proposals per the review criteria. Awards will be made based on review committee recommendations and available funds.

The following criteria will be used to assess proposals (a copy of the review rubric can be found on the PROBE webpage):

- Overall merit
- Student's clarity of explanation
 - Research topic or question
 - Project plan or how the question is to be answered
 - Significance or impact of project
 - Writing style
 - Timeline
- Student's readiness for project and/or the plan for gaining needed skills
- Student's anticipated plan for sharing the project results (examples: presentation, publication, exhibit, performance, etc)

Applicants and mentors will be notified via e-mail of award decisions. See webpage for announcement date.

Award Administration

Extension awardees are **required** to:

- 1) Present their research at USC Aiken's Scholar Showcase **and**
- 2) Submit a 1-page research report to the Center for Research Excellence (guidelines: <http://web.usca.edu/center-for-research-excellence/cre-program.dot>). The research report is due 1 month after completion of the project or prior to graduation.

Extension awardees are **encouraged** to:

1. publish in professional, peer-reviewed journals
 2. present, perform, or showcase work at professional, discipline specific conferences, meetings, and presentations
- **Expenditures** –Established University procedures must be followed in expending project funds. Special attention should be paid to policies and procedures relating to Purchasing, Travel, and Personnel. Compensation (of any form) for faculty and graduate students is not allowed. **All grant overages are the mentor's responsibility.**
 - **Compliance Issues** - If the project includes the use of humans as research subjects (including surveys) or vertebrate animals, the faculty member is responsible for ensuring IRB or IACUC approval (see page 5). The faculty member is also responsible for compliance with USC Aiken, state and federal requirements relating to the use of biohazardous materials. Student proposing the use of biohazardous materials must receive training prior to initiating the project. Contact William Jackson (billj@usca.edu) to arrange a training session.

- Publications and Presentations - Any publications or presentations produced as a result of this award must contain an acknowledgment of USC's support such as: "This project was supported by grant P20GM103499 (SC INBRE) from the National Institute of General Medical Sciences, National Institutes of Health."