NSF Graduate Research Fellowship (GRFP)

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What is the GRFP?

Goals:

1. Recognize & support early-career scientists with high potential for significant achievement.

1. Broaden participation in STEM fields.

Videos

https://www.nsf.gov/news/news_images.jsp?cntn_id=130974&org=NSF

https://nsfgrfp.org/applicants

What is the GRFP?

In a 5-yr period

- 3 years of full graduate support
- $138,000 ($34,000/yr stipend plus tuition+fees)
- GROW (International study for NSF GRFP Fellows)
- GRIP (Federal internships for NSF GRFP Fellows)
- INTERN (Non-academic research internships for NSF GRFP Fellows)
- Career-life balance support possible

2000 awards; ~12,000 applicants in 2018, 15-17% funding rate

Eligibility

- US Citizen, national, or permanent resident
- Have not completed any grad degree by Aug 1 of the submission year unless (1) joint BS/MS program and no additional grad work; (2) At least 2 years off.
- **NO** MD/PhD, JD/PhD, Management, Social work; **NO** support for clinical research, health services

When should I apply?

Senior undergraduates
Post-baccalaureates who haven't started grad school
Must be prepared to enroll the fall after you receive the award

APPLY!

First year graduate students
OR
Fall of your second year grad school

Apply if highly competitive against *other first-years*

Last shot - Apply!

Highly competitive = demonstrates high potential to make significant achievements in STEM

- Past achievements predict future success
- GPA, awards, research experience, letters, great essays, clear past broader impacts and plans for future broader impacts of your work.
- Publications definitely help

How to apply

Fastlane: https://www.fastlane.nsf.gov/grfp/Login.do

How to register

Accessing sections of the application

Fastlane

Prepare Application

- INSTRUCTIONS
- PERSONAL INFORMATION
- EDUCATION AND WORK EXPERIENCE
- PROPOSED FIELD OF STUDY
- PROPOSED GRADUATE STUDY
- REFERENCES
- PERSONAL, RELEVANT BACKGROUND AND FUTURE GOALS STATEMENT
- GRADUATE RESEARCH PLAN STATEMENT
- NSF GRFP PROGRAM INFORMATION
- SUBMIT APPLICATION

Privacy Act Notice

* *Required Field*

Personal information, education, work experience

"The easy stuff"
Add details to make your achievements clear

Proposed field of study

Choose carefully, and consult your advisors!

Transcripts

Grades count; GREs do not

3 letters of recommendation (can list up to 5)

Personal, relevant background & future goals (3 pgs)

Tell your story; concrete details discuss individual research experienced; craft a coherent and integrated whole, not a list

Graduate research plan statement (2 pgs)

Demonstrate ability to plan and conduct research; why is it original, important, innovative? Future steps? Alternate interpretations?

2018 GRFP deadlines

All applications are due at **5:00 p.m. local time, as determined by the applicant's mailing address.**

October 22, 2018 (Monday)

Geosciences

Life Sciences

October 23, 2018 (Tuesday)

Computer and Information Science and Engineering

Engineering

Materials Research

October 25, 2018 (Thursday)

Psychology

Social Sciences

STEM Education and Learning

October 26, 2018 (Friday)

Chemistry

Mathematical Sciences

Physics and Astronomy

November 2, 2018 (Friday)

Reference letter deadline

Selection Criteria

What is the potential of the proposed activity to:

Advance knowledge and understanding within its own field or across different fields (**Intellectual Merit**)?

Benefit society or advance desired societal outcomes (**Broader Impacts**)?

(have separate statements of both in each essay)

Rating: Excellent; Very Good; Good; Fair; Poor

MUST be strong under BOTH criteria

Intellectual Merit

Definition: the potential to advance knowledge
Considers: creativity, originality

Personal statement: evidence of prior achievement, personality, recognition

Research statement: importance and relevance of the proposed work

Broader Impacts

Definition: Potential to benefit society or advance desired societal outcomes

Be true to your interests
Can come from your project or additional activities
Use existing resources to amplify your efforts

Fatal Flaws (Advice from a Panelist)

Panelists advised to weight Intellectual Merit and Broader Impacts *equally*

- Weak *history* of Broader Impacts (in Personal Statement)
- Weak *future* plan for Broader Impacts related to proposed research (in Research Statement)
- Too vague of Broader Impacts—need both specific history (not laundry list, but a story) and specific future plan
- Too mundane of Broader Impacts
- Too much overly personal information or too negative in Personal Statement
- Weak Intellectual Merit in Research Statement

To assess Intellectual Merit and Broader Impacts, Panelists are instructed to consider:

To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?

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?

How well qualified is the individual, team, or organization to conduct the proposed activities?

Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?

Broader Impacts

Advance discovery and understanding while promoting teaching, training, and learning, for example, by training graduate students, mentoring postdoctoral researchers and junior faculty, involving undergraduates in research experiences, and participating in the recruitment, training, and professional development of K-12 mathematics and science teachers.

Broaden participation of under-represented groups, for example, by establishing collaborations with students and faculty from institutions and organizations serving women, minorities, and other groups under-represented in the mathematical sciences.

Enhance infrastructure for research and education, for example, by establishing collaborations with researchers in industry and government laboratories, developing partnerships with international academic institutions and organizations, and building networks of U.S. colleges and universities.

Broaden dissemination to enhance scientific and technological understanding, for example, by presenting results of research and education projects in formats useful to students, scientists and engineers, members of Congress, teachers, and the general public.

Benefits to society may occur, for example, when results of research and education projects are applied to other fields of science and technology to create startup companies, to improve commercial technology, to inform public policy, and to enhance national security.

Encouragement

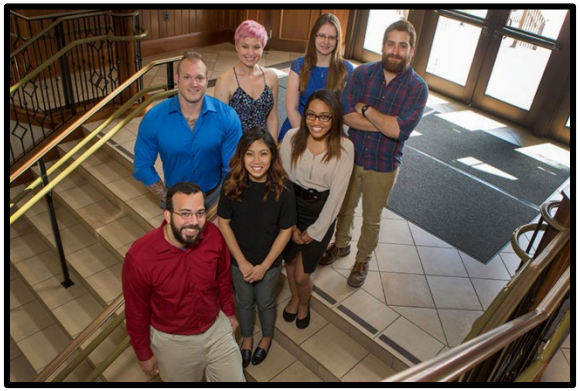
Awardees are not composed of only Ivy League superstars!

Diversity is an asset: students from rural areas, underrepresented groups, disabled, economically-disadvantaged, first generation college or graduate student, financial challenges

Talk about these things in your personal statement!

Applicants who have overcome major challenges and persevered are likely to succeed—write about your experience

NSF GRFP Fellows at FSU



Will Booker, Life Sciences - Evolutionary Biology HM 2016, Awardee 2017

Joseph Pennington, Life Sciences – Molecular Biophysics Awardee 2015

Carla Vanderbilt, Life Sciences - Evolutionary Biology Awardee 2011

Micaiah Ward, Life Sciences - Systems & Molecular Biology HM 2015, Awardee 2016

Chace Holzheuser, Life Sciences - Evolutionary Biology Awardee 2017

Mysia Dye, Life Sciences – Evolutionary Biology Awardee 2018

Pamela Knoll, Chemistry – Physical Chemistry Awardee 2017

Louis Colling Physics – Molecular Biophysics Awardee 2017