Resnick Fellowship Guidelines

The Resnick Institute graduate research fellowships were created to support new research projects in sustainability science or renewable energy, and to create new collaborations on campus for this research. The fellowships are for a two-year duration, with the second year of support contingent upon a satisfactory review of the first year of work.

Eligibility

Applications for the Resnick Institute graduate research fellowships are open to all Caltech graduate students interested in pursuing a new research project related to the science of sustainability.

Fellowships are **not** available for incoming students, or for students that already have fellowship support from an outside agency.*

* If student can defer their existing fellowship (check with the granting organization), they may be awarded a Resnick Fellowship.

Applications

Applications should include a **project title**, **abstract** (200 words or less), and **<u>3-page research proposal</u>**, in addition to a <u>**CV**</u> and <u>**letters of support from faculty**</u>. Applicants are responsible for submitting all of their materials, including the letters of support, by the application deadline.

Given the wide range of disciplines related to energy research that will be represented in the review committee, we ask that the proposals in the application be written for a general scientific audience, and include, in addition to any scientific background, an explanation of the potential impact of the work, should it be successful. Graphs, tables, diagrams and other figures are welcome in the written application, but submissions should contain no more than 3 pages total, inclusive of text, figures and references. Again, the applicants need not be certain of the success of their idea, but proposals should address why they believe it is feasible, and the potential impact if they were to be successful.

Applicants are expected to have done a full search of any relevant literature, and any background lab/computer work required to demonstrate the feasibility of their project, and to be able to explain this work in detail during the second round interview process if need be.

Letters of support should demonstrate that the applicant has discussed the research project with the sponsor, and that the sponsor has agreed to any use of materials or equipment, or to the necessary technical support. They should also demonstrate the sponsor's interest in the project, and their evaluation of the applicant's strengths, and his or her ability to accomplish the projects goals.

Letters of support can come from Caltech research staff (but not post docs), as long as the primary research advisor is the student's faculty advisor. Letters of support can also come from JPL researchers; however, the applicant and sponsor are responsible for obtaining access to JPL facilities, and any permission that might be required to conduct the work.

Evaluation Process

The written applications will be reviewed by the fellowship committee (a collection of faculty, staff and students working on energy or sustainability problems), and a short list of finalists will be selected. These finalists will be asked to prepare a 10-minute presentation on their research project for the review committee, after which the final decisions will be made.

The Fellowship Committee will begin reviewing applications after the submission deadline has past. Applications will not be evaluated unless they are complete. The review committee may request additional information from you, your advisor, or your option to evaluate your proposal and your progress at Caltech to date in doing their evaluation.

The Committee will evaluate applications based largely on the scientific merit of the project, the perceived ability of the student to carry out the research goals, and the relevance and potential impact of the project to the Resnick Institute's mission to seed new advances in sustainability science. After that, additional weight might be given to some applications based on the following questions:

- 1. Is the project a creative solution to an unsolved problem?
- 2. Does the project engage a new research group for the Resnick Institute, or would this fellow expand the breadth of sustainability related research supported by the Resnick Institute?
- 3. How collaborative is the research? Does the project involve more than one research group:
 - a. Use of lab facilities
 - b. Collaboration with students/postdocs from the faculty member's research group
 - c. Reliance on the faculty member's technical expertise
- 4. How interdisciplinary is the research?