



# Harvard College Herchel Smith-Harvard Undergraduate Science Research Program 2023-2024 Application Instructions

## PROGRAM INFORMATION

The Herchel Smith-Harvard Undergraduate Science Research Program was established from a gift of the estate of Dr. Herchel Smith to support highly motivated, talented, and promising undergraduates who are conducting full-time summer research in mathematics; engineering; or life, physical/natural, or computer sciences at Harvard and its affiliate research enterprises or at other domestic and international centers of excellence.

The program experience is designed specifically to prepare outstanding continuing students (i.e., rising sophomores, juniors, and seniors) in good standing for competitive postgraduate fellowships (such as NSF), graduate/doctoral study domestically and internationally (such as Cambridge University), and post-baccalaureate research positions in the private sector. Since 2004, the program has provided exceptional opportunities for over 200 recipients to explore their scientific interests. While most fellows have pursued their activities in the United States – many of them at Harvard and MIT – a number also have undertaken scientific research activities abroad.

There is no preference for any particular research focus or environment, as long as the project provides a substantive experience in one of the science fields listed above. Students may develop their organizational affiliations independently, but ideally will do so with the guidance of a Harvard faculty member in the discipline of the research. Please note that applicants must submit a letter of invitation from the host principal investigator at the time of application. (This letter is not required if one of the recommenders is also serving as the research host.)

## POLICIES & EXPECTATIONS

- **Duration:** Students must undertake a project that is at least ten weeks in duration
- **Reporting:** Fellows must submit a midterm and final report, and research poster
- **Presentations:** Fellows must present their research through college research symposia and conferences (including those beyond Harvard if possible) in the academic year following their award
- **Other funding considerations:**
  - Herchel Smith awardees are not permitted to accept Harvard-funded internships or service projects or take summer school courses at the same time as full-time the research activity, supported by the award. Also, please review [Harvard College Summer Funding Policy](#) for exceptions and clarity on policy.
  - Students applying to PRISE or other summer research program may apply to Herchel Smith. If offered acceptance to both, they must choose one stipendiary funding source, for the duration of the research project. Stipends cannot be combined.
  - Students who pursue research with an investigator at another institution and have the opportunity of being funded by that other institution, may not typically be funded by both Herchel Smith and the other institution. Exceptions can be discussed with the award director.
  - Herchel Smith awardees traveling for outside of Boston and the U.S. for research must provide all necessary pre-departure travel requirements before receiving any Herchel Smith funding. [Student Pre-Departure Requirements](#)
  - For other funding questions, students should contact [undergradresearch@fas.harvard.edu](mailto:undergradresearch@fas.harvard.edu).



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**\* NOTE: No housing or meals are provided through this award. Students are responsible arranging their own housing for the duration of their time doing summer research. \***

**ELIGIBILITY**

- All Harvard College continuing undergraduates in good academic and disciplinary standing
- Must be able to commit at least 10 weeks of full-time effort to the proposed project
- Preference for students pursuing (or intending to pursue) concentrations and post-graduate study or a professional trajectory in the sciences for whom research experience is essential
- Preference for students who have not previously been awarded a Herchel Smith summer fellowship

\* Note: Applications for formal coursework or practical clinical training are not eligible.

**BENEFITS**

- A summer **stipend**
- **Travel funds** necessary for domestic and international locations outside of Boston, if applicable
- Funding allowance for expenses related to presenting research at professional conferences or meetings (e.g., registration fees, travel costs)

**SELECTION CRITERIA**

Applicants will be evaluated on the quality of their proposals and their academic and personal qualifications to pursue the indicated research project. In particular, the selection committee will look for:

- A compelling, well-designed research project with a faculty host, specific to a particular site;
- Evidence of appropriately high academic preparation and achievement;
- Relevant work or other experience;
- Strongly positive endorsements from Harvard faculty recommenders;
- A commitment to full-time research of at least ten weeks duration.

**DEADLINE: SUNDAY, FEBRUARY 4, 2024 AT 11:59PM EST**



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**PLEASE READ CAREFULLY AND ORGANIZE THE FOLLOWING MATERIALS:**

- **APPLICATION FORM:** Complete the online CARAT information, which will be compiled and displayed as your application cover sheet.
- **CURRENT RESUME (no more than 2 pages):** Indicate significant activities, achievements, and experiences in college that demonstrate your interests and potential achievements. Formatting: 11pt font at the very smallest; Arial or Times New Roman font; 1-in margins
- **CURRENT UNOFFICIAL TRANSCRIPT :** Download your unofficial transcript from my.harvard.edu, **including your fall course grades and spring course listing.**

- **ESSAYS**

In a separate document, please provide responses to the following two statements.

**Essay 1. Briefly describe the research project you would like to pursue this summer and why.** (1,000 words maximum.)

This essay should convince an interdisciplinary committee of scientists that you have thought carefully about the science yourself and are not simply rewording material from Wikipedia or a lab web page. Be as specific as possible and describe the research in your own words. The project description should include methodology and rationales. Be mindful of what is feasible during the ten weeks of the award. Articulate how the project is independent, or how it contributes to a broader scientific mission of the host lab. Also, note whether a project you are pursuing is new to you, or an extension/continuation of a previous project in the same lab that you worked on. Be aware of your space limitations as you discuss previous work, and balance this with the actual discussion of what your summer research plans are. Figures of preliminary data or visuals that help to explain concepts, workflows, hypotheses etc. are welcome, but limited to no more than three (3). **See formatting guidelines on page 5 of these instructions.**

**Essay 2. Describe how the research project will contribute to your short- and long-term academic and professional goals.** (500 words maximum.)

- **BUDGET:** If your project is taking place in a location other than Boston/Cambridge, complete the appropriate budget information request lines found in the Budget tab of your funding source application in CARAT. **Please indicate "0" on any budget information request lines if your research is at Harvard or an affiliate in the Boston area.**
- **ONE LETTER OF RECOMMENDATION**  
This letter should be written by someone in the Harvard academic/research community who can comment on your initiative, motivation and determination to pursue research and your research potential, as well as provide examples of such. This letter should include brief examples of how you will benefit from the Herchel Smith Fellowship. See the Herchel Smith Recommender Instructions below. Send your recommender the instructions, which will guide recommenders on the topics we would like addressed in their letter of recommendation. **If the letter writer is also the faculty/research host for your proposed project, the letter writer should also confirm your lab placement in the letter. In this case, this letter of recommendation will doubly count as a letter of confirmation. A separate letter of confirmation is not needed.**



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- **LETTER OF CONFIRMATION FROM RESEARCH HOST**

If research host is different from writer of the letter of recommendation, applicants must be sure to request this letter.

This short letter (150 words/less) is due to URAF by the application deadline.

The letter should include the following:

- 1) a confirmation of your placement/mentorship with a research group,
- 2) a brief description of the project you will be pursuing,
- 3) a brief description of mentorship you will be receiving, e.g. to what extent and by whom you will be directly mentored, and any other aspects about a research group and its resources, the training environment, etc. that can serve to assist you in your research endeavors and further your development as a researcher.

This confirmation letter does not serve as an additional letter of recommendation.

Your faculty host should email their confirmation letter in pdf format to [undergradresearch@fas.harvard.edu](mailto:undergradresearch@fas.harvard.edu) with HERCHEL SMITH and [YOUR LAST NAME] in the subject line. **If your faculty host is also your academic letter writer for this award, they should confirm your lab placement in their letter of recommendation.** A separate letter of confirmation is not needed.

**SUBMIT YOUR APPLICATION MATERIALS AS FOLLOWS:**

1. **LOG IN TO [CARAT](#) USING YOUR HARVARD KEY** and confirm that your profile information is correct.
2. **"APPLY" TO THE [HERCHEL SMITH "FUNDING SOURCE"](#)**  
Fill out all required fields.
3. **REQUEST RECOMMENDATIONS (via "Recommendations" tab)**  
You are STRONGLY ENCOURAGED to solicit recommendations at least three weeks ahead of the application deadline. Once you have provided name (Last, First) and contact information for your recommenders, **YOU MUST CLICK "Send recommendation request"** under each recommender's entry in order for CARAT to send the notification to your recommender's email. **"Save and Next" will NOT submit your recommendation requests.**
4. **UPLOAD YOUR DOCUMENTS**  
All documents must be submitted concurrently, in PDF format. No supplementary materials will be accepted.
5. **SUBMIT YOUR APPLICATION (via "Submission" tab)**  
Enter your HUID and click "Submit." The date and time of your submission will be noted, and late applications will not be accepted. Please note that you do not need to wait for your recommenders to submit their letters to submit your materials.

If you or your recommenders have questions about this application or the online submission process, please contact the Office of Undergraduate Research and Fellowships at ([undergradresearch@fas.harvard.edu](mailto:undergradresearch@fas.harvard.edu).)



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**DEADLINE: SUNDAY, FEBRUARY 4, 2024 AT 11:59PM EST**

**ESSAY FORMATTING GUIDELINES:**

Documents that do not comply by the above formatting guidelines will risk **not being reviewed.**

**Format:**

- Single-spaced and 1,000 words maximum (no exceptions).
- Font requirements are as follows: 11pt font minimum, 12pt maximum.
- Font: Arial or Times New Roman; 1-inch margins all around.

**Label Essays:**

Research essays should have Project Title, Research Host Full Name, Location (department and institution) on the FIRST PAGE. (This is not included in the word count.)

**Figures:**

- No more than three (3) figures can be included.
- Figures may demonstrate preliminary data or detail a methodology or other visual aspects of the research plan that are necessary for the project explanation and narrative.
- All figures must include captions written in font size no smaller than 10pt.
- Captions are not included in word limit.

**Citations:**

- These should be appropriately formatted in the style of your field of study. If you are not sure, ask a librarian, or your research mentor for examples of citation formatting.
- List citations at the end of Essay 1.
- Citations are not included in the word count.



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**Instructions for the Academic/Research Recommender**

From the Selection Committee

This student is applying to the [Herchel Smith-Harvard Undergraduate Research Program](#).

Recipients of this award are selected on the basis of a compelling, well-designed, full-time research project of at least ten weeks duration in the summer linked with a dedicated host institution and faculty principal investigator; evidence of high academic achievement and preparation for the proposed research; and strongly positive endorsements from Harvard faculty and other academics regarding the candidate's overall intellectual strengths and likelihood of success as a scientist. A critical factor in evaluating the application is evidence of initiative and motivation in an academic and/or research setting. The applicant has selected you to provide a letter of recommendation to the "*Herchel Smith-Harvard Selection Committee*". We thank you for your effort on the applicant's behalf. We would appreciate it if you would address the following questions in your letter:

- 1. In what capacity do you know the applicant?**
- 2. Can you provide brief examples of initiative, motivation, and determination in an academic and/or research activity?**
- 3. Can you evaluate the likelihood of the applicant's success in the project and as a developing scientist, based on your observation?**

You will receive an email prompt generated by the Centralized Application for Research and Travel (CARAT) after the applicant has invited you to submit a recommendation. Simply follow the directions to upload a signed PDF version of your letter on official institutional stationery to the CARAT online link indicated on the invitation.

The deadline for receipt of application materials is **Sunday, February 4, 2024 at 11:59pm (EST)**. If you have any questions, please contact the Office of Undergraduate Research and Fellowships at [undergradresearch@fas.harvard.edu](mailto:undergradresearch@fas.harvard.edu).

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**Harvard College Office of Undergraduate Research and Fellowships**  
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