

Graduate Research Fellowship Program (GRFP)

Education and Human Resources (EHR)

Division of Graduate Education (DGE)

Presenters:

Narcrisha Norman, Ph.D., Program Director Christopher L. Hill, Ph.D., Program Director



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





Talk Contents

About GRFP

General Information

Description

Eligibility

Ineligible Degree Programs

Ineligible Fields of Study

Application Package

Review Criteria

ABOUT NSF GRFP

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40+ FELLOWS HAVE GONE ON TO BECOME

NOBEL LAUREATES

Fellows from every state

450+ FELLOWS

HAVE BECOME MEMBERS OF THE NATIONAL ACADEMY OF SCIENCES



ANNUAL STIPEND





2020 COMPETITION 12,000+ APPLICANTS 2,000+ offers

NO POST-GRADUATE STUDY SERVICE REQUIREMENT



OPEN TO:

GRADUATE STUDENTS WHO ARE OR WILL BE PURSUING **RESEARCH-BASED MASTER'S** AND DOCTORAL DEGREES In Eligible Fields of Study



CHEMISTRY



COMPUTER AND INFORMATION **SCIENCES & ENGINEERING**



ELIGIBLE MAJOR FIELDS OF STUDY

ENGINEERING



GEOSCIENCES



LIFE **SCIENCES**



MATERIALS RESEARCH



MATHEMATICAL **SCIENCES**



PHYSICS & ASTRONOMY



PSYCHOLOGY



SOCIAL **SCIENCES**



STEM EDUCATION & LEARNING RESEARCH

Each major field has numerous sub-fields



Graduate Research Fellowship Program (GRFP)

nsfgrfp.org



National Science Foundation

Graduate Research Fellowship Program (GRFP)

DESCRIPTION





NSF Graduate Research Fellowships

Five Year Awards – \$138,000

Three years of financial support

- \$34,000 stipend each year to the graduate institution
- \$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 Initiative (family leave)



GRFP Benefits

- <u>Fellowship</u>: 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 research-based master's and doctoral degrees
- 2010 2019: ~2,000 Fellowships yearly
- 2016: ~16,800 Applications ~12% success rate
- 2017: ~13,200 Applications ~15% success rate
- 2018: ~12,400 Applications ~16% success rate
- 2019: ~12,200 Applications ~16% success rate



GRFP Goals

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 the</u> <u>potential</u> to be high achieving scientists and engineers, <u>early</u> in their careers
- To <u>broaden participation</u> in science and engineering of underrepresented groups, including women, minorities, persons with disabilities, and veterans



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Graduate Research Fellowship Program (GRFP)

ELIGIBILITY





GRFP Eligibility - NSF 21-602

- 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

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

Level 2: 1st-year graduate students

Joint bachelor's-master's (completed 3 years)

Only alphy grad school

Level 3: Second-year graduate students

- No more than 1 academic year completed in 1st graduate degree program
- For joint BS/MS holders ONLY, can apply as 1st year doctoral students if went directly into PhD program, after completing joint bachelor's-master's 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



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)
- History (except history of science)





Ineligible Fields of Study

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

Applied research on plant pathology

Maximizing agricultural production

Impacts on food safety





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Application Package





GRFP Complete Application

Complete Application Package:

- 1) Personal Information, Education, Work/Research Experience, Proposed Major Field of Study, Honors, Awards, Publications
- 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 (may provide up to five names of reference letter writers)
 - 3 reference letter writer names are mandatory and 2 reference letters are mandatory for your application to be reviewed



GRFP Complete Application

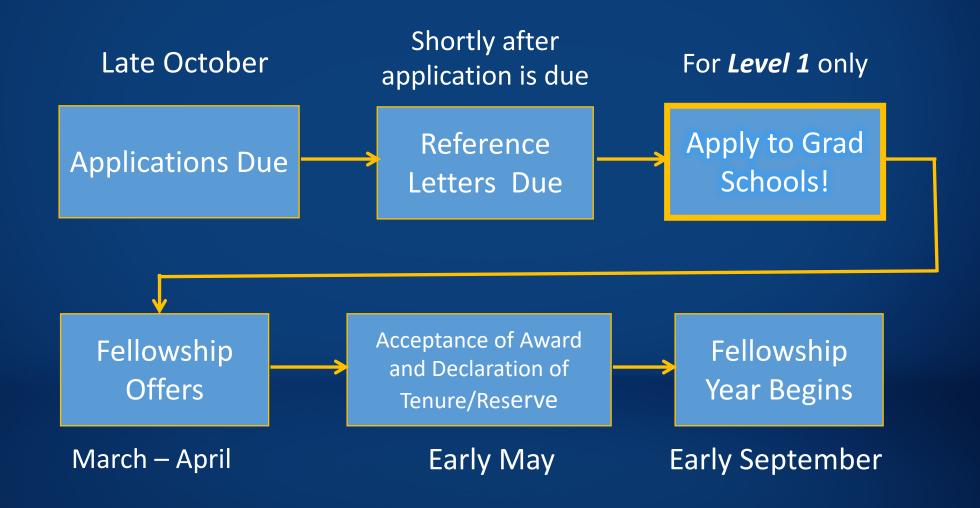
DEADLINES (5 p.m. local applicant mailing address):

- Oct. 18, 2021: Life Sciences
- Oct. 19, 2021: CISE, Materials Research,
 Psychology, Social Sciences, STEM Education and Learning
- Oct. 21, 2021: Engineering
- Oct. 22, 2021: Chemistry, Geosciences, Math,
 Physics & Astronomy

Read the GRFP Solicitation for detailed application instructions and requirements (NSF 21-602, latest)

If accessibility accommodations are required, please contact info@nsfgrfp.org at least four weeks before the application deadline

Example GRFP Application Timeline





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Graduate Research Fellowship Program (GRFP)

Personal and Research Statements



Two Statements

Personal, Relevant
Background & Goals
(3-page PDF)

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?

Two Statements

Personal, Relevant Background & Goals

Research Statement (2-page PDF)

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 and Transcripts



Reference Letters

- 5 names of potential references are optional
- 3 names *must be listed* as part of the application
- NSF must receive at least 2 letters to accept your application for review
- Three (3) reference letters are STRONGLY RECOMMENDED
- Two (2) reference letters are MANDATORY
- List and rank up to 5 reference letter writers
 Top 3 will be seen by reviewers

Transcripts

- All applicants must submit bachelor's degree transcript
- Transcripts are <u>required</u> for all degree-programs
- Graduate transcripts for all graduate degree enrollment
- Official or unofficial transcripts accepted



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Review Criteria



Comprehensive Review

National Science Boardapproved 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

Applicants are reviewed based on:

- Their demonstrated potential for significant achievement in STEM
- Using a comprehensive, holistic approach
- A balanced consideration to all components of the application
 - Including the 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, such as ability to:

- 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
- 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 and/or the research on society; why it's important

Societal benefits may include, but are not limited to:

- Increasing participation of underrepresented groups, women, persons 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
- 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



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