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

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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
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)
www.nsf.gov
Customizable NSF email service
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
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
GRFP Solicitation (NSF 16-588)

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

<table>
<thead>
<tr>
<th>Primary Aim</th>
<th>Comprehensive graduate student training</th>
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<tbody>
<tr>
<td>Interdisciplinary</td>
<td>Yes</td>
</tr>
<tr>
<td>Stipend &amp; COE Support:</td>
<td>Yes</td>
</tr>
<tr>
<td>Duration/Amount</td>
<td>Up to 5 years; &lt; $3 M</td>
</tr>
<tr>
<td>Limit per Organization</td>
<td>2</td>
</tr>
<tr>
<td>Eligible Organizations</td>
<td>US Institutions that award research-based master’s and doctoral degrees</td>
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</tbody>
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### 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  stemgradstudents.science.gov