The NSF Graduate Research Fellowship Program

nsf.gov/grfp
www.nsfgrfp.org

September 22, 2014
GRFP Goals

• To select, recognize, and financially support individuals with the demonstrated 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.
GRFP Key Elements

Five Year Award – $132,000

• Three years of support
  – $32,000 Stipend per year
  – $12,000 Educational allowance to institution

• Professional Development Opportunities:
  GROW: International Research
  GRIP: Internships

• Supercomputer access: XSEDE

• Career Life Balance (family leave)
GRFP Unique Features

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

• **2010 - 2014:** 2,000 Fellowships each year
  – 2014: 14,000 Applications - ~14% success rate
GRFP Solicitation (NSF 14-590)

• Contains the following information:
  – 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 and PhD
• NSF supported fields (Science and Engineering fields)
• Enrolled in accredited institution in US by Fall

Academic Levels
• 1: Seniors/baccalaureates; no graduate study
• 2: First-year graduate students
• 3: Second-year grad students
  – ≤ 12 months of graduate study by August
• 4: >12 months graduate study
  – Interruption in graduate study of 2+ years (can have MS degree)
NSF-Supported 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 Application Timeline

- **August**: Solicitation Posted
- **October 29 – November 4**: Applications Due
- **November 6**: Reference Letters Due
- **March - April**: Recipients Announced
- **May 1**: Acceptance of Award and Declaration of Tenure/Reserve
- **June 1 or Sept. 1**: Fellowship Year Begins
GRFP Complete Application

NSF FastLane

• Personal, Relevant Background and Future Goals Statement (3 pages)
• Graduate Research Statement (2 pages)
• Transcripts (uploaded electronically)
• Three letters of reference (received by 6 Nov 2014, 8 pm EST)

DEADLINES: 29, 30 October, 3, 4 November 2014 (received by 8 pm EST)

Please see 2014 Solicitation for application details and requirements.
Preparing a GRFP Application

Demonstrate potential for STEM research
• Experiences, personal and professional, that contributed to your motivation to pursue a STEM career and your preparation for it.
• Career aspirations and goals
• Previous research/industrial/professional experiences

Describe your Research Plan
• Demonstrate understanding of research plan and methodology
• Communicate research idea and approach

Address NSF’s review criteria
NSF Review Criteria

Two National Science Board-approved review criteria:

- Intellectual Merit

- Broader Impacts

NSB is the governing board of the National Science Foundation & policy advisors to the president and congress.
Intellectual Merit and Broader Impacts

- 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
Intellectual Merit

Demonstrated intellectual ability and other accepted requisites for scholarly scientific study, such as the ability to:

- Plan and conduct research
- Work as a member of a team as well as independently
- Interpret and communicate research
Broader Impacts

Societal benefits include, but not limited to:
- Impact of project or individual student on society
- Increased participation of underrepresented groups, women/ minority, students with disabilities, veterans
- Improved STEM education in schools and teacher development
- Impact on society: Increased public scientific literacy; increased public engagement with science and technology
- Community outreach: science clubs, radio, TV, newspaper
- Potential to impact diverse, globally competitive workforce
- Increased partnerships between academia, industry and others
- Leadership potential
(Plans to share science with the broader community?)
Intellectual Merit Assessment

- Academic performance; grades, curricula, 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
Two Statements

Statement 1:

Personal, relevant Background and Future Goals Statement

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.
Two Statements

Statement 2:

Graduate Research Plan Statement

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

• 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.
Reference Letters

- Three reference letters are required.
- Applicant can upload contact information of up to 5 reference letter writers

As a reference letter writer keep in mind:

- Intellectual Merit and Broader Impacts (give specific examples)
- Deadline: Nov 6, 2014
Reviewer/Panelist

You are invited to serve as a reviewer in any of the NSF supported disciplines!

www.nsfgrfp.org/panelist/registration

Remark: We still need reviewers (in all areas), however, areas of greatest need are:

Molecular & Systems Biology
Marine Biology
Sociology
Astronomy and Astrophysics
Economics
Why fellowships?

For institutions:

– High quality graduate students selected by an independent competitive process
– Financial support
– Prestige – fellowship recipients enhance national image
Promoting GRFP on Campus

• Publicize GRFP on campus: focus on domestic students, undergrads and beginning grad students
• Identify faculty willing to mentor applicants
  – Encourage faculty to register to serve as reviewers for GRFP
• Hold workshops/courses
  – Find faculty advisors and Fellows willing to participate
• Utilize GRFP’s web resources
• Reach out to GRFP Resource People on www.nsfgrfp.org
• Partner/engage with Honors College, REU Site Coordinators
GRFP Resources

• NSF GRFP Website (nsf.gov/grfp)
  – Solicitation and links
• NSF GRFP FastLane Website (fastlane.nsf.gov/grfp)
  – Application, guides, announcements
• GRFP Website (www.nsfgrfp.org)
• Graduate Research Opportunities Worldwide (GROW) www.nsf.gov/grow
• Graduate Research Internship Program (GRIP) www.nsf.gov/grip or http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505127
• Current & former fellows
• Phone & e-mail
  – 866-NSF-GRFP (673-4737)
  – info@nsfgrfp.org
Q & A
GRFP FAQ

nsfgrfp.org