Graduate Research Fellowship Program

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The National Science Foundation (NSF) is a United States government agency that supports fundamental research and education in all the non-medical fields of science and engineering.
About The Program

The NSF Graduate Research Fellowship Program recognizes and supports outstanding graduate students in NSF-supported science, technology, engineering, and mathematics disciplines who are pursuing research-based Master's and doctoral degrees at accredited United States institutions.

Read More »

2016 GRFP Results Announced

The awardees and honorable mentions for the 2016 NSF Graduate Research Fellowship Program competition have been posted online. For the 2016 competition, NSF received close to 17,000 applications, and made 2,000 award offers. Congratulations to the awardees and honorable mentions, and thank you to everyone who submitted applications this year.

Change To 2017 Eligibility Guidelines Announced

NSF has provided advance notice of a change in the eligibility of prospective applicants to the NSF Graduate Research Fellowship Program (GRFP) to allow the community to plan accordingly. This change is described in a Dear Colleague Letter (NSF 16-050) and FAQs (NSF 16-051).

In The News

2013 NSF GRFP awardee Lujendra Ojha led a study that suggests there is liquid water on Mars.

A new study led by scientists at the Georgia Institute of Technology provides the strongest evidence yet that there is intermittent flowing liquid water on modern Mars. Using instruments on board NASA's Mars Reconnaissance Orbiter (MRO), researchers measured...
GRFP Goals

• To select, recognize, and financially support individuals who have demonstrated the potential to be high achieving scientists and engineers, **early in their careers**.

• To broaden participation in science and engineering of underrepresented groups, including women, minorities, persons with disabilities and veterans.
GRFP Information

Five Year Award – $138,000

- Three years of support
  - $34,000 Stipend per year
  - $12,000 Educational allowance to institution

- Professional Development Opportunities:
  - GROW: International Research
  - GRIP: Federal Internships

- Supercomputer access: XSEDE

- Career Life Balance (family leave)
GRFP Information

- Awarded to individual
- **Flexible**: choice of project, advisor & program
- **Unrestrictive**: No service requirement
- **Portable**: Any accredited U.S. institution
  - MS, MS and PhD, PhD

- **2010 - 2016**: 2,000 fellowships/year

  2016: ~16,800 Applications
  ~12 % success rate
GRFP Information

Monday, October 24, 2016 - Geosciences, Life Sciences
Tuesday, October 25, 2016 - Computer and Information Science and Engineering, Engineering, Materials Research
Thursday, October 27, 2016 - Social Sciences; Psychology; STEM Education and Learning
Friday, October 28, 2016 - Chemistry, Mathematical Sciences, Physics, and Astronomy
Thursday, November 3, 2016 - References letters for all fields of study

What do I need to complete to apply?
2 essays
3 recommendation letters
Fastlane (online submission system) requirements
NSF GRFP 16-588

Provides the following information:

– Deadlines
– Program description
– Award information
– Eligibility requirements
– Application preparation
– Submission instructions
– Application review criteria

NSF 16-588 Program Solicitation
GRFP Eligibility

- U.S. citizens, nationals, and permanent residents
- Early-career: undergraduate & graduate students
- Pursuing research-based MS or PhD
- Science and Engineering
- Enrolled in accredited institution in US by Fall
GRFP Eligibility

**Academic Levels**

- **1:** Seniors or baccalaureates with no graduate study yet

- **2:** First-year graduate students

- **3:** Second-year graduate students
  (≤ 12 months of graduate study by August)

- **4:** >12 months graduate study, with interruption in graduate study of 2+ years (*can have MS degree*)

**Eligibility FAQ:** [https://www.nsfgrfp.org/applicants/faqs](https://www.nsfgrfp.org/applicants/faqs)
How often can you apply?

Academic Levels

• **1:** Seniors or baccalaureates with no graduate study yet

• **2:** First-year graduate students

• **3:** Second-year graduate students (≤ 12 months of graduate study by August)

**No restriction**

**Only 1 time in graduate School, in 1st or 2nd year**
GRFP Fields of Study

- Chemistry
- Computer & Information Science/Engineering
- Engineering
- Geosciences
- Life Sciences
- Materials Research
- Mathematical Sciences
- Physics and Astronomy
- Psychology
- Social Sciences
- STEM Education
NOT SUPPORTED

- Joint science-professional degree programs (e.g. MD/PhD)
- Business administration or management
- Counseling, Social work
- Education (except in science and engineering education)
- History (except in history of science)
- Biomedical research for which goals are directly health or disease-related
- **Research focused on clinical practice**
  - Patient-oriented research
  - Epidemiological studies
  - Medical behavioral studies
  - Outcomes research
  - Health services research
GRFP Application Timeline

July/August

Solicitation Posted

late October

Applications Due

Early November

Reference Letters Due

March - April

Recipients Announced

May 1

Acceptance of Award and Declaration of Tenure/Reserve

June 1 or Sept.

Fellowship Year Begins
Complete Application Package:

1) Personal information, education & work experience, proposed field of study, academic honors, publications

2) Personal, Relevant Background, & Future Goals Statement (3 pages)

3) Graduate Research Statement (2 pages)

4) Transcripts (uploaded electronically by the applicant)

5) Three letters of reference, due November, 5 pm ET
Experiences, personal and professional, that contributed to your motivation to pursue a STEM career and your preparation for it.

- How have your experiences shaped your goals?
- What use have you made of the resources available to you?
- What have you learned?
- Why you will succeed at graduate research?
- How do you know this is what you want to do?

1.5 pages: Previous research experience (relevant background)
1.0 page: Intellectual merit and broader impacts (personal statement)
0.5 page: Current research and future goals
GRFP Complete Application

Previous research experiences (include all).

- What was/were the project(s)?
- Where was the research done?
- Why was/were the project(s) worth doing?
- What was your part of the project(s)?
- How did your part of the project(s) fit into the whole?
- What have you learned?
- Any advanced course work?
Experiences, personal and professional, that contributed to your motivation to pursue a STEM career and your preparation for it.

Previous research experiences

Career aspirations and goals

Address both intellectual merit and broader impacts!
GRFP Complete Application
Preventing a GRFP Application

**Research Statement** (2 pages)

Describe your Research Plan

- Motivate research question(s)
- Demonstrate understanding of the research question(s) and methods for addressing them
- Communicate original research idea and approach

Be sure to include sections explaining both intellectual merit and broader impacts.
Preparation of a GRFP Application

**Research Statement (2 pages)**

- **Your ideas** on how to fill a 'knowledge gap' from your field of study
- **Clear**est and most **concrete** part of your application
- **Easy to read**
- **Justification** that the proposed research is feasible to accomplish
- **Link** to your Personal, Relevant Background, and Future Goals Statement

- Introduction
- Research Objectives
- Hypotheses/Conjectures
- Preliminary Results (if you have any from previous research)
- Experimental, Computational or Other Approach
- Intellectual Merit and Broader Impact (separate paragraphs)
- References
Preparing a GRFP Application
NSF Review Criteria

National Science Board-approved review criteria:

- Intellectual Merit
- Broader Impacts
Intellectual Merit and Broader Impacts

- How important is the proposed activity to advancing knowledge within its own field or across different fields?

AND

- How well does the proposed activity benefit society or advance desired societal outcomes?

* Separate sections for Intellectual Merit and Broader Impacts
Intellectual Merit

- Demonstrated intellectual ability for scholarly scientific study, such as the ability to:
  - Interpret and communicate research
  - Work as a member of a team as well as independently
  - Plan and conduct research

- The proposed research is scientifically sound, reflects knowledge of existing work and makes a contribution to the field.
Broader Impacts

Societal benefits include, but not limited to:

- Impact of project or individual student on society
- Increased participation of underrepresented groups, women/minority, students with disabilities, veterans
- Improved STEM education in schools
- Impact on society: Increased public scientific literacy; increased public engagement with science and technology
- Community outreach: science clubs, newspaper, etc
- Increased partnerships between academia, industry and others
Broader Impacts

• How well does the activity advance discovery while promoting teaching, training, and learning?

• How well does the proposed activity broaden the participation of underrepresented groups?

• To what extent will it enhance the infrastructure for education?

• Will the results be disseminated broadly to enhance scientific and technological understanding?

• What may be the benefits of the proposed activity to society?
Assessment

Intellectual Merit
- Academic performance; grades, curricula, awards, etc.
- Graduate Research plan
- Research/professional experience
- Reference letters

Broader Impacts
- Prior accomplishments, future plans
- Individual experiences
- Potential benefit(s) to society
- Community outreach
- Reference letters
Reference Letters

• Three reference letters
• You can upload contact information of up to 5 letter writers
• Select reference letter writers carefully

Reference letter writers should keep in mind:
• **Intellectual Merit and Broader Impacts**
• Deadline: 1st Thursday in Nov **(5 p.m. ET)**
Application Review Process

- Applications are reviewed by panels of disciplinary and interdisciplinary scientists and engineers.
- Applications are assigned to panels based on the chosen Primary Field of study.
- Select the Primary Field of Study that is most closely aligned with the proposed graduate program of study. For information about the fields supported by the NSF see http://www.nsf.gov/pubs/2015/nsf15597/nsf15597.htm#apendix
- Holistic evaluation.
## Holistic Review in GRFP

<table>
<thead>
<tr>
<th>Application Component</th>
<th>Intellectual Merit</th>
<th>Broader Impacts</th>
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<tbody>
<tr>
<td>Personal Statement</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Research Statement</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Transcripts</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Reference Letters</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Overall Rating</strong></td>
<td><strong>E/V/G/F/P</strong></td>
<td><strong>E/V/G/F/P</strong></td>
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### Rating Key

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
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<td>E</td>
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<td>V</td>
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<td>G</td>
<td>Good</td>
</tr>
<tr>
<td>F</td>
<td>Fair</td>
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<tr>
<td>P</td>
<td>Poor</td>
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An applicant receives **Ratings** and **Comments** for both Intellectual Merit and Broader Impacts. Notifications are sent in early April.
Before You Start Your Application

• What's special, unique, distinctive, and/or impressive about you or your life story?

• What details of your life might help the reviewers better understand you or set you apart from other applicants?

• When did you become interested in this field, and what have you learned about it (and about yourself) that has convinced you that you are well suited to this field?

• How have you learned about this field - through your classes, readings, seminars, work or other experiences, or conversations with people already in the field?

• What reasons can you give for reviewers to be interested in you?
What the reviewers will need to learn ABOUT YOU

- Your potential as a leader and collaborative team member.
- Your academic achievements, extraordinary efforts to enhance your knowledge and skills beyond the classroom (relates to intellectual merit).
- Your ability to think creatively, test new ideas, find solutions and move past barriers or failure (relates to intellectual merit).
- Your communication skills, initiative, and motivation.
- Your long term academic and career goals and ways that you intend to contribute to your future profession (relates to broader impacts).
- Your contributions to society - community engagement, engagement in diversity efforts, public outreach or education, etc. (relates to broader impacts).
• Read Solicitation, and read it again.
• Make sure you list all of your honors, research experiences, presentations, and any publication(s).
• Give a careful attention to Merit Review criteria and Broader Impacts.
• Select and confirm your reference letter writers early. You might seek reference letters from your undergraduate advisor, your graduate advisor or mentor, a supervisor from a K-12 outreach program, or an employer who can address your professional skills.
• Share your application materials with your reference writers.
• Prior research experience, internships, strong academic record and community activities are important components for a competitive GRFP application. Therefore, a
• s a pre-senior you should get involved in research and community outreach.
• Do not wait until the last minute to submit your application.
Cafe Information

Welcome to the Grad Cafe.

**New** There's a new set of users blogging about their admissions journey. [Check it out.](#)

We've got an active [graduate school discussion forum](#). Check them and see if you can **answer** any questions. Or if you have a question yourself, feel free to **ask**! And join in the [discussion](#).

[Search for results](#) and give it a try.

There are **438777** grad school admission results in the database.

**Contact:** [help at thegradcafe.com](mailto:help@thegradcafe.com)
GRFP Resources

- NSF GRFP Website:  www.nsf.gov/grfp
- GRFP Website:  www.nsfgrfp.org
- FastLane:  www.fastlane.nsf.gov/grfp
- Graduate Research Opportunities Worldwide (GROW):  www.nsf.gov/grow
- Graduate Research Internship Program (GRIP):  www.nsf.gov/grip
- E-mail:  info@nsfgrfp.org
- GradCafe:  https://thegradcafe.com/
Good luck!

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