

Understanding the NSF GRFP & How to Get Started

We will begin shortly.

If you need assistance during this event, please use the chat function to message Sam Lake or Kelly Oman



PhDPlus



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Pronouns: he/him/his



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- NSF GRFP Goals
- Eligibility & Important Information
- Application Elements
- Review Criteria
- Resources & Next Steps



National Science Foundation

The purpose of the NSF Graduate Research Fellowship program is to ensure the quality, vitality, and diversity of the scientific and engineering workforce of the United States.

Select, recognize, and financially support individuals who have demonstrated potential to be high-achieving scientists and engineers early in their careers

- Focused on the individual, not solely the research project
- Intellectual merit

Broaden participation in STEM of underrepresented groups, including women, minorities, persons with disabilities, and veterans

- Broader impacts

WHY SHOULD YOU APPLY?

Five-year Award – Total of \$147,000

- 3 years of financial support
- \$37,000 stipend per year
- \$12,000 goes to the institution for tuition

Professional Development Opportunities

- INTERN – Non-academic internship program
- Practicing grant writing and receiving constructive feedback throughout the process

Prestigious

- Fellowships and Honorable Mentions are notable accomplishments

Awarded to YOU (an individual)

- Flexible – not tied to a specific research project
- Unrestrictive – no service requirement after completion

WHO IS ELIGIBLE?

- U.S. citizens, nationals, or permanent residents
- Intend to enroll or be enrolled in a research-based master's or doctoral degree program in an eligible Field of Study in STEM or STEM education
 - Note:** does NOT include MD/PhD or JD/PhD programs
- Never earned a doctoral or terminal degree in any field
- Never previously applied to GRFP while enrolled in a graduate degree program
- Never previously accepted the GRFP
- Not an NSF employee

Learn more at: [nsfgrfp.org/applicants/applicant-eligibility/](https://www.nsfgrfp.org/applicants/applicant-eligibility/)

WHO IS ELIGIBLE?

- 1st or 2nd year graduate students may apply once in graduate school.
 - If you are a 1st year taking courses this summer, you **must** apply this year.
- Never earned a master's or professional degree in any field, or completed more than one academic year in a graduate degree-granting program, unless:
 - (i) returning to graduate study after an interruption of two or more consecutive years immediately preceding the application deadline, and
 - (ii) not enrolled in a graduate degree program at the application deadline

Note: **if you are a current graduate student, you do not meet these criteria**
- Undergraduate seniors pursuing a master's degree simultaneously with the bachelor's degree will be limited to one application to GRFP [apply either during joint degree OR doctoral program, not both]

ELIGIBLE FIELDS OF STUDY

- Chemistry
- Computer and Information Sciences & Engineering
- Engineering
- Geosciences
- Life Sciences
- Materials Research
- Mathematical Sciences
- Physics & Astronomy
- Psychology
- Social Sciences (includes Economics)
- STEM Education and Learning Research

See the Complete List of Fields (with subfields) in 2022 Solicitation

Note: Historically, does NOT include clinical research or research with primarily disease-related goals.

FALL 2023 SUBMISSION DATES - FORTHCOMING

Applications are due at 5:00 pm (local time) in mid-October. The day of the week varies by Field of Study.

For example, the 2022 dues dates were:

Monday, Oct. 17, 2022

Life Sciences

Tuesday, Oct. 18, 2022

Computer and Information Science and Engineering, Materials Research, Psychology, Social Sciences, STEM Education and Learning Engineering

Thursday, Oct. 20, 2022

Engineering

Friday, Oct. 21, 2022

Chemistry, Geosciences, Mathematical Sciences, Physics and Astronomy

WHAT DOES THE APPLICATION INCLUDE?

Application (Resume/CV content)

- Personal information, Education, Work/Research Experience,
- Proposed Field of Study, Honors, Publications
- *Maximize what you include here, it is the FIRST thing reviewers see*

Personal, Relevant Background, and Future Goals Statement

- 3 pages

Graduate Research Statement

- 2 pages

3 Reference Letters

- Up to 5 letters can be requested from referees

Unofficial Transcripts

- Graduate and undergraduate

PERSONAL, RELEVANT BACKGROUND, & FUTURE GOALS STATEMENT – 3 pages

Tell your story & demonstrate your potential for STEM research

- Experiences (personal and professional) that contributed to your **motivation and preparation** for pursuing a STEM career
- Previous research/industrial/professional experiences
 - Focus on **the why**, using the experiences that have informed your career and motivate you today (Show; don't tell!)
 - What was the project? What was **your** contribution?
 - What did you learn or gain from this experience?
 - Articulate the importance of each experience and how it contributes to your role in the scientific community.
- Career aspirations and future goals
 - How have your experiences shaped your goals?

GRADUATE RESEARCH PLAN STATEMENT – 2 pages

A 3-year plan for an original research project you will complete during the fellowship

- Describe your research idea, your research plan and methods, and the resources needed/available (*not a binding agreement*)
 - What is creative about this?
 - How will you know if you're successful?
 - What do you expect to learn?
 - Alternative approaches?
- Demonstrate your **ability to develop a research question, hypothesis, and the knowledge/resources to execute it**
- Address the potential of research to advance knowledge, as well as its potential for broader impacts on society
- What skills do you have to make this project possible?
- Keep the scope of the project feasible for a graduate project.

REFERENCE LETTERS

3 reference letters are needed for a complete application

- Provide information for up to 5 references and rank them.
- Only the top 3 letters submitted will be reviewed.

Who to choose?

- Your current research advisor & your previous research advisor.
- People who are familiar with you AND can speak to your intellectual merit and broader impacts.
- Consider recommendations from outside your primary field of study (if appropriate)

Share your statements and current CV/resume with them

- Complete drafts are okay!

You can **give them suggestions** of what you'd like them to mention

- Their letter should complement the rest of your application (even the other reference letters)



NSF REVIEW CRITERIA

Intellectual Merit

The **potential to advance knowledge** within your field or across different fields.

Broader Impacts

The potential to benefit society and contribute to the achievement of specific, desired societal outcomes.

Reviewers should make “a holistic, comprehensive review. Look for intellectual merit and broader impacts throughout the **ENTIRE** application.”

INTELLECTUAL MERIT

The **potential of both the applicant *and* the proposed activities to advance knowledge and understanding** within your field or across different fields.

- Your demonstrated intellectual ability & academic performance (such as grades, curricula, awards, listed achievements, research products, etc.)*

Other evidence of your potential to be a high-achieving scientist or engineer, such as your:

- Previous research experience*
- Professional experience*
- Graduate Research Plan*
- Ability to plan and conduct research
- Ability to work as a member of a team as well as independently
- Ability to interpret & communicate research
- Willingness to take the initiative, solve problems, and persist

BROADER IMPACTS

The potential of the proposed activities to **benefit society or advance desired societal outcome.**

- Potential impact of the **individual** (you!) on society
- Potential impact of **your research** on society

Examples of Societal Benefits:

- Increasing participation of underrepresented groups, women, students with disabilities, & veterans in STEM
- Outreach and mentoring; improving STEM education in schools
- Increasing public engagement with science and technology
- Community outreach, e.g. science clubs, newspapers, blogs
- Increasing collaboration between academia, industry, nonprofits, community groups, others

BROADER IMPACTS EXAMPLES

“The importance of Broader Impacts differs among individuals and the reviewers’ perspectives,” and the novelty of approaches differs among disciplines.

Reviewers look for evidence in:

- Plans, contributions, and achievements*
- Personal experiences, resilience, and motivation*
- Prior accomplishments, current activities, goals, and next steps*
- Initiative, engagement, and awareness of where they can have an impact*
- Explanation of research importance*
- Awards or honors for IMPACT*
- Reference letters*

OTHER CONSIDERATIONS

The following points are important in the review of both criteria:

- To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
- 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?
- How qualified is the individual, team, or organization to conduct the proposed activities?
- Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?

APPLY NOW OR NEXT YEAR?

Apply this year if you:

A graduate student in their second year at UVA, who has not previously applied as a graduate student. You must apply this year.

APPLY NOW OR NEXT YEAR?

For graduate students starting at UVA in Fall 2023:

Apply this year if you:

- Have extensive research experience (with publications and/or conference presentations)
- Are already involved (or have a plan for getting involved) with UVA organizations
- Have someone (e.g., advisor, lab rotation PI, DGS) to provide guidance on your research plan & write a strong letter
- Are enrolled in graduate courses this summer that will be on your transcripts*

Apply next year if you:

- Anticipate a publication within the next year
- Need time to strengthen your relationship with a research advisor
- Want to get more involved (broader impacts)

Applying to the NSF Graduate Research Fellowship Program?

Learn about the support PhD Plus provides UVA applicants.



phdplus.virginia.edu

The screenshot shows the top navigation bar of the PhD Plus website. It includes the University of Virginia logo, a search bar, and a main header 'PHD PLUS'. Below the header is a menu with categories: ABOUT, CORE MODULES, PHD PLUS HIGHLIGHTS, EVENTS & OPPORTUNITIES, JOB SEARCH, INTERNSHIPS, and PROJECT PARTNERS. The main content area features a breadcrumb trail 'HOME / NSF GRADUATE RESEARCH FELLOWSHIP' and a large title 'NSF Graduate Research Fellowship'. The text below explains that PhD Plus supports UVA doctoral students applying for the NSF GRFP in 2023, providing access to workshops, writing retreats, and online materials. It also mentions a 'PhD Plus - 2023 GRFP Preparation Timeline' and lists upcoming events for May, June, and July.

This summary page features the University of Virginia logo and the 'PhDPlus' branding. The title is 'NSF Graduate Research Fellowship Program' with the subtitle '2023 Preparation Timeline'. The text states that PhD Plus knows applying for a fellowship or grant can be time-consuming and sometimes overwhelming, and offers support by providing a document to refer to while drafting and submitting applications. The page is organized by month:

- MAY**
 - Get to Know the GRFP**
 - Register and attend the PhD Plus [Understanding the NSF GRFP & How to Get Started](#) workshop on May 31, 3:30 pm
 - Visit the [NSF GRFP website](#) for additional information (note: the solicitation for this year likely won't be released until July, though the major aspects and application components typically remain stable from year to year)
 - Confirm Your Eligibility**
 - Review the eligibility requirements and guidelines on the [NSF GRFP website](#)
 - Use the [NSF GRFP Eligibility Questionnaire](#)
 - Decide When to Apply**
 - If you started your graduate program in the Fall of 2022 or Spring or Summer of 2023, **APPLY THIS YEAR!**
 - If you started (or will start) in the Fall of 2023, schedule a time to talk to your advisor or DGS to decide when you will be most competitive.
- JUNE**
 - Learn More about the GRFP**
 - Visit the [PhD Plus NSF GRFP website](#) to register for the summer and fall programs and add them to your calendar.
 - Register and participate in session 1 of the [PhD Plus Fellowship Application Workshop, Deconstructing Fellowship Announcements & Evaluation Criteria](#), on June 21, 3:00 pm
 - Review the GRFP resources available on the [PhD Plus Collab site](#)
- JULY**
 - Start Your Application**
 - Register and participate in session 2 of the [PhD Plus Fellowship Application Workshop, Research and Personal Statements: Crafting Your Stories](#), on July 5, 3:00 pm

PHD+ RESOURCES FOR 2023 APPLICANTS

Fellowship Application Workshop Series

- Deconstructing Fellowship Announcements & Evaluation Criteria - June 21 | 3:00 pm
- Research and Personal Statements: Crafting Your Stories - July 5 | 3:00 pm
- Revising and Refining, Coaching Letter Writers - July 19 | 3:00 pm
- Peer Feedback Sessions - Week of Aug. 14 | 3:00 pm

GRFP Fall 1-Day Bootcamp

- Condensed training for applicants who were unable to attend the summer fellowship workshop series or would like a refresher: Aug. 15 | 1:00 – 3:30 pm

Fall Activities

- Mini-Writing Retreats: Aug. 24, Sept. 1, 7, 14, 22 | 2:00 – 4:30 pm
- Virtual Office Hours: Aug. 25, 29; Sept. 8, 13, 21; Oct. 6 | 3:00 – 4:30 pm
- Application Panel Review “Speed Dating”: Week of Sept. 25, dates & times TBD

ADDITIONAL RESOURCES

NSF GRFP 2022 solicitation:

<https://www.nsf.gov/pubs/2022/nsf22614/nsf22614.pdf>

NSF GRFP Resources (recorded webinars, templates, slides, & session transcripts)

<https://nsfgrfp.org/resources/>

NSF GRFP FAQ:

<https://nsfgrfp.org/applicants/faqs/>

Blogs and Websites (advice, timelines, and previous awardee materials)

<https://www.alexhunterlang.com/nsf-fellowship>

<http://www.malloryladd.com/nsf-grfp-advice.html>

Applying to the NSF Graduate Research Fellowship Program?

Learn about the support PhD Plus provides UVA applicants.



QUESTIONS?

Your GRFP Support Team includes your advisor(s), lab mates, current and past fellows, and us. We are here to help and connect you to resources!

When you have questions, please reach out to us:

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bit.ly/PhDPlus_GRFP



