

2022 Undergraduate Research Fellowships in Physics and Biophysics

Through the generosity of an endowment for the physics undergraduate research and education program, we expect to be able to award a research grant to at least two undergraduate students submitting proposals describing research projects to be pursued in collaboration with a faculty member of the Physics department. The award offers a stipend of \$500 per week, and requires 6-12 weeks of continuous work. A maximum of \$4500 will be awarded per student. Students may apply separately for travel funds (for conference or project work), requiring an additional budget and application. Students may apply for both stipend and travel. This award may be combined with other awards or funding sources, but other funding will be considered in the allocation of the awards. The summer research award supports faculty-mentored research in any subfield of physics and biophysics. Preference is given to students whose research projects are integral to their academic program and may contribute to a senior thesis.

Eligibility

In all cases, the research projects must be directed by a member of the Physics faculty and conducted over a period of 6-12 weeks continuously during the summer months (a hiatus of one week or less within this period is acceptable). Students may not be enrolled in classes during the period of the funded research work. With the exception of graduating seniors, all Physics and Biophysics majors are eligible to apply for this fellowship.

Selection criteria

Criteria include: merit of project, feasibility of project, adequacy of resources, preparedness of student, potential for outcome (poster, presentation, paper etc.), potential for work leading to graduation with distinction. It will be a consideration whether the applicant is member of an underrepresented group. Projects spanning more than one department with multiple advisors are eligible, although at least one faculty advisor must be from Physics. The student must be a declared Physics or Biophysics major at the time of application.

Application instructions

Students must submit the following:

1. *Student Information:* The student should provide a CV listing prior work experience and skills.
2. *Faculty recommendation letter:* The faculty mentor will need to submit a letter of recommendation and evaluation of the project to the address below, also including information confirming the dates when research will be performed.
3. *Academic information:* The student's academic transcript.
4. *Project Information:* Short project title, abstract (single paragraph of no more than 250 words), dates, location, special considerations
5. *Project Proposal:* A narrative of no more than 3 pages organized into:
 - Background and general aims/long term objectives
 - What is the overall goal of this research?
 - What are the 'big questions' in your discipline that you expect to address?
 - How does your proposed research relate to the work of others in this field?
 - Specific aims/short term objectives and methods
 - What research questions will you ask, and what methods will you use to address them?
 - References cited.
6. *Budget:* Total amount requested, corresponding to dates of research. Other funding sought for this project must be listed.
7. *Health & Safety Plan:* Special health and safety considerations must be described.

Applications should be submitted to dus@phy.duke.edu, by March 15th, 2022, electronically in a single pdf file (except for the recommendation letter, which should be sent by the letter-writer separately), by 3 pm on the due date.