



National Science Foundation

# The NSF Graduate Research Fellowship Program



Graduate Research Fellowship Program Operations Center



## NSF Graduate Research Fellowship Program Goals



- To increase the Nation's human capacity in science and engineering by providing fellowships for early-career graduate students who pursue research-based master's and doctoral degrees in NSF-supported disciplines



- To support the development of a diverse and globally engaged US science and engineering workforce



National Science Foundation Graduate Research Fellowship Program  
Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrfp.org](http://www.nsfgrfp.org)  
Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)



## GRFP Successes



- 48,500 Fellowships awarded since 1952
- 30 Nobel Laureates
- 440 members of the National Academy of Sciences
- Founders of corporations to authors of books
- Higher Ph.D. completion rates
- Enhanced diversity



National Science Foundation Graduate Research Fellowship Program  
Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrfp.org](http://www.nsfgrfp.org)  
Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)



## GRFP Key Elements



- Five Year Award – \$126,000
- Three years of support
  - \$30,000 Stipend per year
  - \$12,000 Educational allowance to institution
- International research opportunities
- Access to XSEDE cyberinfrastructure resources



National Science Foundation Graduate Research Fellowship Program  
Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrfp.org](http://www.nsfgrfp.org)  
Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)



## GRFP General Eligibility



- U.S. citizens, nationals, and permanent residents
- Early-career students
- Pursuing research-based MS or PhD in NSF fields
- Enrolled in accredited U.S. institution by Fall 2013
- Applicants must **self-certify in the application** that they meet the GRFP Eligibility criteria



National Science Foundation Graduate Research Fellowship Program  
Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrfp.org](http://www.nsfgrfp.org)  
Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)



## GRFP Supported Disciplines

- Chemistry
- Computer and Information Science and Engineering
- Engineering
- Geosciences
- Life Sciences
- Materials Research
- Mathematical Sciences
- Physics and Astronomy
- Psychology
- Social Sciences
- Science, Technology, Engineering and Mathematics Education (research-focused)



National Science Foundation Graduate Research Fellowship Program  
Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrfp.org](http://www.nsfgrfp.org)  
Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)



## Not Supported by NSF GRFP

- Business administration or management
- Social work
- Medical, dental, law, or public health programs
- Joint science-professional degree programs, e.g., MD/PhD, JD/PhD, etc.
- Education (except research-focused STEM Education programs)
- **See Solicitation** ([www.nsfgrfp.org](http://www.nsfgrfp.org))



National Science Foundation Graduate Research Fellowship Program  
Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrfp.org](http://www.nsfgrfp.org)  
Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)



## GRFP Cycle



- **Application:** Available online late August
- **Deadlines:** Mid-November (varies by field)
- **Awards:** Announced late March to early April
- **Best Time to Start Preparing:** **Now**



National Science Foundation Graduate Research Fellowship Program  
Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrfp.org](http://www.nsfgrfp.org)  
Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)



# Complete Application

## NSF FastLane

- Personal statement (2 pages)
- Previous research experience (2 pages)
- Proposed plan of research (2 pages)
- Transcripts, uploaded into FastLane
- **Three** letters of reference required
- Additional information required for some candidates  
See Solicitation for eligibility requirements on [www.nsfgrp.org](http://www.nsfgrp.org)



National Science Foundation Graduate Research Fellowship Program  
Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrp.org](http://www.nsfgrp.org)  
Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)



# Resources

## NSF GRFP Website ([nsf.gov/grfp](http://nsf.gov/grfp))

- Solicitation
- FAQ and Guide links

## Fastlane.nsf.gov/grfp

- Online application, user guides, official announcements

## Phone and email

- 866-NSF-GRFP (673-4737)  
[info@nsfgradfellows.org](mailto:info@nsfgradfellows.org)



National Science Foundation Graduate Research Fellowship Program  
Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrp.org](http://www.nsfgrp.org)  
Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)





## Resources at nsfgrfp.org



- Tips for applying
- Frequently asked questions (FAQ)
- Find GRFP contacts
- Important links for the GRFP
- Panelist registration



National Science Foundation Graduate Research Fellowship Program  
Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrfp.org](http://www.nsfgrfp.org)  
Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)



## Review Criteria



### National Science Board

GOVERNING BOARD OF THE NATIONAL SCIENCE FOUNDATION & POLICY ADVISORS  
TO THE PRESIDENT AND CONGRESS

Two National Science Board-approved Review Criteria:

- Intellectual Merit
- Broader Impacts



National Science Foundation Graduate Research Fellowship Program  
Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrfp.org](http://www.nsfgrfp.org)  
Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)





## Intellectual Merit



- How important is proposed activity to advancing knowledge and understanding within its own field or across different fields?
- How well qualified is the proposer to conduct the project?
- To what extent does the proposed activity suggest and explore creative, original, or potentially transformative concepts?
- How well conceived and organized are proposed activities?
- Is there sufficient access to resources?
- If international activities are proposed, are they relevant and do they benefit applicant?



National Science Foundation Graduate Research Fellowship Program  
Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrfp.org](http://www.nsfgrfp.org)  
Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)



## Intellectual Merit Assessment

- Academic performance
- Research plan
- Appropriate choice of institution
- References
- **Research experience**



National Science Foundation Graduate Research Fellowship Program  
Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrfp.org](http://www.nsfgrfp.org)  
Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)



# Broader Impacts

- How well does the activity advance discovery and understanding while promoting teaching, training and learning?
- How well does the proposed activity broaden participation of underrepresented groups?
- To what extent will it enhance infrastructure for research and education?
- Will results be disseminated broadly?
- What may be the benefits of proposed activity to society?



National Science Foundation Graduate Research Fellowship Program  
Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrfp.org](http://www.nsfgrfp.org)  
Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)



# Broader Impacts Assessment

- Prior accomplishments
- Future plans
- Individual experiences
- Potential to reach diverse audiences
- Potential benefit to society



National Science Foundation Graduate Research Fellowship Program  
Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrfp.org](http://www.nsfgrfp.org)  
Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)





## Preparing a competitive application

### Personal Statement (limit: 2 Pages)

- Describe personal, professional or educational experiences that have contributed to your preparation and desire to pursue graduate study
- Describe your leadership potential, and how you see yourself now or in the future contributing to research, education, and innovations in science and engineering
- Discuss your career aspirations and some goals you hope to achieve



National Science Foundation Graduate Research Fellowship Program

Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrfp.org](http://www.nsfgrfp.org)

Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)



## Preparing a competitive application

### Previous Research Experience Essay (Limit: 2 Pages)

- Describe any scientific research activities you have participated in, and what you learned from this experience
- Explain the purpose of the research and your role, including the extent to which you worked independently and/or as part of a team
- If you have no direct research experience, describe any activities that you believe have prepared you to undertake research



National Science Foundation Graduate Research Fellowship Program

Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrfp.org](http://www.nsfgrfp.org)

Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)



## Preparing a competitive application

### Proposed Research Plan (Limit: 2 Pages)

- Present a complete plan for a research project that you plan to pursue, demonstrating your understanding of research design and methodology
- Explain the relationship to your previous research, if applicable
- Address the Intellectual Merit and Broader Impacts of your proposed plan
- Research topics in your proposed plan must be in fields within NSF's mission



National Science Foundation Graduate Research Fellowship Program  
Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrfp.org](http://www.nsfgrfp.org)  
Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)



## Preparing a competitive application

### Reference Letters

- Choose at least **three** reference writers
- Give them ample time to prepare their letters
- They should know you as a scientist and personally
- Share your application materials and the merit review criteria (good letters address Intellectual Merit and Broader Impacts)
- Track letter submission using FastLane; you must have 3 letters for a complete application



Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrfp.org](http://www.nsfgrfp.org)  
Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)



## Preparing a competitive application

1. Read the Solicitation carefully
2. Address the two NSF Merit Review Criteria (Intellectual Merit and Broader Impacts)
3. Check for spelling and grammatical errors
4. Verify essays and transcripts uploads
5. You must certify that this is your own original work
6. You must self-certify your eligibility according to the criteria in the Solicitation
7. Make sure you Press "Submit" button
8. Regularly check application status for # of reference letters
9. Make sure you are enrolled in graduate school by Fall 2013



National Science Foundation Graduate Research Fellowship Program  
Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrfp.org](http://www.nsfgrfp.org)  
Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)



## Evaluation of applications

- Panelists are academic and research experts in general discipline, not necessarily in your research topic
- Panelists rate your application using the two Merit Review Criteria, Intellectual Merit and Broader Impacts
- NSF requests panelists to provide constructive comments (applicants may view)
- Panels make recommendations to NSF
- NSF awards fellowships and honorable mentions



National Science Foundation Graduate Research Fellowship Program  
Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrfp.org](http://www.nsfgrfp.org)  
Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)



# You are encouraged to apply

Besides constructive feedback, the application is great preparation for:

- Graduate school applications
- Other award applications
- Job applications
- Writing publications
- Professional connections

## 2012

2,000 Awards  
12,000  
Applications  
~ 17% Success



National Science Foundation Graduate Research Fellowship Program  
Information: [www.nsf.gov/grfp](http://www.nsf.gov/grfp) and [www.nsfgrfp.org](http://www.nsfgrfp.org)  
Apply at: [www.fastlane.nsf.gov/grfp/](http://www.fastlane.nsf.gov/grfp/)

