NSF’s Mission & Your Qualifications

The NSF seeks to “promote scientific discovery, advance national welfare, and secure national defense”

How do your research & career goals fit into the NSF’s Fellowship Program’s mission?

The NSF “invests in graduate education for individuals who demonstrate potential to complete graduate degree programs and become future leaders in disciplines relevant to NSF’s mission”
Eligibility

See [http://www.nsfgrfp.org/applicants/eligibility](http://www.nsfgrfp.org/applicants/eligibility)

- Finished your baccalaureate (i.e. undergraduate) degree, but have never completed any graduate level coursework since
- Started graduate school in the Fall 2015 term
- Started graduate school in the Winter/Spring 2015 term
- Started graduate school in the Fall 2014 term
- Pursuing a research-based master's or doctoral degree at an accredited US institution in the science, technology, engineering, or mathematics fields supported by NSF
- U.S. citizen, national, or permanent resident alien
- If awarded, you cannot hold another federally-funded fellowship
Supported Disciplines

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

Not sure if your research is supported? Please consult the list of panels and sub-fields on the back of the handout.
Disciplines that are Not Supported

- Practice-oriented professional degree programs
- Joint Science-Professional Programs (MD/PhD, JD/PhD, etc.)
- Education (except for research-focused science education Ph.D. programs)
- Business & Management
- Clinical or Counseling Psychology
- Social Work
- History (except History of Science)
- Dental, Medical, and Public Health Programs
- Research focused on the etiology, diagnosis or treatment of physical or mental disease, abnormality or malfunction.
- Clinical areas of study, including: patient-oriented research; epidemiological and behavioral studies; outcomes research; health services research; pharmacologic, non-pharmacologic, and behavioral interventions for disease prevention, prophylaxis, diagnosis, or therapy; and community and other population-based intervention trials
Level of Support

- Three years of support, five year window for use
- $34,000 Stipend per year
- $12,000 Educational allowance to institution per year
- Awarded to the individual, not an institution
- The support “follows” the student
- International research and professional development opportunities
- Family and medical leave with possible research continuance
- Access to XSEDE supercomputer
- Does require progress to degree reports
Timeline

• Application available online now
• Deadlines varies by field, please see the GRFP website for details:

Due dates: October 26, 2014 - October 30, 2015
Deadlines: 8:00 p.m. EST

All reference letters due by November 5, 8:00 p.m. EST

• **Warning**: Do not procrastinate because FastLane, the proposal submission website, tends to crash on due dates
• Awards announced late March to early April
• Best time to start preparing: NOW
Application Materials

Apply through NSF Fastlane: http://www.fastlane.nsf.gov/
Information on applying at http://www.nsfgrfp.org/

• Personal Information
• Education and Work Experience
• Academic Electronic Transcripts
• Field of Study & Graduate Study
• Personal, Relevant Background, & Future Goals Statement (3 pages)
• Graduate Research Plan Statement (2 pages)
• Reference Letters (3)
• Program Information
Field of Study

See the backside of the handout for list of fields of study.
Choose wisely the field in which a panel will review your proposal:

• “The Fields of Study listed in the Appendix are used to place applications in the most appropriate review panel and to track the disciplinary progress of Fellows and their career outcomes. Applicants may select ‘other’ if their Field of Study is not represented in the list.”

• “Applicants are advised to select the Field of Study in the FastLane GRFP Application module that is most closely aligned with the proposed graduate program of study and research plan.”

• “Panels will review applications from **broad areas** of related disciplines”
Criteria for a Successful Application

Intellectual Merit:

“the potential of the applicant to advance knowledge based on a holistic analysis of the complete application, including the Personal, Relevant Background, and Future Goals Statement, Graduate Research Plan Statement, strength of the academic record, description of previous research experience or publication/presentations, and references.”

Broader Impacts:

“encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes. Panelists may consider the following with respect to the Broader Impacts Criterion: the potential of the applicant for future broader impacts as indicated by personal experiences, professional experiences, educational experiences and future plans.”
Intellectual Merit

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

• To what extent does the proposed activity suggest and explore creative, original, or potentially transformative concepts?

• How well conceived and organized is the proposed activity?

• Is there sufficient access to resources?

• How well qualified is the individual, team, or organization to conduct the proposed activities?

• Will the results be disseminated broadly to enhance scientific and technological understanding?
Broader Impacts

• What is the potential for the proposed activity to benefit society or advance desired societal outcomes (Broader Impacts)?
• How well does the activity advance understanding while promoting teaching, training, and learning?
• How well does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)?
• To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships?
More on Broader Impacts

“Broader impacts may be accomplished through the research itself, through the activities that are directly related to specific research projects, or through activities that are supported by, but are complementary to, the project.... Such outcomes include, but are not limited to: full participation of women, persons with disabilities, and underrepresented minorities in science, technology, engineering, and mathematics (STEM); improved STEM education and educator development at any level; increased public scientific literacy and public engagement with science and technology; improved well-being of individuals in society; development of a diverse, globally competitive STEM workforce; increased partnerships between academia, industry, and others; improved national security; increased economic competitiveness of the US; and enhanced infrastructure for research and education.”
Personal, Relevant Background, & Future Goals Statement

• Start with your undergraduate experience, not before
• Don’t ignore poor past performance, explain it and what you learned from it
• Discuss past research outside of class, avoid in-class research unless that is all you have experienced
• Why? Not what you have done, but why you did it
• Why? Not what preparation for graduate school you achieved, but why it prepared you
• Why? Not how graduate school prepares you for a career, but why
• Why? Focus is not on what research you did, but why it is important
• Show that you understand the research results, their importance, their intellectual context and relationships
• 1st year graduate students: do not ignore what research you have just begun
• Do not be afraid to discuss a literature review’s influence on you
• Future: “With resources made possible by this fellowship, I can accomplish…”
Research Plan Statement

• Propose a 3-year project, not something that takes 1 year or 10 years

• Explicitly state hypotheses, alternative hypotheses, predictions, data analysis methods, limitations, etc.

• How do you know when you’ve achieved the goal of your research?

• Yet, remember that this award is to the student not the project
Letters of Reference

• Contact referees now
• Research advisors
• Collaborator of advisor (if working with him/her)
• Coordinators of STEM outreach projects
• Current or last semester professors
  • No GTAs or postdocs
• Request in person or write a full formal letter/email with salutation and closing. Specify why you are applying, why you would like this person to write a letter, and do provide him/her with a copy of your application essays, the NSF guidelines and website for referees, and any other information he/she may need
• Include the deadline for letters: November 5, 2015 by 8:00 p.m. EST
Successful Applicants…

- Start the process early
- Read the solicitation and application guides very carefully
- Demonstrate review criteria in application materials
- Be clear, concise, confident, & truthful
- Draw on accomplishments more than promises (“demonstrated potential”)
- Write multiple drafts and show them to others for review
- Check for spelling, grammar, formatting
- Submit application to the appropriate panel
- Verify materials were uploaded correctly to the appropriate place
- Press the “Submit” button and meet the deadline
- Regularly check application status
Special Notes
for Undergraduate Applicants
Apply Early & Often

You might receive the award!
If not, you’ll receive reviews so you have a better chance as a grad student
Graduate schools and potential advisors will be pleased with your initiative
Level Matters

Applicants are divided into “Levels” & reviewed accordingly

Level 1: undergraduate seniors & post-baccalaureate students
Level 2: 1st year graduate students
Level 3: 2nd year graduate students
An Application is not a Commitment

When applying, you don’t need to decide:

Graduate School
Advisor
Research Project

This award is to you as a person – you take it with you wherever you end up.
Research Statement

Write about the research that enables you to best demonstrate your scientific thinking and potential for success
Current research or proposed grad research
My 2 cents: choose the research you have most faculty mentor support for right now
More Questions?

Drop-in office hours
Fridays 10am-12pm
151 Strong Hall

Email cur@ku.edu

Dyan Morgan, Ph.D.
Assistant Director
Center for Undergraduate Research
785-864-5735
Questions about the NSF GRFP?

Today’s Panelists

John Augusto, Director, Center for Undergraduate Research

Jessica Dow, NSF Graduate Research Fellow, Ph.D. Student in Anthropology

Jennifer Gleason, Associate Professor of Ecology & Evolutionary Biology

Lumumba Harnett, NSF Graduate Research Fellow, Ph.D. Student in Electrical Engineering & Computer Science

Kate Lorenz, Grant Development Specialist, Institute for Policy & Social Research
Thank you for attending today’s workshop.

Please fill out your evaluation form.

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