



50 University Heights North, Ste 017
802.656.5533 FOUR@uvm.edu

DEADLINE: March 11, 2022 5:00pm

SUMMER UNDERGRADUATE RESEARCH FELLOWSHIP PROGRAM

APPLICATION INSTRUCTIONS & FORMS PACKET

The Summer Undergraduate Research Fellowship (SURF) program provides UVM undergrads with funds to spend their summer working on research, scholarship, or creative projects. There is one application for several different awards, each includes a \$4500 stipend paid directly to the student for their personal expenses and a separate amount for research expenses that the student and their faculty will manage.

The application must be submitted through the Microsoft Teams Form, some parts are filled out directly on the Teams Form and parts are uploaded files. All uploads must be PDFs attached to your Teams Form. Due date is **MARCH 11, 2022, at 5:00pm**. Your Faculty Sponsor Recommendation is due by that time as well, but it is emailed directly to four@uvm.edu.

If you have any issues with the Teams Form, please contact the office directly (802) 656-5533.

Because of the volume of applications, incomplete applications will not be reviewed and late applications will not be accepted. This means ALL parts of the application must be provided by the due date and time.

STUDENTS MAY ONLY RECEIVE ONE LARGE, STIPEND-BEARING AWARD PER SUMMER FROM ANY SOURCE AND MAY ONLY RECEIVE TWO MAJOR AWARDS (SURF AND SIMON) FROM THE FOUR OFFICE WHILE AT UVM.

The application includes:

- Part 1. Student information (Teams Form)
- Part 2. Faculty information (Teams Form)
- Part 3. Awards list (Teams Form; indicate which awards you are applying for)
- Part 4. Budget Worksheet (upload fillable pdf worksheet)
- Part 5. Learning Outcomes & Skills Development (Teams Form)
- Part 6. Additional Uploads section (upload as pdfs)
 - UVM Transcript
 - Research Compliance Sheet; IRB, IACUC, IBC, Travel, etc. (fillable pdf checklist)
 - Descriptive Proposal (pdf)
 - Personal Narrative (pdf)

Part 1. STUDENT INFORMATION:

By supplying your net id and 95# you are signing the application and asserting that this is your own grant proposal, not taken from or written by your faculty mentor. Your faculty mentor may assist in editing, but any part of the application that is not of your own creation must be properly credited/cited. You will be asked to attest to your authorship at the end of the Teams Form as well.

Graduation date: We cannot provide awards to students graduating in May.

Project Title: A **brief**, specific description of the research. The title, by itself, should give a clear indication of what the project is about.

Dates of Project: These awards are typically for a 10-week period and may be no less than eight weeks of full-time work; the dates provided reflect the duration of your summer project, not necessarily the larger research plan.

Location of Project: For safety reasons you need to list exact locations where you will do your work. Foreign locations will require additional registration through GoAbroad; laboratory locations (room number and building) will require appropriate training (reviewed by Risk Management and Safety) for tools and/or safety devices.

Part 2. FACULTY INFORMATION

A UVM faculty member must agree to support your research, meaning that they are responsible for any training or ethical oversight appropriate to your discipline, agree to help you with University policies and protocols, etc. They must be available in person or consistently via Microsoft Teams, phone, or email during your project.

Some students will be working under direct oversight of a graduate student or postdoc (provide their name on the Teams form too), but you must still have a faculty member who bears ultimate responsibility for your oversight. Due to the limited number of summer awards, faculty will not be able to sponsor more than one student who receives SURF funding -even when they have a graduate student overseeing the direct day-to-day.

Provide the Faculty Sponsor Recommendation form to your faculty member (or provide them with the link) and gently remind them of the due date as it approaches. They will submit directly to four@uvm.edu

NOTE: Your faculty mentor need not be from UVM when research is not performed at the university. In this circumstance, you still need a UVM faculty to act as a "character" reference (the name you provide on Teams Form) AND list a person at the other institution with whom you are working. The UVM faculty will still fill out the Faculty Sponsor Form and the other person will submit a letter on their institution's letterhead explaining their knowledge and supervision of your work for the summer.

Unsupervised/Un-sponsored students will not be funded.

Part 3. AWARDS LIST

Which award(s) is/are right for you? Follow these guidelines (and indicate selections on Teams Form):

- a. **All students**, regardless of major or college, are considered for one of 15-20 **Summer Research Awards** and one of five **Brennan Fellowships**. The top proposal from each field of study (life sciences, physical sciences, social sciences, arts, etc.) are named Brennan Fellows, our highest SURF honor.
- b. If you are a student who advances diversity in the life sciences (underrepresented racial groups, LGBTQ+, first generation) who is working with a CALS faculty member, check the **CALS Life Science Program** box. You yourself need not be a CALS student or have prior research experience.
- c. Honors College students only: If you are a student in good standing (not on academic probation) and your project has an environmental theme or focus, check **Carl Reidel**.
- d. If you are doing research on/about Vermont, indicate the **Green Mountain Scholar**.
- e. If you are working with a faculty member affiliated with the Gund Institute for Environment, check the **Gund** box.
- f. If you are performing humanities scholarship or working in an artistic medium, regardless of

your major, you should check the **Humanities Center** box.

- g. If you are researching systems of oppression and the intersections between facets of identity including, but not limited to, race, gender, sexual orientation, ability, class, nationality, and colonization, check the **Social Justice** box. *Students holding marginalized identities are strongly encouraged to apply.*
- h. If your work uses special collections, archives, museum collections, etc. then check **Special Collections**.
- i. ****NEW THIS YEAR**** There are additional funds provided by the US Department of Agriculture for a new award aligned with food systems research, **Food SURF**. The Food Systems Research Center at UVM is offering funding opportunities for these 10 awards.

Part 4. BUDGET WORKSHEET (upload fillable pdf worksheet):

Total Budget refers to all your research expenses, but not your stipend. Only totals for each major category are required here. Round to the nearest dollar.

This budget page should include a list of the major items within each category and a justification of any unusual items that you plan to use FOUR funding to cover. Again, round to the nearest dollar and provide the grand total. Show exactly how you would propose to use the FOUR research money. Also list any other sources of support (e.g., other grants, mentor support, etc.) that will cover additional expenses. In this way you show an understanding of the total expenses for your project, but also that should you win an award from this competition, you will be able to pay for the project you proposed.

SURF awards have a budget limit of \$500 for research expenses UNLESS you are applying for Food SURF, which has a \$1500 limit.

Note: The award usually does not fund the purchase of personal computers. Any software requested must not be available through UVM or the department. Purchase of soft/hardware, or any other equipment will become the property of the faculty's department once the project is complete.

Save the fillable pdf worksheet and upload to the Teams Form.

Part 5. LEARNING OUTCOMES & SKILLS DEVELOPMENT

Undergraduate research is a learning experience that builds critical thinking. As such, we expect you to set some goals for your summer project. Use Bloom's Taxonomy (https://davenport.libguides.com/learningoutcomes/action_verbs) for inspiration and provide three learning outcomes. The two skills you expect to develop may be specific to the methods you are employing. Provide these five things on your Teams Form.

Part 6. ADDITIONAL UPLOADS Make sure every file has your last name and what it is.

- 1) Budget Worksheet (addressed above)
- 2) Transcript
 - Your "Official Transcript" can be obtained through MyUVM under the "Registrar" tab. Please send your transcript to yourself and upload to the Teams Form. Students must be in good academic standing. If you feel your GPA does not reflect your ability to perform the project you propose, address this in the Personal Narrative section. An upward trajectory or steady improvement is valued more than a declining or an uneven one.

- 3) Research Compliance Sheet: IRB, IACUC, IBC, travel, etc. (fillable pdf checklist)
- a) The checklist shows some research policies with which students must comply. If your research involves any of the things listed you must indicate it by checking the appropriate box. Do you already have the necessary IRB, IACUC, IBC, UVM Safety Training, Radiation or Laser Safety training, travel authorization, or other necessary approvals?
 - i) If yes, then **attach** the approval that clearly indicates your name as part of the protocol or showing your training.
 - ii) If no, then explain where you are in the process.
 - iii) If there is international travel: Please contact the office with the location and approximate dates so that we may enter your plans into GoAbroad. You will need to complete the GoAbroad process prior to receipt of funding and departure. Please note: due to rapidly changing conditions, international travel may not be permitted to your requested destination.

NO funding will be given prior to the receipt of the necessary approvals.

- 4) Descriptive Proposal (max. length 3 pages, single-spaced, 12pt font; upload pdf file)

Write to an educated lay person not necessarily in your discipline. Reviewers are not always from your specific discipline. If someone with an advanced education broadly in your category of research (eg. life sciences, humanities, etc.) cannot understand what you are going to do and how you are going to do it, then it is doubtful you will win an award. Excessive jargon will also diminish your chances.

This description should be **written by the student** and contain the following information (not necessarily in this order). For some disciplines you may also be testing a hypothesis; use your judgment on whether to include.

- a) One-Paragraph Abstract (includes thesis statement or statement of purpose): 100 words focusing on the importance of the proposed project. The abstract should demonstrate the position of this project within your discipline.
- b) Body of Proposal: Your project must have a clearly defined purpose – a statement of what you want to accomplish during the summer –note an obtainable outcome within the **10-week time frame even if your plan is to continue the research beyond the summer**. For projects in the sciences, the thesis should typically translate into a testable hypothesis or set of hypotheses to be tested or explored. If this project is part of a larger body of work, either as part of a group or your own thesis, then explain what the goal is for your summer's work.
- c) Literature Review: A brief review of the current, pertinent literature in your field showing your command of the existing scholarship and conveying again how your project fits within this field.
- d) Methods: A summary of the procedures to be used and the importance of each in achieving the project objectives. This section should include reference to the equipment and facilities that are available for the project, the proposed schedule of major steps, and the estimated duration of the overall project (timeline). In either this section or in the body of the proposal, you should tie in the items you requested in your budget.
- e) Outcomes: At least a short paragraph on your projected outcomes for the summer, explain your goal for the summer with possible next steps.

- 5) Personal Narrative (pdf)

Write a short description of your personal trajectory (where you've been) and goals (where you want to go) and how this project will help support these goals. Shortcomings in GPA may be addressed here.

PLEASE NOTE: If you are applying for either the **CALS Life Science Program** or the **Social Justice Research Award** you must add an additional paragraph discussing how your life experiences contribute to the social, cultural, and intellectual diversity on campus, and (for CALS) in the life sciences.

Submitting your application materials

All your materials are uploaded through the Microsoft Teams Form (find the link at: <https://www.uvm.edu/four/undergraduate-research/internal-undergraduate-research-funding>).

In rare instances, hard copy applications may be unavoidable. If that is the case, then hard copies must arrive in the FOUR office (50 UHN, Suite 17) NO LATER THAN 12:00pm (noon) on the due date.

COVID-19 DISCLAIMER

We cannot know what the research conditions will be at the start of your summer project. You should write your proposal as if you will be able to gather your data, use your lab space, interview people, travel, or any other optimal research condition. You are proposing your best, realistic plan at the time of submission. Plans change and this is understood. If you win a grant, we may ask you to create a contingency plan based on the conditions at that time.

Criteria for funding of summer research projects

SURFs are awarded to students who have an interesting research question, a well- conceived plan, and clear faculty support. Students are expected to focus full-time on their research project for 8-10 weeks during the summer. We require that you forego summer session enrollment for that period (beyond the 1-credit SINT course that will be required).

Successful applicants will show promise of a quick start (meaning all trainings are completed and research protocols are expected by the start of the summer) and potential to complete their project within the proposed timeline. If projects are part of a larger program or thesis work, then it must be clear to the reviewers that the summer will be spent on specific tasks that otherwise would be difficult to accomplish during the academic year.

Below are additional criteria that reviewers prioritize when evaluating proposals:

1. Students must be in good academic standing. Generally a 3.00 GPA is needed to be in strong contention for these awards. Shortcomings in GPA must be addressed in the personal narrative. An upward trajectory or steady improvement is valued more than a declining or uneven one.
2. Academic record (courses taken), particularly how these show the student's ability to complete the proposed project. Students should highlight courses that are applicable to their projects (e.g., a methods course, foreign language training, etc.).
3. Preference given to students with some past experience in the area of research and with their faculty sponsor; the exceptions to this rule are the CALS Life Science Program which strongly encourages students who may be new to research, and the Food SURF.
4. The proposal is judged on its overall merits and strengths (abstract, thesis statement, literature review, objectives, methods clearly defined, and outcomes clearly discussed). The student's role in a larger project must be clear.
5. The proposal must be written by the student applicant. While it is important that the faculty sponsor review and advise in the writing of the proposal, it must be clear that the student has written the proposal, understands the project, and explains it clearly. Think of your faculty as an editor, not a co-author.
6. The letter of support from the faculty sponsor impacts the decision of whether or not to fund a proposal and must include how the faculty knows the student applicant, for how long, and in what capacity. Faculty who are sponsoring more than one student should note that we will fund only one student per faculty member.
7. Students must be degree-seeking undergraduates at the time of the project to receive a grant. You may not graduate the spring prior to application.
8. Previous/Current Mini Grant funding does not affect your chances for the summer research funding, but those who have received a prior SURF will be given a lower priority. You may only receive two of the major awards from FOUR (involving \$4000+ stipends) during your undergraduate career.
9. Students who win other substantial university summer awards (APLE Summer, Binter, Barrett, departmental research awards, etc.) will be expected to choose either the FOUR award or the other one, so that additional students may benefit from summer research opportunities.

Obligations of Accepting Funding

The faculty sponsor, by providing a letter of support, agrees that it is their responsibility to:

- Ensure that the project is carried out as proposed. Usually, significant changes must receive prior written approval from the Office;
- Comply with the terms and conditions of the award;
- Comply with relevant University administrative and academic policies and procedures; of particular relevance are University policies governing accounting, safety, human and animal subjects, travel, patents, copyright, ethics, and conflict of interest.

The student, by providing both netID and 95# on the application agrees that as awardee your responsibilities are to:

- Comply with relevant University administrative and academic policies and procedures for accounting, travel, safety, and ethics, among others;
- **Submit a final report** to the Office (generally within 30 days of project completions in the fall semester) and a thank you note (if a Brennan recipient);
- Present your research at the Annual **Student Research Conference** in April of the following year;
- Any future presentation or publication that incorporates the work performed during an award must acknowledge the award by name (eg. Brennan Family Summer Fellowship, Gund Institute Summer Research Award, etc.);
- Recipients of named awards (generally all those other than the Summer Research Award) may have additional obligations to the funding agencies; these tend to be minor (eg., a thank you letter);
- You will be notified of all the requirements for accepting summer funding once final decisions are made and the Office will work carefully with the student throughout the funding period to assist with these obligations; all students take a one-credit SINT course during the summer that will involve several elements of participation spread throughout the summer.

The Sponsor and Student agree that any scientific data that are produced in the course of carrying out the funded research are the property of both the faculty sponsor and student. Neither should publish the data without the co- authorship of the other. Original research notes, raw data, and electronic files must stay in the laboratory with the faculty sponsor. Copies of research notes may stay with the awardee.

The copyright, ownership and authorship of all creative and/or artistic works shall remain with the author (i.e., the student) of said works; unless it is produced as a collaborative project in which case the authors shall share authorship, ownership and copyright.

Please refer to the University of Vermont's policies on:

- Research: <https://www.uvm.edu/policies/z-policy-index> (filter by "Research")
- Travel: <https://www.uvm.edu/sites/default/files/UVM-Policies/policies/travel.pdf>
- IRB: <https://www.uvm.edu/rpo/human-subjects-research>
- IACUC: <https://www.uvm.edu/rpo/vertebrate-animal-research>
- Safety: <https://www.uvm.edu/riskmanagement>

Questions? Please contact: Dr. Ann Kroll Lerner (akrolle@uvm.edu 656-5532).

The following pages contain the three fillable forms that accompany your application: Budget Worksheet, Research Compliance, and Faculty Recommendation.

Justify or further explain expenses here, where necessary. If funds come from multiple sources, you must indicate how FOUR funds will be used specifically:

This checklist helps determine the additional review necessary to approve this award. Please make your answers as complete as possible to speed up the review process. Attach any trainings or other documentation that help verify your proposed project. No funding will be given until ALL compliance statements are verified.

RESEARCH COMPLIANCE: *My work involves*

(Check all that apply to your project OR Check N/A (for not applicable))

N/A

Animals (inclusive of lab, farm, and field/wild) - Corresponding IACUC approval #:

Biological or Infectious materials including:

DNA

Recombinant DNA - Corresponding IBC Protocol #

Bloodborne pathogens

Virus, Bacteria, Parasite -Corresponding IBC Protocol #

Chemicals, Compressed gases, Controlled substances, or Select Agents

Domestic travel

Driving? Driver Training to operate UVM vehicle (required for insurance purposes)

Electrical, Hydraulic and other High Energy Systems

Farm and Animal or Field and Vehicle hazards

Human subjects -Corresponding IRB approval #:

International travel (Trip must be approved in GoAbroad prior receiving funds or traveling)

Location(s):

Expected travel dates:

Ionizing radiation or Lasers

Isotopes

Nanoparticles

Noise

Non-native/Invasive species

Shipping/Receiving/Transporting hazardous materials (includes samples in chemical solutions)

Ground

Air

Domestic

International

Size

or Quantity

Water, Diving, and Boat hazards (must have UVM safety training)

*May require authorization of student/faculty training or other approvals prior to receiving funds. We may contact you or your faculty.

ATTACH DOCUMENTATION FOR ANY TRAINING, APPROVAL, OR PROTOCOL NUMBER.

FACULTY SPONSOR RECOMMENDATION

50 University Heights North, Ste 017
four@uvm.edu

Students who apply for funding must have UVM faculty support. We ask that you use this form to evaluate this student's potential to succeed. We use faculty opinion of the student as one very valuable measure of the overall application. Ultimately it is the student's own ability to convey clearly the nature and value of the project that most strongly impacts funding decisions. Please complete this form and add any comments you may feel are relevant at the end of the page. This information will not be shared with the student.

If the student should receive the award, you are agreeing to sponsor that student—provide oversight, feedback, and mentorship; provide information on methodological, ethical, procedural, and university protocols which may apply to the student's work, and help them succeed.

Student Name:

Award application: Summer Undergraduate Research Fellowship (SURF) Program

1) How familiar are you with the work for which this student is requesting funds?

- Not at all
 Slightly

- Moderately
 Very familiar

- Extremely
 Student recently approached and described project

2) Have you read the student's project description?

- Yes
 No

3) Have you reviewed the budget with the student?

- Yes –Is it reasonable? Yes / No
 No

4) Please evaluate the importance of the student receiving the research expenses to achieve their project goals:

- Student could accomplish the goals without funding (e.g., other sources of funds, using library resources, etc.)
 Student could accomplish some but not all of the goals without funding
Student would not be able to engage in the proposed project without these research expenses

5) Please list any classes in which you have taught this student (dept and course #/approx. class size):

5a) How would you (briefly) describe the student's academic performance in your class(es)? (20 words max.)

6) I have worked with this student outside the classroom:

- Yes
No

6a) If yes, in what capacity? For how long?

6b) If no, how do you know this student? For how long?

7) How many students do you believe will apply or have applied for FOUR funding this academic year with you as a faculty sponsor?

7a) Of this number, where do you rank this student in terms of value of the experience for the student? (20 words max.)

8) If applicable, compared to other students of yours who have received funding, how do you rank this student?

9) Please rank the student's abilities and characteristics below:

| | |
|---|----|
| | |
| a. Perform tasks independent of direct supervision | a. |
| b. Complete tasks under tight deadlines and with mounting pressures | b. |
| c. Prioritize responsibilities? | c. |
| d. Ask for assistance from you? | d. |
| e. Communicate scholarly interests to a broad audience? | e. |
| f. Competence in major or specialization | f. |
| g. Academic interests and motivation | g. |
| h. Resourcefulness | h. |
| i. Reliability | i. |
| j. Academic integrity | j. |
| k. Personal integrity | k. |
| l. Rate student's performance on this project to date | l. |

10) Please state frankly your opinion of this candidate's chances to successfully complete the project that is described in the proposal and your role in directly or indirectly supporting their work. Please include your role in developing this proposal.

(Limit to 250 words on this form or submit a recommendation written on department letterhead and attach to this form). For CALS-Life Science applications please include statements on: your perspective on the importance of diversity and inclusion in the life sciences, and your background preparation for mentoring students from underrepresented groups).

Faculty Name (printed) Signature (if emailed from UVM account, no signature required) Date

NOTE: If your student is working on your IRB, IACUC, and/or IBC protocol, we ask that you provide the Key Personnel page and/or Training page from UVMClick as appropriate that indicates the student's name and expiration date(s).

Please return this form to the FOUR (four@uvm.edu) or you may use campus mail. Name file "*Student L_Name SURF22.pdf*"
Thank you for supporting undergraduates pursuing scholarship, research, and creative activities at UVM!