



# National Science Foundation

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- Independent federal agency created in 1950
- Mission
  - To promote the progress of science
  - To advance the national health, prosperity, and welfare
  - To secure the national defense
- Funds ~20% of all federally supported basic research conducted by America's colleges and universities



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**For Applicants to  
the NSF Graduate Research Fellowship Program**

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# Goals of GRFP

NSF GRADUATE RESEARCH FELLOWSHIP PROGRAM

- 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.

*Outcome: Recruit and retain these individuals in the U.S. STEM workforce*



# NSF Graduate Research Fellowships

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## Five Year Awards – \$138,000

- Three years of financial support
  - \$34,000 Stipend per year
  - \$12,000 Educational allowance to institution



- Professional Development Opportunities:



International Research  
Internships

- Career-Life Balance Initiative (family leave)
- FASED Individuals with Disabilities
- Supercomputer access: XSEDE



# NSF GRFP Fellowship

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- Awarded to individuals
- *Flexible*: choice of project, advisor & program
- *Portable*: Any accredited U.S. institution
  - MS, MS and PhD, PhD
- No service requirement



# GRFP Solicitation (NSF 16-588)

- Provides the following information:
  - Deadlines
  - Program description
  - Award information
  - Eligibility requirements
  - Application preparation
  - Submission instructions
  - Application review criteria

## **Graduate Research Fellowship Program (GRFP)**

### **PROGRAM SOLICITATION NSF 16-588**

### **REPLACES DOCUMENT(S): NSF 15-597**



#### **National Science Foundation**

Directorate for Biological Sciences

Directorate for Computer & Information Science & Engineering

Directorate for Education & Human Resources  
Division of Graduate Education

Directorate for Engineering

Directorate for Geosciences

Directorate for Mathematical & Physical Sciences

Directorate for Social, Behavioral & Economic Sciences

Office of Integrative Activities

Office of International Science and Engineering

#### **Application Deadline(s)** (received by 5 p.m. local time of applicant's mailing address):

October 24, 2016

Life Sciences, Geosciences

October 25, 2016

Computer and information Science and Engineering, Engineering, Materials Rese:

October 27, 2016

Psychology, Social Sciences, STEM Education and Learning

October 28, 2016

Chemistry, Mathematical Sciences, Physics and Astronomy

October 23, 2017

Life Sciences, Geosciences

October 24, 2017

Computer and information Science and Engineering, Engineering, Materials Rese:

October 26, 2017

Psychology, Social Sciences, STEM Education and Learning

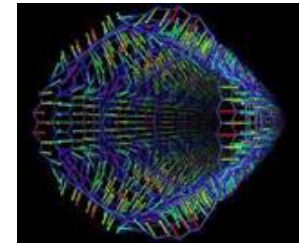
## FAQs for Applicants (NSF 17-123)

<https://www.nsf.gov/pubs/2017/nsf17123/nsf17123.jsp>



# GRFP Fields of Study

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





# GRFP Eligibility

- U.S. citizens and permanent residents
- Early-career: undergrad & grad students
- Pursuing research-based MS or PhD
- Science and engineering
- Enrolled in accredited institution in US by Fall



## Academic Levels

- **1: Seniors or baccalaureates with no graduate study yet**
- **2: First-year graduate students**
- **3: Second-year graduate students**  
( $\leq 12$  months of graduate study by August)
- **4: >12 months graduate study, with interruption in graduate study of 2+ years (can have MS degree)**







# Eligibility

## New Eligibility Rules (NSF 16-050)



**Level 1:** Seniors/baccalaureates: **no graduate study**

**Level 2:** First-year **graduate students**

Only once in

**Level 3:** Second-year **graduate students**

grad school

≤ 12 months of graduate study by August 1, 2017

**Level 4:** >12 months **graduate study**

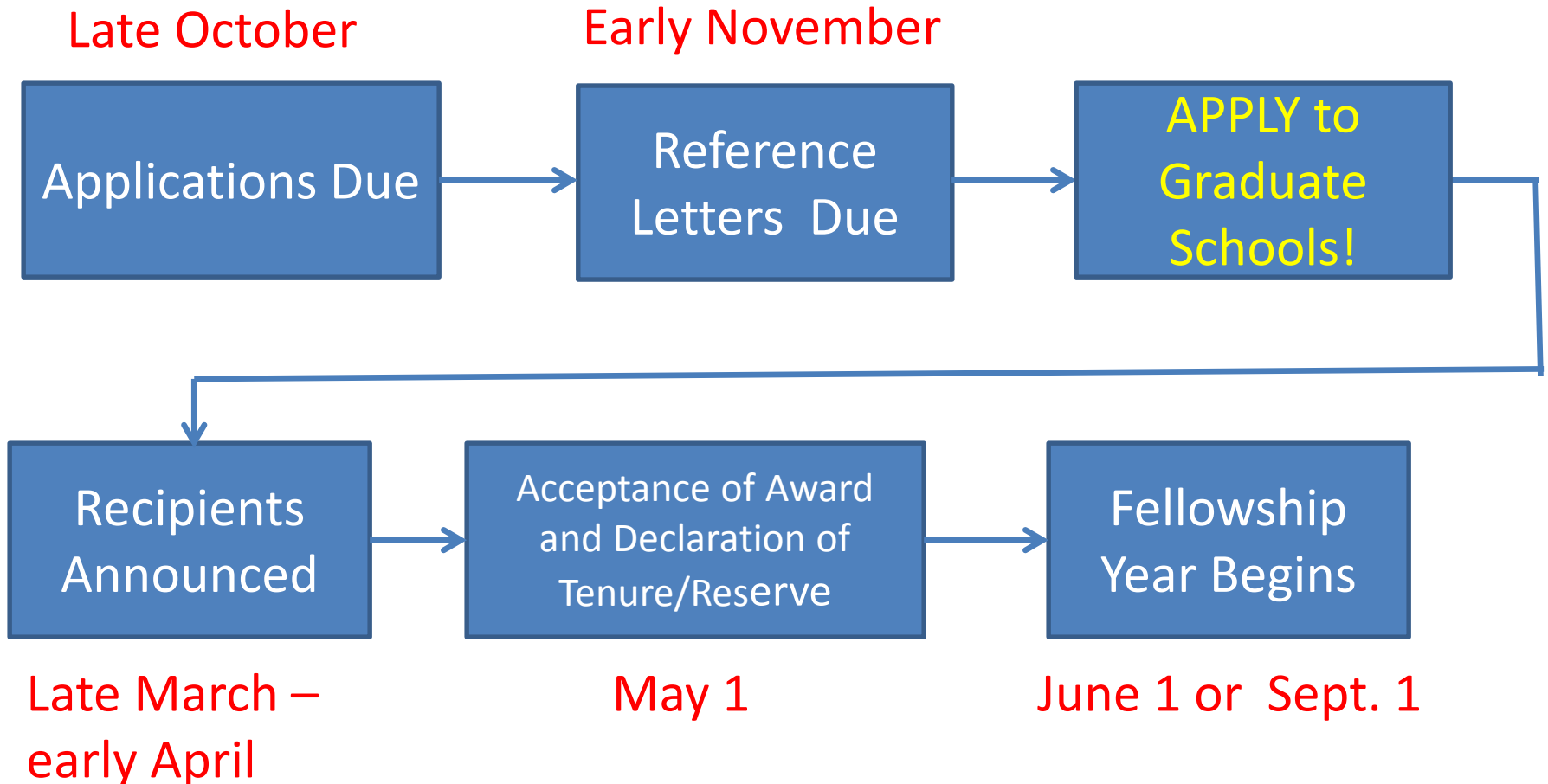
with an interruption in graduate study of 2+ years



*Directorate for Education and Human Resources*

Division of Graduate Education

# GRFP Application Timeline





# GRFP Complete Application

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## **Complete Application Package:**

- 1) Personal, Relevant Background and Future Goals Statement (3 pages)**
- 2) Graduate Research Statement (2 pages)**
- 3) Transcripts (uploaded electronically)**
- 4) Three letters of reference**

**DEADLINES: October/November 2017**

**Refer to Solicitation NSF 16-588**



# Two Statements

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## Statement 1:

### **Personal, relevant Background and Future Goals (3 pages)**

Describe your personal, educational and/or professional experiences that motivate your decision to pursue advanced study. Include examples of research and/or professional activities in which you have participated. Describe the contributions to **advancing knowledge** in STEM fields and the potential for **broader societal impacts**. Include future plans to contribute to broader impact.

## Statement 2:

### **Graduate Research Plan (2 pages)**

Present an original research topic that you would like to pursue in graduate school. Describe the research idea, your general approach. Address the potential of the research to **advance knowledge** and understanding within science as well as the potential for **broader impacts** on society.



# Application Review Process

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- Applications are reviewed by panels of disciplinary and interdisciplinary scientists and engineers
- Applications **assigned** to panels based on the applicant's chosen Primary Field(s) of Study and the discipline(s) represented
- Applicants are advised to select the Primary Field of Study that is most closely **aligned** with the proposed graduate program of study
- **Holistic evaluation:** a flexible, individualized way of assessing an applicant's interests and competencies by which balanced consideration is given to experiences, attributes, and academic achievements and, when considered in combination, how the applicant has demonstrated potential for significant achievements in science and engineering.



# NSF Review Criteria

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## National Science Board

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

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- Two National Science Board-approved criteria
  - Intellectual Merit
  - Broader Impacts



# Intellectual Merit and Broader impacts

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

**AND**

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

**– Separate sections for Intellectual Merit and Broader Impacts; address in both Statements**



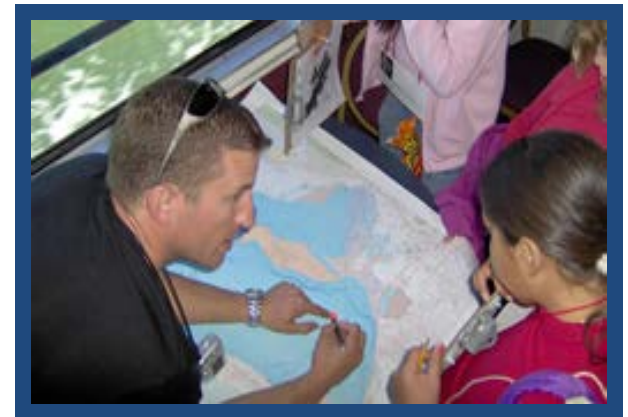
# Intellectual Merit Assessment

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- Academic performance: grades, courses, awards, etc.
- Graduate Research plan
- Research/professional experience
- Reference letters

## Broader Impacts Assessment

- Prior accomplishments and future plans
- Individual experiences
- Potential benefit(s) to society
- Community outreach
- Reference letters



**Solicitation NSF GRFP: NSF 16-588**





# GRFP Advice for Applicants

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- Start early
- Read Solicitation, and read it again
- Read NSF GRFP websites
  
- Select and confirm reference letter writers
- Pay attention to Merit Review criteria
- Identify several colleagues and have them comment on multiple statement drafts
- Share your application materials and the merit review criteria with reference writers
- Monitor receipt of reference letters (3 required for review)



# Reference writers

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- Select your reference writers carefully, as they will provide important information about your potential as a leader, researcher, and educator – **familiarity with you as a person is important**
- Your selected reference writers will submit their own references; provide them all necessary information well in advance of deadline
- You may request up to 5 references. It is your responsibility to ensure three letters of references are submitted by the published deadline in order for your application to be complete and reviewed



# GRFP Resources

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- NSF GRFP Website [www.nsf.gov/grfp](http://www.nsf.gov/grfp)
  - Solicitation and links
- NSF GRFP FastLane Website: [www.fastlane.nsf.gov/grfp](http://www.fastlane.nsf.gov/grfp)
  - Application, guides, announcements
- GRFP Website: [www.nsfgrfp.org](http://www.nsfgrfp.org)
  - (includes tips for applying,*
  - GRFP Experienced Resource List)
- Phone & e-mail
  - 866-NSF-GRFP (673-4737)
  - [info@nsfgrfp.org](mailto:info@nsfgrfp.org)





# Portals for federally-sponsored opportunities in STEM for students

[stemundergrads.science.gov](http://stemundergrads.science.gov)

[stemgradstudents.science.gov](http://stemgradstudents.science.gov)

STEM OPPORTUNITIES: Graduate Students | Undergraduate Students

## STEMUndergrads.science.gov

Your Gateway to Federal Opportunities for Undergraduate Students

[Home](#) [About](#) [Contact](#)

STEM OPPORTUNITIES: Graduate Students | Undergraduate Students

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### Narrow Results:

- Undergraduate Program Type >
- Undergraduate Level Eligibility >
- STEM Discipline Focus >
- Institutional Location >
- Federal Agency Sponsor >
- Geographic Region >

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