

## Bucknell Program for Undergraduate Research – Summer 2020

The Bucknell Program for Undergraduate Research is a University-wide program providing summer awards to undergraduate students to conduct research, engage in other scholarship, or undertake creative projects with faculty mentors. We invite proposals that reflect the broad goals of the Program for Undergraduate Research: to prepare and train students for scientific, scholarly, and creative work by engaging, hands-on, in such scholarly endeavors under the collaborative guidance of our faculty members.

**ELIGIBILITY:** All full-time, undergraduate Bucknell students are eligible to propose projects under the guidance of current Bucknell faculty. Awards are not available for the summer following the senior year, although students in 5-year degree programs will be eligible during the summer after their 4th year. While applications from previous PUR recipients will be accepted, priority will be given to students who have not previously won a PUR grant.

**SELECTION:** Awards are determined on a competitive basis by faculty selection committees. Science, technology, engineering and mathematics faculty will review applications in those fields. Applications from other fields will be reviewed by a committee of faculty from the arts, humanities, social sciences, and management.

**AWARDS:** Students will receive \$400 per week for up to ten weeks of full-time scholarly work in the form of three fellowship stipend payments. They will also receive on-campus summer housing for the duration of their project. Recipients may not also earn academic credit for the research. Throughout the duration of the research project, students may not undertake additional coursework or employment that would encumber their time beyond 10 hours per week. Faculty mentors will receive stipends of \$500 for each of up to two student mentees.

**REQUIREMENTS:** The project should cover a period of at least eight weeks. Projects of shorter duration will be considered on a case-by-case basis. Students are required to submit an abstract and short reflection on their scholarly work by August 15, 2020. Faculty members are expected to evaluate their students' performance in the middle and at the end of the project. In addition, students and mentors are required to participate in the annual *Kalman Research Symposium* to be held in spring 2021 at which students present the results of their collaborative efforts. Details about the Symposium will be communicated via email in early spring semester. This public exposition, in the form of a poster session or an oral presentation, also gives the larger Bucknell community the opportunity to meet the program participants and see the results of their summer's work.

**APPLICATION:** The application can be found at: <https://www.bucknell.edu/academics/undergraduate-research-opportunities/program-undergraduate-research>

**DUE DATE:** Proposals for the summer of 2020 are **due by Tuesday, February 4, 2020** at 11:59 p.m. ET. The selection committees expect to notify applicants of their decision before spring break.

# **Program for Undergraduate Research at Bucknell**

## **Application Instructions**

PUR grants are open to all disciplines. Applications may propose to conduct research, engage in other scholarship, or complete a creative project.

The application is the responsibility of, and must be written by, the student proposing the project – not the faculty member with whom the student will collaborate. The proposal must include a clear research question, problem, or creative undertaking, as well as a clearly-defined process or method by which the project is to be undertaken. The proposal should demonstrate that the project can be completed within the proposed duration. A successful proposal will demonstrate an intellectual collaboration between the student and faculty member in both the formulation and conduct of the project. Such proposals should also demonstrate the faculty and student will be in close geographic proximity throughout the summer to allow frequent face-to-face meetings.

The proposal, as written, should be understandable to a general audience, including those whose area of specialization is outside that in which the proposed work is to be conducted. It is important that each component of the application (see below) be fully completed, though the segments of the project proposal (II.A-E) may appear in a different order if the student so chooses. Grammatical lapses and spelling errors will negatively influence the committee's impression of the proposal.

### **Part I: Cover Page**

1. Title of the project
2. Student name and class year
3. Student BUID
4. Student's major(s) and minor(s)
5. Student's email address
6. Student's cell phone #
7. Faculty mentor's: a) name; b) department; c) email address
8. Signatures (or other affirmation of authorship and faculty approval) of both the student and faculty mentor

### **Part II: Student's Project Proposal**

(In total, the student's proposal should not exceed three pages, single-spaced, using 12-point font and one-inch margins.)

#### **A: The research question, problem, or creative undertaking**

The research question, problem being addressed, or aim of the creative endeavor, must be clearly stated, as should any anticipated answers, solutions, discoveries or products. Cite relevant literature as is appropriate.

#### **B: Project description, including methods and anticipated outcomes.**

Explain clearly how the research will be conducted or the project carried out, citing relevant literature where appropriate. The feasibility of the proposed methodology must be evident. Applicants are advised to describe where the work is to be performed, indicating the dates or

frequency of any use of off-campus sites. The research facilities or studios should be described and appropriate for the kind of work to be done. A recognition of time constraints is important in designing a project that can achieve meaningful results during the course of the summer. Regardless of what is proposed, a logical connection between process and outcome must be evident to the selection committee.

### **C: Research Value**

Articulate the value of the endeavor. What is the significance of pursuing an answer to the question, finding a solution to the problem, exploring a neglected area of scholarship, or engaging in a creative work or artistic practice? Explain why this undertaking is a valuable investment of time and resources. Simply gaining experience in a given field will not be evaluated as highly as more specific goals or outcomes for the proposed project.

### **D: Sharing the Results**

Describe how the results, outcome or product of the project will be shared or distributed in addition to the Kalman Research Symposium. Examples include a professional conference presentation, manuscript, paper, short story, book chapter, or collection of poems for publication and the place(s) it will likely be published or in which publication will be sought. For an artistic piece or production, describe how and where it will likely be displayed, produced, or performed.

### **E: The Faculty Mentoring Relationship**

Explain the anticipated contact and communication between student and faculty mentor. The selection committee wishes to promote a high degree of intellectual engagement between student and mentor, and will look for evidence that such a relationship will exist. Communication is expected to be both regular and substantive throughout the project. Project proposals in which the student and faculty member are in different sites and/or are communicating, for example, only by e-mail, are strongly discouraged. The frequency with which the student and mentor interact, and the general availability of the mentor will be important factors in selecting summer fellows.

## **Part III: Faculty Endorsement**

**(Written and signed by the faculty member and submitted separately from the student's proposal. Endorsement letters should be sent to the email address below as a pdf attachment on or prior to Feb 4, 2020.)**

The faculty member who intends to collaborate in the proposed project should submit, under separate cover, a confidential realistic description of his/her involvement in the formulation and implementation of the project. This should include a detailed description of the method of the collaboration with the student **including the nature and frequency of their interaction over the period of the project** (including the number of weeks during the summer the faculty member expects to meet with the student face-to-face).

The faculty endorsement should conclude with a brief description of:

- a) how the project relates to his/her scholarship,
- b) how the student is particularly qualified to undertake the proposed work,
- c) and how the faculty member perceives the project will benefit the student's education.

**Note: If the proposed project involves human or animal subjects, it is the faculty advisor's responsibility to ensure that the student obtains the requisite IRB or IACUC approval and to support the student through those processes.**

## **Proposal Submission**

Please submit proposals to Gretchen Fegley, Office of the Provost, [gfeley@bucknell.edu](mailto:gfeley@bucknell.edu). Applications will be accepted electronically, as a pdf attachment to an email.

The submission deadline for summer 2020 is Tuesday, **Feb. 4, 2020** at 11:59 p.m. ET. Applicants can expect to be notified of the selection committee's decision before spring break.

## **Further Information**

Contact Margaret Marr, Director for Undergraduate Research and Fellowships, x71979, [Margaret.Marr@Bucknell.edu](mailto:Margaret.Marr@Bucknell.edu) or Gretchen Fegley, Office of the Provost, x73655, [gfeley@bucknell.edu](mailto:gfeley@bucknell.edu)

Sample applications and do's and don'ts can be found at <http://purapplications.blogs.bucknell.edu/>.