For Applicants to
the NSF Graduate Research Fellowship Program

nsf.gov/grfp

www.nsfgrfp.org
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 Eligibility

- U.S. citizens and permanent residents
- Early-career: undergrad & grad students
- Pursuing research-based MS and PhD
- Science and Engineering
- Enrolled in accredited institution in US by Fall

Academic Levels

1: Seniors/baccalaureates; no graduate study
2: Graduate Students
   - First-year graduate students OR
   - Second-year grad students with ≤ 12 months of graduate study by August
   - Note: graduate students can apply only once, so you have to decide when to apply.
3: Previous graduate student
   - >12 months graduate study - Interruption in graduate study of 2+ years (can have MS degree)
GRFP Key Elements

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: Internships

• Supercomputer access: XSEDE

• Career-Life Balance Initiative (family leave)
• 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 - 2017:** 2,000 Fellowships each year
  – 2018: over 12,000 Applications - ~16.7% success rate
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
GRFP Application Timeline

- **Solicitation Posted**
  - Late Spring/Summer

- **Applications Due**
  - Late October

- **Reference Letters Due**
  - November 1

- **Recipients Announced**
  - March - April

- **Acceptance of Award and Declaration of Tenure/Reserve**
  - May 1

- **Fellowship Year Begins**
  - June 1 or Sept. 1
GRFP Solicitation (NSF 16-588)

- Contains the following information:
  - Program description
  - Award information
  - Eligibility requirements
  - Application preparation
  - Submission instructions
  - Application review criteria
NSF FastLane

- Personal, Relevant Background and Future Goals Statement (3 pages)
- Graduate Research Statement (2 pages)
- Transcripts (uploaded electronically)
- Three letters of reference
Statement 1:

Personal, relevant Background and Future Goals Statement
3 pages

Describe your personal, educational and/or professional experiences that motivate your decision to pursue advanced study. Include examples of research and/or professional activities in which you have participated. Describe the contributions to advancing knowledge in STEM fields and the potential for broader societal impacts. Include future plans to contribute to broader impact.
Statement 2:

Graduate Research Plan Statement
2 pages

Present an original research topic that you would like to pursue in graduate school. Describe the research idea, your general approach. Address the potential of the research to advance knowledge and understanding within science as well as the potential for broader impacts on society.
• Two National Science Board-approved criteria
  – Intellectual Merit
  – Broader Impacts
Intellectual Merit Assessment

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

Broader Impacts Assessment

• Prior accomplishments and future plans
• Individual experiences
• Potential benefit(s) to society
• Community outreach
• Reference letters
• Demonstrated **intellectual ability** and other accepted requisites for **scholarly scientific study**, such as the **ability** to:
  – Plan and conduct research
  – Work as a member of a team as well as independently
  – Interpret and communicate research

*Tips:*

• **Consider the past:** What is the evidence you have already demonstrated intellectual merit? [If your GPA isn’t the greatest, then use other things to show your merit]

• **Consider the future:** Show that you will continue to demonstrate intellectual merit. (through a good and reasonable research plan)
Tips:

- **Consider the past:** What broader impacts have you already made? [Doesn’t have to always be in research; include community outreach, etc.]

- **Consider the future:** How are you going to leverage the NSF resources that you receive to generate broader impacts in the future? [technological/scientific and non-technological/scientific. How will you help the NSF meet its goals? What will you do at your school? And beyond?]
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 and teacher development
• Impact on society: Increased public scientific literacy; increased public engagement with science and technology
• Community outreach: science clubs, radio, TV, newspaper,
• Potential to impact diverse audiences: museums, aquarium
• Development of a diverse, globally competitive workforce
• Increased partnerships between academia, industry and others
• Leadership potential
• Plans to share your science with the broader community
The following elements should be considered in the review for both 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); and
   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?
Select your reference writers carefully, as they will provide important information about your potential as a leader, researcher, and educator – familiarity with you as a person is important

Your selected reference writers will submit their own references; provide them all necessary information well in advance of deadline

You may request up to 5 references. It is your responsibility to ensure three letters of references are submitted by the published deadline in order for your application to be complete and reviewed. (Will be reviewed with two letters)

Letter writer deadline: November 1, 2018, 5:00 p.m. (ET)
Applications are reviewed by panels of disciplinary and interdisciplinary scientists and engineers

Applications assigned to panels based on the applicant's chosen Primary Field(s) of Study and the discipline(s) represented

Applicants are advised to select the Primary Field of Study that is most closely aligned with the proposed graduate program of study

Holistic evaluation: a flexible, individualized way of assessing an applicant’s interests and competencies by which balanced consideration is given to experiences, attributes, and academic achievements and, when considered in combination, how the applicant has demonstrated potential for significant achievements in science and engineering.
GRFP Advice for Applicants

• Start early
• Read Solicitation, and read it again
• Read NSF GRFP websites

• Select and confirm reference letter writers
• Pay attention to Merit Review criteria
• Identify several colleagues and have them comment on multiple statement drafts
• Share your application materials and the merit review criteria with reference writers
• Monitor receipt of reference letters (2 required for review)
nsfgrfp.org

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.

2017 GRFP Application Is Closed
Prospective applicants must read the 2016-17 Program Solicitation, and apply for the 2017 competition on the FastLane portal.

2017 GRFP Results Announced
The awardees and honorable mentions for the 2017 NSF Graduate Research Fellowship Program competition have been posted online. For the 2017 competition, NSF received over 13,000 applications and made 2,000 awards.

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 16-561) 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 spectral signatures of hydrated minerals on slopes where mysterious, possibly water-related streaks are found on the red planet. These streaks, known as recurring slope lineae (RSL), form and snake down the planet’s steep slopes
University of Washington contacts:

Current graduate students:  
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Current undergraduate students & alumni:  
Emily Smith & Robin Chang  
Office of Merit Scholarships, Fellowships & Awards  
emilys42@uw.edu; robinc@uw.edu
GRFP Resources

- NSF GRFP Website (nsf.gov/grfp)
  - Solicitation and links
- NSF GRFP FastLane Website (fastlane.nsf.gov/grfp)
  - Application, guides, announcements
- GRFP Website (nsfgrfp.org)
- Current & former Fellows
- Phone & e-mail
  - 866-NSF-GRFP (673-4737)
  - info@nsfgrfp.org