NSF Graduate Research Fellowship Program Handbook

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All materials included here are based on the requirements and information provided by the National Science Foundation for the 2016 Fellowship Program. This handbook will be updated periodically to reflect any changes, however, if you have a question or issue not addressed here, look online at www.nsfgrfp.org for the most up to date information.
Overview of the Application and Important Information

1. **Due Date: Late October**
   a. Dates vary by discipline so check the NSF website for the specific deadline for the social sciences

2. **Notification of award: Early April**

3. **Synopsis of the Program (from NSF)**
   a. The purpose of the NSF Graduate Research Fellowship Program (GRFP) is to help ensure the vitality and diversity of the scientific and engineering workforce of the United States. The program recognizes and supports outstanding graduate students who are pursuing research-based master's and doctoral degrees in science, technology, engineering, and mathematics (STEM) and in STEM education. The GRFP provides three years of support for the graduate education of individuals who have demonstrated their potential for significant research achievements in STEM and STEM education. NSF especially encourages women, members of underrepresented minority groups, persons with disabilities, and veterans to apply. NSF also encourages undergraduate seniors to apply.

4. **Awards**
   a. Estimated number of awards: 2,000
   b. Funding per fellowship: 3 years of funding support during a 5 year fellowship period
      i. $34,000 stipend
      ii. $12,000 to graduate institution

5. **Eligibility Requirements**
   a. You are **ineligible** if you:
      i. Are not a US citizen, national, or permanent resident by application deadline
      ii. Have previously received a fellowship from the NSF Graduate Research Fellow Program and accepted
      iii. Did not accept the Graduate Fellowship AND did not notify NSF by the published deadline
      iv. Have completed the requirements for any graduate or professional degree by August 1, 2015, except 1) applicants who have completed a joint baccalaureate-master's (BS/MS) program and have not completed any further graduate study outside the joint program unless the graduate coursework was required to establish or maintain credentials in a profession such as teaching; or 2) applicants that have had an interruption in graduate study of at least two consecutive years prior to November 1, 2015 and have completed no additional graduate study as of August 1, 2015.
      v. Are a current NSF employee

6. **Important Websites**
   a. [http://www.nsfgrfp.org](http://www.nsfgrfp.org)
i. This is the website where you set up your FastLane account for your application
   i. NSF homepage for information on other funding that NSF offers

7. NSF contact for inquiries
   a. Phone: (866) 673-4737
   b. Email: info@nsfgrfp.org
      i. NSF is generally pretty quick about getting back to you via email
Why you should apply

1. Flexibility
   a. The NSF fellowship provides three years of funding that can be spread out as you like over a five-year period
      i. If you receive the fellowship, you can decide which years you want to be on NSF funding and which years you want to be on Stanford’s funding
      ii. This allows you to decide when you want to be working as a TA/RA
   b. When you are on NSF funding, you do not have to be working as a TA, which frees up more time for your research
      i. Remember, however, that in order to graduate, you still must fulfill Stanford’s TA/RA requirements

2. Prestige
   a. Fellowships in general, and NSF in particular come with a good deal of prestige
      i. They look good on your CV
   b. When you’re on the job market, having NSF on your CV tells departments that you know how to successfully bring in outside funding

3. Practice
   a. When you’re on the job market, having NSF on your CV tells departments that you know how to successfully bring in outside funding

4. Money
   a. The $30,000 stipend from NSF is slightly more than the stipend from Stanford
General Tips

1. Submission
   a. Applications must be submitted electronically through the FastLane system
      i. Do not wait to the last minute to submit; the system can back up when
         there are a large volume of submissions at once
         1. Go here to set up your FastLane account
   b. Make sure that your application materials meet NSF guidelines; failure to comply
      will result in rejection of your application without review
      i. Formatting for personal statement and proposal:
         1. Standard 8.5”x11” page size
         2. 12-point, Times New Roman or Computer Modem font
         3. 10-Point font may be used for references, footnotes, figure
captions, and text within figures
         4. 1” margins on all sides
         5. Single-spaced (approximately 5 lines per inch) or greater
            spacing. Do not use options such as “exactly 12 point” that are
            less than single spaced
         6. Personal statement can be no longer than 3 pages
         7. Proposal can be no longer than 2 pages, including any tables,
            figures, and references

2. Review Process
   a. Applications are reviewed on two key criteria: **Intellectual Merit** and **Broader
      Impact**
      i. These address the potential for the applicant/proposal to:
         1. Advance knowledge/understanding within own field or across
            fields (Intellectual Merit)
         2. Benefit society or advance desired societal outcomes (Broader
            Impacts)
   b. Applications are reviewed by panels from broad areas of related disciplines
      i. Do not assume your work is being reviewed by individuals who know
         your area in depth
      ii. Provide a clear description so that no matter the reviewers’ specific
          knowledge of your area, they can understand what you are proposing

3. NSF is funding the person, not the proposal
   a. The proposal is still key, but make sure that you express who you are in both
      statements
      i. Think: why should NSF fund you?
   b. Also, you do not have to follow your proposal exactly if you receive the
      fellowship
      i. Again, this does not mean do not put a lot of effort into the proposal, but
         know that you are not wed to it for all eternity
Personal Statement

1. **3-page maximum**

2. **Prompt:** Please outline your educational and professional development plans and career goals. How do you envision graduate school preparing you for a career that allows you to contribute to expanding scientific understanding as well as broadly benefit society? Describe your personal, educational and/or professional experiences that motivate your decision to pursue advanced study in science, technology, engineering or mathematics (STEM). Include specific examples of any research and/or professional activities in which you have participated. Present a concise description of the activities, highlight the results and discuss how these activities have prepared you to seek a graduate degree. Specify your role in the activity including the extent to which you worked independently and/or as part of a team. Describe the contributions of your activity to advancing knowledge in STEM fields as well as the potential for broader societal impacts (See Solicitation, Section VI, for more information about Broader Impacts).
   
   a. Questions to ask yourself before writing the statement
      i. Why are you fascinated by your research area?
      ii. What examples of leadership skills and unique characteristics do you bring to your chosen field?
      iii. What personal and individual strengths do you have that make you a qualified applicant?
      iv. How will receiving the fellowship contribute to your career goals?
      v. What are all of your applicable experiences?
      vi. For each experience, what were the key questions, methodologies, findings, and conclusions?
      vii. Did you work in a team and/or independently?
      viii. How did you assist in the analysis of results?
      ix. How did your activities address the Intellectual Merit and Broader Impacts criteria?

3. **Tips**
   a. Especially for first years, you can and should draw heavily from the personal statement that got you in here
      i. Update it to reflect anything important that has happened post-applying to graduate school
   b. Remember, here as well as in the proposal you need to address the criteria of intellectual merit and broader impact
      i. That is, how do you as a person show your intellectual merit and potential for broader impact?
   c. Show, don’t tell
      i. Providing examples of ways in which you fit NSF’s criteria makes for a stronger statement than simply telling that you are determined/passionate/driven/etc.
   d. The personal statement has a 3-page limit, not a 3-page requirement
      i. If you have said everything that you need to say in under three pages, don’t add more just to take up space
Proposal

1. **2-page maximum (including figures, tables, and references)**
2. **Prompt:** Present an original research topic that you would like to pursue in graduate school. Describe the research idea, your general approach, as well as any unique resources that may be needed for accomplishing the research goal (i.e., access to national facilities or collections, collaborations, overseas work, etc.) You may choose to include important literature citations. Address the potential of the research to advance knowledge and understanding within science as well as the potential for broader impacts on society. The research discussed must be in a field listed in the Solicitation (Section X, Fields of Study).
   a. Questions to ask yourself before writing the proposal
      i. What issues in the scientific community are you most passionate about?
      ii. Do you possess the technical knowledge and skills necessary for conducting this research, or will you have sufficient mentoring and training to complete the study?
      iii. Is this plan feasible for the allotted time and institutional resources?
      iv. How will your research contribute to the “big picture” outside the academic context?
      v. How does your proposed research address the Intellectual Merit and Broader Impacts criteria?
3. **Tips**
   a. Use footnotes for references to save space
      i. Remember, these can be in 10-point font, but everything else must be 12-point, Times New Roman
   b. Don’t skimp on addressing the Broader Impacts criterion
      i. People often overlook this in favor of the Intellectual Merit criterion, but each is equally weighed by the panel reviewing the application
      ii. In addition, be as specific as you can about how you will ensure broader impact—think of the resources and centers at Stanford that you can use
   c. Figures can be helpful if you are dealing with a complex concept or relationship
      i. BUT, figures take up space
      ii. Don’t include a figure just to have one
   d. In general, use your space wisely
      i. You only have two pages, so make every word count
      ii. Watch for run on sentences and places where you repeat yourself
Letters of Recommendation

1. Three required, can have up to five
   a. Cannot be family members
2. Guidelines for letter writers
   a. Institutional (or professional) letterhead, if possible
   b. Two (2) page limit
   c. 12-point, Times New Roman font in the body of the letter
   d. Name and title of reference writer
   e. Department and institution or organization
3. Tips
   a. Particularly for first years, consider contacting the people who wrote your recommendation letters for grad school
      i. You know they like you and they already have a recent letter than can be edited easily for NSF
   b. But, first years should also feel free to ask Stanford faculty
      i. Consider your assigned advisor or a professor that you currently have class with
      ii. The department benefits from receiving NSF funds, both financially and in prestige, so first years should feel confident to ask any professor, particularly faculty you are taking classes with to write a letter on your behalf
   c. Recommenders must submit online
      i. After asking them for a recommendation, log into your FastLane account
         1. You will need to provide the name and email address of your recommenders and then the system will email them with all necessary information
   d. Letters are generally due a week after the application is due
Timeline

1. First years: Be aware, unless you started thinking about NSF over the summer, your timeline for submission is very short
   a. Do not let this discourage or worry you; you just need to be proactive
2. This timeline is not a requirement but intended to give you a sense of one way to effectively use the time you have
3. **First/Second Week in October**—talk to professors
   a. If you have any ideas for topics you would like to study or even just a general area of interest, start talking to professors early and mention you would like to apply to NSF and would appreciate help
4. **Third Week in October**—outline/first draft of proposal and keep talking to professors
   a. Try to put your idea together in as cohesive a manner as possible
   b. Continue talking to professors and asking for their guidance about your proposal
5. **Fourth Week of October/Lead up to submission at end of week**—Work on finalizing your proposal and statement and keep talking to professors
   a. Get as much feedback as you can (though remember time is tight, so don’t stress too much)
      1. Ask members of your cohort and/or older cohorts for help editing (and offer to edit their work in return)
   b. Review all NSF guidelines to ensure you have followed them completely
6. **End of October**—turn in application and breathe a sigh of relief
   a. Try to turn it in with a good buffer before the deadline so you don’t run into any problems with the submission system crashing
   b. Pat yourself on the back and treat yourself to something that puts a smile on your face
Sample Statements and Proposals

1. Statements/proposals for NSF and for other fellowship and grant applications can be found here:
   a. https://sites.google.com/site/stanfordsocgrads/grants-and-fellowships
   b. All statements and proposals included here come from students who have been awarded the given fellowship/grant