

Your National Science Foundation: funding opportunities for students through the Graduate Research Fellowship Program



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National Science Foundation

- 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



NSF and you!

Mission

- *To promote the progress of science* – **you are the future of science in the U.S.**
- *To advance the national health, prosperity, and welfare* – **your research and outreach efforts, now and in the future**
- *To secure the national defense* – **through your innovations and efforts**

These efforts will succeed if **everyone**, from **all types of schools**, can participate in STEM

NSF supports people (as well as projects)



National Science Foundation
WHERE DISCOVERIES BEGIN

QUICK LINKS

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FUNDING

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ABOUT NSF

FASTLANE



Globular C
Two Black

FULL

Advancing the Sciences

Funding & Supporting

Inspiring & Edu

VIMS Researchers Unravel Life Cycle
of Blue-crab Parasite
October 4, 2012

October 2, 2012

- REU
- GRFP
- Specialized Information for Graduate Students
- Specialized Information for Undergraduate Students

EVENT CALENDAR

15
OCT

Center for Nondestructive Evaluation IAB Meeting
[PARTNERSHIP MEETING](#)

15
OCT

I/UCRC: Center for Laser and Plasma for Advanced Manufacturing (LPAM) IAB Meeting
[PARTNERSHIP MEETING](#)

15
OCT

I/UCRC: Center for Tire Research IAB Meeting
[PARTNERSHIP MEETING](#)

16
OCT

Science: Becoming the Messenger
[WORKSHOP](#)

17
OCT

Fall 2012: ENG Advisory Committee Meeting
[ADVISORY COMMITTEE MEETING](#)

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[Upcoming Due Dates](#)
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Customizable NSF email service



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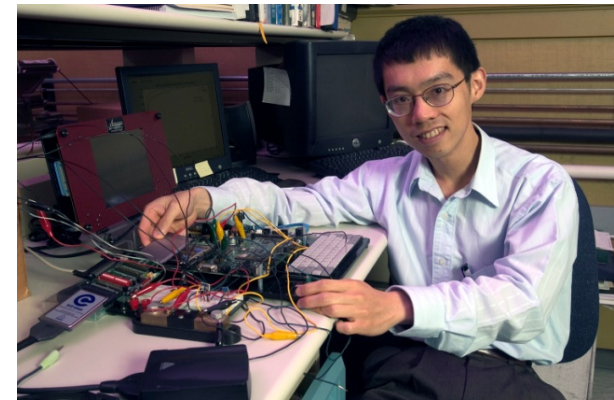
Division of Graduate Education Portfolio

**Graduate Research
Fellowship
Program**

**NSF Research
Traineeship
Program**

**CyberCorps
Scholarship for
Service**

**EHR Core
Research:
Workforce
Development**



Graduate Research Fellowship Program (GRFP) goals:

- 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 fellowships begin in 1952

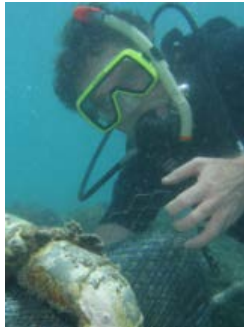
First Annual Report of the National Science Foundation (1950-51):

“Since the training of young scientists is of such crucial importance, the National Science Foundation has determined that a graduate fellowship program should be the first order of business. First emphasis will be given to fellowships rather than scholarships, because the completion of graduate work will have the most immediate effects upon the national supply of trained manpower.”
(p. 17)

“As was pointed out previously the National Science Foundation is emphasizing first-year awards of graduate fellowships to help as many students as possible across the bridge between undergraduate and graduate study.” (p. 29)



Recruit & retain students with the potential to be high achieving scientists & engineers, including women, minorities, persons with disabilities, and veterans



Graduate Research Fellowship Program



Key Elements

Five Year Award – \$138,000 per Fellow

Three years of support

\$34,000 Stipend per year

\$12,000 Educational allowance to institution

Career Life Balance (family leave)

Supercomputer access: XSEDE

Professional Development Opportunities:



GROW: International Research

GRIP: Federal Internships



U.S. Department of Agriculture	U.S. Department of the Interior
U.S. Department of Commerce	U.S. Department of Transportation
U.S. Department of Defense	Environmental Protection Agency
U.S. Department of Education	Office of Science and Technology Policy, Executive Office of the President
U.S. Department of Energy	National Aeronautics and Space Administration
U.S. Department of Health and Human Services	National Science Foundation
U.S. Department of Homeland Security	Smithsonian Institution



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 Research

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 Research

October 26, 2017

Psychology, Social Sciences, STEM Education and Learning

October 27, 2017

Chemistry, Mathematical Sciences, Physics and Astronomy

October 22, 2018

Life Sciences, Geosciences

October 23, 2018

Computer and Information Science and Engineering, Engineering, Materials Research

October 25, 2018

Psychology, Social Sciences, STEM Education and Learning



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

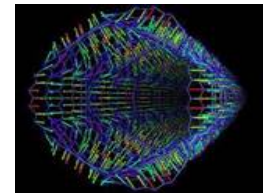
Academic Levels

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



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 Complete Application

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



NRT: NSF Traineeships

	Traineeship Track
Primary Aim	Comprehensive graduate student training
Interdisciplinary	Yes
Stipend & COE Support:	Yes
Duration/Amount	Up to 5 years; < \$3 M
Limit per Organization	2
Eligible Organizations	US Institutions that award research-based master's and doctoral degrees

NRT Portfolio

- 57 projects
 - **34 Traineeship**
 - 23 IGE
- 29 states
 - 22% projects in EPSCoR states

**NRT-UtB: University of
South Dakota
Neuroscience and
Nanotechnology
Network**



NSF CyberCorps®: Scholarship for Service (SFS) Program

GOALS

- Increase the number of qualified employees working for Federal, State, Local, and Tribal governments in cybersecurity
- Increase the capacity of US education enterprise to produce professionals in cybersecurity

ELIGIBILITY

- Institution: National CAE/IAE designation or offers coherent formal cybersecurity program
- Student: US citizen or Permanent Resident, enrolled in cybersecurity program (full time)



NSF CyberCorps®: Scholarship for Service (SFS) Program

SUPPORT

- Full tuition, stipend (\$22.5K/\$34K per year), and fees/insurance/allowance (up to \$9K per year), up to 3 years
- Summer internship, JobFair, post-graduation service requirement (work in government positions equal to scholarship length)

IMPACT

- 2,900 SFS scholarship recipients (since 2001)
- B.S. (22%), M.S. (75%), Ph.D. (2%), B.S./M.S. (1%)
- Female (25%), data collection since 2013
- Overall placement rate →

94%

Dakota State University NSF-SFS Cyber Corps



Portals for federally-sponsored opportunities in STEM for students

stemundergrads.science.gov



Narrow Results:

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

Search

stemgradstudents.science.gov



Narrow Results:

Graduate Program Type	>
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