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"NSF has funded more than 60,000 graduate fellowships dating back to 1952." - USC Press I was a successful first-time applicant in 2023 (the first-year of my PhD).

1 Overview of the NSF GRFP Application

- Eligibility
 - Graduating senior undergraduate, 1st year grad, or 2nd year grad
 - US citizen, US national, or permanent resident
 - In or will be in a research-based Master's or PhD program

Note. Applications can only be submitted once as a senior and once as a graduate student

- Application
 - Personal Essay (3 pages)
 - Research Proposal (2 pages)
 - 3-5 Letters of Recommendation
- Benefits
 - Feedback on your application
 - Three-year annual stipend of \$37,000 and \$16,000 allowance for tuition and fees
 - Five year fellowship period
- Deadline: Late Oct
- Decisions Released: Early April (I received mine earlier on Mar 28, 2023)

2 Important NSF Solicitation Definitions

A beneficial aspect of the NSF GRFP application is that the NSF clearly specifies what they are looking for and how they will evaluate applications.

The following subsections are taken from the GRFP program solicitation.

2.1 Intellectual Merit

The Intellectual Merit criterion encompasses the potential to advance knowledge [within your own field or across different fields].

2.2 Broader Impacts

The Broader Impacts criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes.

Broader Impacts may be accomplished through:

- the research itself
- activities directly related to specific research projects
- activities supported by, but complementary to the project

Societal outcomes may include:

- full participation of women, persons with disabilities, and underrepresented minorities in science, technology, engineering, and mathematics (STEM)
- improved STEM education and educator development at any level
- increased public scientific literacy and public engagement with science and technology
- improved well-being of individuals in society
- development of a diverse, globally competitive STEM workforce;
- increased partnerships between academia, industry, and others
- improved national security; increased economic competitiveness of the US
- enhanced infrastructure for research and education.

2.3 Review Criteria

- 1. What is the potential for the proposed activity to:
 - (a) Advance knowledge and understanding within its own field or across different fields (Intellectual Merit)?
 - (b) Benefit society or advance desired societal outcomes (Broader Impacts)?
- 2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
- 3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
- 4. How well qualified is the individual, team, or organization to conduct the proposed activities?
- 5. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?

3 Final Notes

- Check your application year's official NFS GRFP website for the most up-to-date information
- See my other NSF GRFP blog posts for my tips and application