

Student Fellowship in Physics and Society

Sponsored by the APS Forum on Physics and Society in partnership with the Society of Physics Students and the APS Forum on Graduate Student Affairs.

APPLICATION DEADLINE: December 15

The American Physical Society Forum on Physics and Society (FPS), in partnership with the Society of Physics Students and the Forum on Graduate Student Affairs, is proud to announce the Student Fellowships in Physics and Society. The Fellowships are open to undergraduate or graduate students in physics who will be awarded up to \$4,000 each to support a project that applies physics to a societal issue.

The primary goal of the Student Fellowship in Physics and Society is to provide research opportunities for undergraduate and graduate students interested in physics and society, and to raise the awareness of applying physics to problems in society as a career and as an important undertaking by members of the physics community.

There are three objectives of the program.

- First, some students who are exposed to issues where physics impacts societal issues will choose to make careers in this area. These students will provide a badly needed younger generation of technically literate policy researchers, analysts, and leaders.
- Second, there are many more technical issues on the interface between physics and society than there are physicists working on them. Putting talented young people to work on these problems will help society and the physics community.
- Finally, students involved in projects applying physics to social issues will communicate their excitement to fellow students and faculty members in their institutions and nationally, thus raising the awareness of the entire physics community.

Structure of the Project:

Students will conduct technical research in an area where physics is applied to societal problems with the guidance of an experienced senior mentor. Their work will result in a final report suitable for dissemination to the physics community and/or the public. This report may be in the form of an article for publication, or another product such as a CD/DVD, mass media project, course development, or website. It is suggested that the students will present their work at an APS or other professional society meeting. A report on their final project will also be considered for publication in the FPS publication, *Physics & Society*.

The timeline for the project will vary depending on whether the work is done during an academic year or a summer. Proposals must include a detailed work plan and budget that will allow completion of the project within one calendar year. The stipend can be used to support the

student financially, to support student travel, to purchase critical equipment and/or services directly related to the project, or to support the project in other ways. Typically, projects will occur over an academic term or the summer. The size of the award will depend on merit, and the detailed work plan and timeline proposed by the applicant. Matching funds are not a requirement, but the selection committee encourages applicant and mentor to explore the availability of such funds.

The criteria for selection include the following, roughly equally weighted:

- 1) The extent to which the project addresses, engages, or furthers the objective of the Forum on Physics and Society, which is, “the advancement and diffusion of knowledge regarding the inter-relation of physics, physicists, and society.” The proposal should address the intellectual merit of the project and its probable impact on the issue being studied, and must include appropriate bibliographic references.
- 2) The extent to which the proposer(s) have established their ability to perform the project in question, including the academic record and extracurricular activities of the student proposer and the commitment and track record of the proposed mentor.
- 3) The extent to which the project has a realistic timeline and budget, a compelling format (paper or another product such as a CD/DVD, mass media project, course development, or website, for example), and utilizes existing resources.

Responsibilities of Mentor

The mentor is expected to advise the applicant during his/her choice of a project and preparation of the proposal, and to provide a letter of support with respect to the value and suitability of the project, and the applicant’s capabilities for successfully completing the project.

Should the applicant’s proposal succeed, the mentor should regularly discuss progress of the project with the applicant during performance of the project, and should consult with the applicant during preparation of the report, paper, or other product of the project (where appropriate, serving as coauthor).

Proposal Guidelines:

The proposal should consist of the following elements, **prepared by the applicant:**

- Application form (see following pages 1, 2, and 3)
- Application Checklist and Submission Instructions(page 4), and associated document:
 - Applicant’s resume/CV, including GPA, major, year in school, and other relevant activities and experiences.
 - Supporting letter from the applicant’s mentor.
 - Mentor’s resume/CV, with items relevant to the proposed project highlighted.
 - At least one additional letter of support for the applicant.

“Student Fellowship in Physics and Society”

Application Form

All proposals must be postmarked on or before DECEMBER 15.

Applicant Name: _____

Institutional affiliation: _____

Major and Year in School: _____

Postal address: _____

City, State, Zip: _____

E-mail address: _____ Telephone number: _____

Mentor Name: _____

Institutional affiliation: _____

Postal address: _____

City, State, Zip: _____

E-mail address: _____ Telephone number: _____

Project title: _____

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Prepare a project description; include the motivation, relevant previous work, approach (including analytical approach, if appropriate), nature of results, and type of paper, report, or other product expected from this work (maximum: 1000 words; please add additional sheets if necessary).

Include a detailed work plan including where the work will take place, a timeline, and a budget that will allow completion of the project within one calendar year. (The stipend can be used to support the student financially, to support student travel, to purchase critical equipment and/or services directly related to the project, or to support the project in other ways.) Note whether any matching funds are anticipated. (please use additional sheets, if necessary)

Please note whether the project corresponds to a course or other requirement, so that the selection committee can understand how the project may fit into the broader context of the applicant's education).

Also include a list of references to articles and other materials referred to in the project description (please use additional sheets, if necessary)

PAGE 4---APPLICATION CHECKLIST AND SUBMISSION INSTRUCTIONS:

- Pages 1, 2 and 3 of completed application form
- Applicant's resume/CV, including GPA, major, year in school, relevant experiences
- Supporting letter from the applicant's mentor
- Mentor's resume/CV, with items relevant to the proposed project highlighted.
- Additional letter of support for applicant

Deadline:

All proposals must be postmarked on or before DECEMBER 15.

Submission of the Proposal:

The proposal must be submitted in one of three ways:

- Mail one copy of the proposal, postmarked not later than midnight 15 December, to:
FPS/SPS/FGSA Science & Society Fellowships
Director, Society of Physics Students
One Physics Ellipse
College Park, MD 20740;
- Fax one copy of the proposal, not later than midnight 15 December, to: (301) 209-0839.

-OR-

- E-mail the SPS National Office at sps@aip.org, not later than midnight 15 December, and attach the file containing the proposal to the e-mail. The file must be created in Microsoft Word© or WordPerfect©. In the subject line of the e-mail, please type: FPS/SPS/FGSA Science & Society Fellowships.