Applying to the NSF Graduate Research Fellowship Program

National Science Foundation
Graduate Research Fellowship Program

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www.nsfgrfp.org
The **OVERALL GOAL** of the Graduate Research Fellowship Program is to recruit individuals into Science, Technology, Engineering, and Mathematics (STEM) fields

- 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
NSF GRFP

- **Fellowship**: Individuals apply
- **NSF GRFP funding**: Awarded directly to Fellow’s graduate institution for disbursement
- **Flexible**: Project, advisor, and graduate program
- **Unrestricted**: No service requirement after completion
- **Portable**: Use at any accredited, non-profit, US institution of higher education, on US campus, at which Fellow is enrolled
NSF GRFP

Success Rate*:

2010 - 2020: ~2,000 Fellowships awarded yearly
  – 2017: ~13,200 Applications - ~15% success rate
  – 2018: ~12,400 Applications - ~16% success rate
  – 2019: ~12,200 Applications - ~16% success rate
  – 2020: ~12,900 Applications - ~16% success rate

2,500 awards anticipated for 2022

*Applications reviewed
NSF GRFP Benefits

- **Five Year Award** – $138,000
- **Three years of support**
  - $34,000 Annual Stipend
  - $12,000 Educational allowance directly to graduate institution in lieu of tuition and fees

- **Other NSF Opportunities**
  - INTERN – non-academic internship program
  - FASED Individuals with Disabilities support
  - Career Life Balance awards (family leave)
NSF GRFP Eligibility Overview

- U.S. citizens, nationals, and permanent residents
- Early-career: undergrad & graduate students
- Pursuing research-based master’s and/or doctoral degrees (no professional degrees)
- Science, Technology, Engineering, Mathematics (STEM) or STEM Education
- Full-time enrollment in graduate degree program at accredited, non-profit US institution of higher education
- NO foreign institutions
How many times can I apply?

• **Level 1**: Undergraduate Seniors or baccalaureates never enrolled in graduate program
  
  – **No restriction** – can apply every year until enrolled in graduate degree program!
  
  – If awarded Fellowship, **must enroll in eligible graduate degree program by Fall** (See GRFP Solicitation for details)
How many times can I apply?

Graduate students can apply only **ONCE**.

**Level 2:** First-year graduate students in *first* graduate degree program. Currently enrolled joint bachelor’s-master’s students who have completed 3 years in joint program.

**Level 3:** Second-year graduate students (no more than one academic year in *first* graduate degree program). Current first-year doctoral students who went directly into doctoral program after completing joint bachelor’s-master’s degree (and did not apply during joint program).

**Level 4:** Returning graduate students with >2-year interruption in graduate study; may have master’s (no doctorates) or >1 academic year in graduate program; **NOT ENROLLED** in graduate program at application deadline.
How often can I apply?

Only one application per person per annual competition
Eligible Fields of Study

- Chemistry
- Computer & Information Science/Engineering
- Engineering
- Geosciences
- Life Sciences
- Materials Research
- Mathematical Sciences
- Physics and Astronomy
- Psychology
- Social Sciences
- STEM Education
INELIGIBLE Degree Programs

• Professional degree programs
  – E.g., MBA, MD, JD, DVM, DDS, Pharm. D
• Joint science-professional degree programs
  – E.g., MD/PhD, JD/PhD
• Community, Global, or Public Health (MPH)
• Counseling, Social Work (MSW)
• Education (except STEM education)
• Humanities (except history of science)

See Detailed Eligibility Requirements
GRFP Solicitation NSF 21-602
Ineligible Proposed Research

- Research with directly health-related goals
- Clinical research
- Applied research on plant pathology
- Impacts on food safety
NSF GRFP Deadlines

Applications DUE:
5 p.m. local time applicant mailing address
(NSF receipt time stamp)

Oct 18: Life Sciences
Oct 19: CISE, Materials Research, Psychology, Social Sciences, STEM Education and Learning
Oct 21: Engineering
Oct 22: Chemistry, Geosciences, Math, Physics & Astronomy

No exceptions. No extensions. No materials accepted by mail or email.

2) Personal, Relevant Background and Future Goals Statement (3-page PDF)

3) Graduate Research Statement (2-page PDF)

4) Transcripts (PDFs; mandatory)

5) Letters of reference (you may provide up to five reference letters; 2 mandatory; 3 RECOMMENDED)

Read GRFP Solicitation for detailed application instructions and requirements
Intellectual Merit

Your potential to advance knowledge

• Demonstrated intellectual ability (grades, curricula, awards, publications, presentations, etc.)
• Other evidence of your potential, such as ability to:
  – Plan and conduct research
  – Work as a member of a team as well as independently
  – Interpret and communicate research
  – Take initiative, solve problems, persist.

The potential of your approach to your major field of study and your Research Plan to advance knowledge.

Evidence of Intellectual Merit can be found in all parts of the application: Personal Statement, Research Plan, letters, experiences, awards, achievements, and transcripts.

Note that your intellectual merit is different from your research’s intellectual merit
Broader Impacts

Potential impact of the individual (you!) on society
Potential impact of your research on society; why it’s important

Societal benefits may include, but are not limited to:

- Increasing participation of underrepresented groups, women, students with disabilities, veterans
- Outreach: Mentoring; improving STEM education in schools
- Increasing public scientific literacy; increased public engagement with STEM
- Community outreach: science clubs, radio, TV, newspapers, blogs
- Potential to impact a diverse, globally competitive workforce
- Increasing collaboration between academia, industry, others

Evidence of Broader Impacts can be in all parts of the application: Personal Statement, Research Plan, letters, experiences, awards, achievements
Applications are reviewed:

• Using a comprehensive, holistic approach, giving balanced consideration to all components of the application—
  including the educational and research record, leadership, outreach, service activities, future plans, individual competencies, experiences, and other attributes

• To assess demonstrated potential for significant achievement in STEM
Preparing a Competitive GRFP Application

Research Statement

• Describe your proposed research plan:
  – Communicate your research idea and approach
  – Explain your research plan and methods
  – What do you expect to learn? How will you know if the project is successful?
  – What would you do next?

• Keep in mind:
  – Avoid jargon
  – Communicate clearly for non-specialists
  – Make your contributions clear

Clearly address NSF’s Merit Review Criteria – Intellectual Merit and Broader Impacts – under separate headings
Reference Letters

Reference Letter Deadline

NSF Receipt Time Stamp BEFORE

October 29, 2021, 5PM Eastern Time

As your reference letter writers to submit EARLY!
Potentially 40,000 individuals submit reference letters.

No exceptions or extensions for Reference Letter deadline.
Application Review Process

• Your application is reviewed by disciplinary and interdisciplinary STEM experts

• Applications are assigned to reviewers based on your chosen Major Field of Study
  – Select the Major Field of Study most closely aligned with your proposed graduate program of study

• Prepare your statements with your audience in mind
  – Reviewers have broad disciplinary expertise but may not be specialists
Choose Field of Study Carefully!

Your choice determines:
• Expertise of the reviewers for your application
• Discipline of your graduate degree program if awarded fellowship
  – Choice must match the broad discipline of your chosen major field of study
  – E.g., if you chose a Chemistry field, you can’t enroll in Chemical Engineering

Check out the information at:
https://www.nsfgrfp.org/applicants/application_components/field_of_study
Prepare a competitive application

START EARLY!

• Read the current Solicitation *and read it again!*
• See tips & FAQs at NSF GRFP website ([www.nsfgrfp.org](http://www.nsfgrfp.org))
• Clearly address NSF Merit Review Criteria
• Describe your honors, experiences, presentations, any publications (etc.) clearly for the reviewers
• Your statements should be interesting and clear
  – Ask colleagues to read and comment on drafts
• Share your application materials and the Merit Review Criteria with your reference letter writers
• Select, contact, and **confirm** your reference letter writers
• **View Your Application Package Status** on GRFP site frequently
Click SUBMIT!

Remember to hit SUBMIT after you complete your application. Unsubmitted applications are considered incomplete and will not be reviewed.

You will receive a confirmation email after submission.
APPLY EARLY!

Don’t risk wasting hours of work because you waited to the last minute to submit your application.

No exceptions or extensions for the application and reference letter deadlines
NSF GRFP Resources

• GRFP Website: www.nsfgrfp.org
  – Includes tips for applying, FAQs
• NSF GRFP Website: www.nsf.gov/grfp
  – Solicitation & FAQs
• Apply on Research.gov
  www.research.gov/grfp/Login.do
Read the GRFP Solicitation!
https://nsfgrfp.org/

Questions?
info@nsfgrfp.org
866-673-4737
(M-F, 8:30-5:30 PM ET)