

Division of Graduate Education (DGE) Graduate Research Fellowship Program (GRFP)

NSFGRFP.org

National Science Foundation Directorate for STEM Education (EDU)

Preparing a diverse STEM workforce and a well-informed citizenry



Graduate Research Fellowship Program (GRFP)

Directorate for STEM Education (EDU) Division of Graduate Education (DGE)

> www.nsf.gov/grfp info@nsfgrfp.org www.nsfgrfp.org

About GRFP

General Information

Description

Eligibility

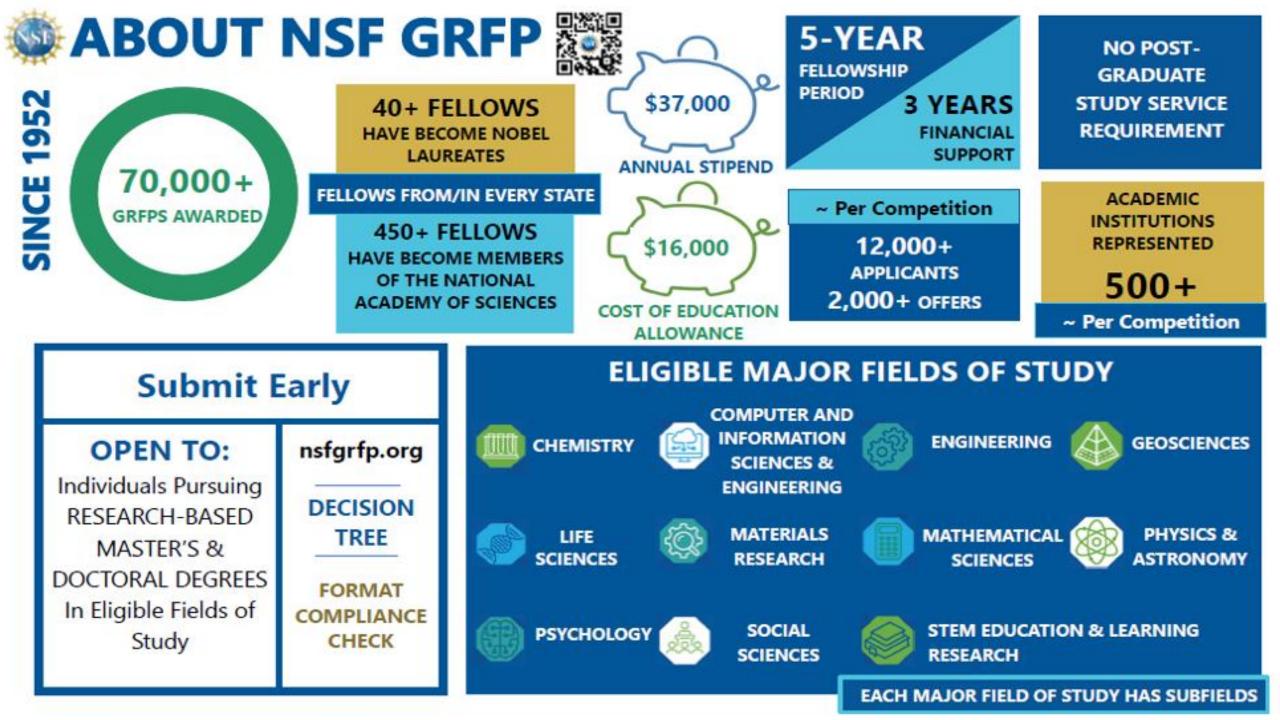
Ineligible Degree Programs

Ineligible Areas of Study & Proposed Research

Application Package

Review Criteria







Graduate Research Fellowship Program (GRFP)

DESCRIPTION



NSF Graduate Research Fellowship

Five Year Awards – \$159,000*

\$53,000 each year for <u>three</u> years over five-year period

- \$37,000 stipend + \$16,000 education allowance paid to institution
- Payment covers all tuition and mandatory fees (no cost to student)

Other NSF Opportunities

- INTERN non-academic internship program
- FASED Individuals with Disabilities support
- Career-Life Balance Initiative (family leave)





- **Fellowship:** Awarded to individual, paid through the attended graduate institution
- Flexible: Choice of project, advisor, and graduate program
- <u>Unrestricted</u>: No service requirement after completion
- <u>Portable</u>: Can be used at any accredited, non-profit, US institution of higher education, with campus in US for research-based master's and doctoral degrees

2010 - 2022: ~2,000-2,100 Fellowships yearly

2022: ~12,600 Applications - ~18% success rate 2021: ~12,600 Applications - ~17% success rate 2020: ~12,800 Applications - ~16% success rate 2019: ~12,200 Applications - ~16% success rate





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 <u>demonstrated</u> the potential to be high achieving scientists and engineers, <u>early in their careers</u>
- To broaden participation of the full spectrum of diverse talents in STEM



Graduate Research Fellowship Program (GRFP)

ELIGIBILITY





GRFP Eligibility NSF Solicitation 23-605

- 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



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Level 1: Seniors/Bachelor's degree: no graduate study

Level 2: 1st-year graduate students

Joint Bachelor's-Master's (completed 3 years)

Level 3: Second-year graduate students

- No more than 1 academic year completed in 1st graduate degree program
- Joint BS/MS holders ONLY: can apply as 1st year doctoral students progressed to PhD directly after completing joint BS/MS degree

Level 4: Returning graduate students

- > 2-year interruption in graduate study
- No doctorates or >1 academic year in graduate program
- NOT ENROLLED in graduate program at application deadline

Only

apply

once

Ineligible Degree Programs

- Professional degree programs
 - E.g., MBA, MD, JD, DVM, DDS
- 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 in the GRFP Solicitation



Ineligible Areas of Study and Proposed Research*

Research with directly health-related goals

- Etiology, diagnosis, or treatment of disease or disorder
- Animal models of disease for drug development/testing
- Epidemiology
- Disease prevention
- Public, community, global health
- Clinical research
- Patient-oriented research
- Epidemiological and behavioral studies

Outcomes research

- Health services, standard of care, health policy
- Research directly leading to clinical trials
- Advocacy for specific policy outcomes

Applied research on plant pathology

Maximizing agricultural production

Impacts on food safety

* See GRFP solicitation for limited exceptions to ineligible areas of study and proposed research



Graduate Research Fellowship Program (GRFP)

Application Package





NSE

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GRFP Application

Complete Application Package:

- Personal Information, Education, Work/Research Experience, Proposed Major Field of Study, Honors, Awards, Publications
 Personal, Relevant Background and Future Goals Statement (3-page PDF)
 Graduate Research Statement (2-page PDF)
 Transcripts (PDFs; mandatory)
 Letters of reference (may provide up to five names of reference letter writers)
 - Mandatory: 3 reference writer names

GRFP Application Specifics

DEADLINES (5 p.m. local time of applicant mailing address):

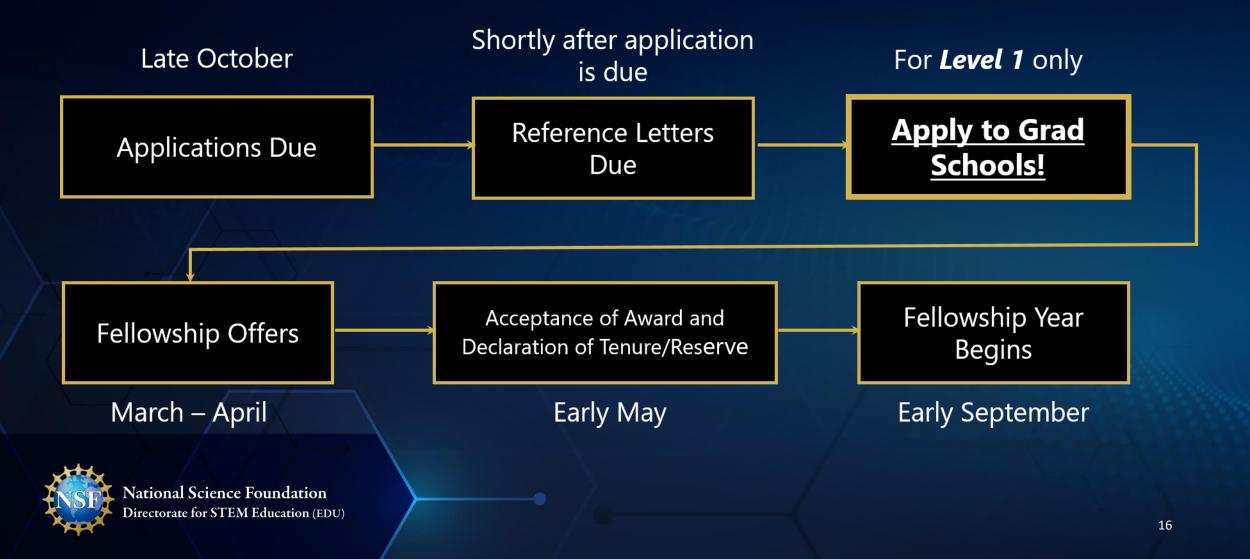
- Oct. 16, 2023: Life Sciences
- Oct. 17, 2023: Computer & Information Science & Engineering, Materials Research, Psychology, Social Sciences, STEM Education & Learning
- Oct. 19, 2023: Engineering
- Oct. 20, 2023: Chemistry, Geosciences, Mathematical Sciences, Physics & Astronomy

Read the GRFP Solicitation for detailed application instructions and requirements!

To request accessibility accommodations, please contact info@nsfgrfp.org at least four weeks before the application deadline.



<u>Example</u> GRFP Application Timeline





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Two Statements

 Personal, Relevant Background & Goals
Research Statement

Personal, Relevant Background & Goals

- Tell your story; demonstrate your potential for STEM research
- Experiences (professional and personal) that contributed to your motivation and preparation for pursuing a STEM career

Career aspirations and future goals

How have your experiences shaped your goals?

Research, industrial, professional experience

- What was the project, what was your role?
- How did you become involved? Where was it done?
- Why was this project worth doing? What have you learned? Any advanced course work?
- What was your contribution to the project and how did it fit into the whole?



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



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Clearly address NSF's Merit Review Criteria – Intellectual Merit and Broader Impacts – under <u>separate</u> headings

Reference Letters & Transcripts

<u>Reference Letters</u>

MANDATORY for Application Review

- 3 reference writer names in the application
- 2 reference letters <u>must be received</u> by NSF

STRONGLY RECOMMENDED

- List up to 5 names of reference writers
- 3 reference letters received by NSF

List and rank up to 5 reference letter writers - Top 3 will be seen by reviewers

<u> Transcripts – Required</u>

- All applicants <u>must</u> submit Bachelor's degree transcript
- Transcripts <u>required</u> for all degree programs
- Transcripts <u>required</u> for all graduate degree enrollment
- Official or unofficial transcripts accepted
- Official transcripts recommended for 2nd year graduate students



Graduate Research Fellowship Program (GRFP)

Review Criteria



Comprehensive Review National Science Board Merit Review Criteria

Intellectual Merit

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

Broader Impacts

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



Comprehensive Review National Science Board Merit Review Criteria

Review considerations:

- <u>Demonstrated potential</u> for significant achievement in STEM
- <u>Comprehensive</u>, <u>holistic</u> approach to review
- Balanced consideration to all components of the application
 - educational and research record, leadership, outreach, service activities, plans for the future, individual competencies, experiences, and other attributes



Intellectual Merit Potential to advance knowledge

Evidence of potential and ability:

- Demonstrated intellectual ability (grades, curricula, awards, publications, presentations, etc.)
- Plan and conduct research
- Work as a member of a team as well as independently
- Interpret and communicate research
- Take initiative, solve problems, persist
- Display 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



Broader Impacts Potential impact of the individual or research on society

Societal benefits may include, but are not limited to:

- Increasing participation of the full spectrum of diverse talents in STEM
- Engaging in mentoring; improving STEM education in schools
- Increasing public scientific literacy; increased public engagement with STEM
- Conducting community outreach: science clubs, radio, TV, newspapers, blogs
- 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





Thank you!

Graduate Research Fellowship Program (GRFP)

Program Contacts

info@nsfgrfp.org

Applicants: info@nsfgrfp.org GRFP Reference Writers: nsfgrfp.org/reference writers GRFP Reviewers: nsfgrfp.org/reviewers 866-NSF-GRFP, 866-673-4737 (toll-free from the US & Canada) 202-331-3542 (international)

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