

Ten Tips for Applying to the NSF Graduate Research Fellowship Program

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The National Science Foundation Graduate Research Fellowships (www.nsfgrfp.org) are a fabulous external funding source for graduate students in psychology. These fellowships provide generous funding for three years, are prestigious early career honors that can bolster future grant applications, and provide an escape from teaching obligations (if desired). But these fellowships are also extremely competitive, and it is critical to submit a polished proposal. To that end, I will share some key strategies for drafting a competitive application. Although these tips are specifically tailored for NSF, many of these suggestions may help with other grant applications.

1. Carefully research the application process

Be sure to know all of the ins and outs of the application process. Scour the funding announcement and the website, paying close attention to the evaluation criteria. Read the solicitation carefully, and frame your grant to address it. Ask previous winners in your department for advice — but take it all (even mine!) with a grain of salt.

2. Write, rewrite, then rewrite again

This is perhaps the most important rule. Strong writing comes from rewriting. So start writing early enough to leave time for several revisions. It may take two or three complete drafts before you have a tight, streamlined application.

3. Have as many editors as you can manage

Give several readers the best application you can produce. Be prepared for them to say, “It’s a good start, but you have a long way to go.” Good editors include your advisor, other NSF applicants from your school, labmates, and anyone else you trust to be critical. Many schools also have resources such as writing centers where you can get additional help from gifted writers who are not in your field. Even if they are not familiar with your science, their perspective may be similar that of reviewers whose expertise is outside of your topic area.

4. Write clearly and concisely

All scientists should consult Rule 17 of Strunk and White (1979): “Omit needless words. Vigorous writing is concise. A sentence should contain no unnecessary words, a paragraph no unnecessary sentences, for the same reason that a drawing should have no unnecessary lines and a machine no unnecessary parts.” Chapter Three of the American Psychological Association (APA) Publication Manual also has style suggestions. The two-point summary: Avoid jargon, and write so an undergraduate can understand.

5. Tell a compelling story

Rather than listing accomplishments, tell a story about how you became interested in psychology, how your academic experiences have prepared you for rigorous science, and what questions you are

interested in answering. Specific skills, talents, and goals should be integrated into the narrative of your academic and professional life.

6. Brag subtly

Mention your accomplishments in the context of talking about your previous experiences. It can be difficult to highlight your strengths without sounding cocky or overly confident, but you do want to state your accomplishments clearly. One solution to this predicament is to mention abstract lessons you have learned in the context of talking about concrete experiences. For example, you might mention how you learned about the importance of perseverance and precision in scientific research when you were learning how to calibrate eye trackers.

7. Balance what you have done with what you will do

Address both what you have done and what you plan to do. A clear project proposal and career trajectory are essential. At the same time, you must prove that you are capable of undertaking the proposed research and that you have the relevant background to help achieve your broader impact goals. Claiming you want to do science outreach is a much easier sell when you already have a long history of outreach work.

8. Make your application visually appealing

Avoid the temptation to cram as many words as possible into your two pages (e.g., single-spacing lines, tightening the kerning and tracking, narrowing the margins). Your application is only one among thousands. Reviewers will be tired and reading quickly, so do everything in your power to make it easier for them. Use elegant figures on each page (especially if you do neuroscience — see McCabe & Castel, 2008.) Leave white space on the page with healthy margins and an extra line break between paragraphs. Choose your font wisely. The application has loose formatting requirements, so enjoy the chance to break away from APA style.

9. Emphasize broad impact

Reviewers will be assessing both your academic merit and your potential for broad impact. Keep in mind that everyone applying for the fellowship is either already in or applying for graduate school. As a result, broad impact is often what separates the honorable mentions from the winners. The NSF website suggests the kind of activities in which they are most interested, such as communicating scientific findings broadly and mentoring minority students. Highlight previous relevant experiences, mention what you would like to do in the future, and, if at all possible, propose a research project that includes broad-impact goals, such as exploring how memory research can enhance classroom education.

10. If at first you don't succeed...get more experience

Plan on applying for the fellowship multiple times. If you do not win (which is likely), you will get some feedback about the strengths and weaknesses of your application. Over the next year you can seek out additional experiences that will bolster your portfolio. Take on leadership positions within your department or a national organization (such as APS), mentor undergraduate students, and add presentations and publications to your CV. Most importantly, use the extra six months to continue rewriting and thinking about your new application.

Every graduate student should apply for external funding. Aside from the obvious benefits mentioned above, writing an application forces you to analyze your research career, to think about what kind of questions interest you, and to examine why you are engaged with science. Reflecting on your future

career and research projects can be a useful activity on its own.
And who knows, you might actually win!

Further Reading:

NSF: www.nsf.gov/

NSF GRP Website: www.nsfgrfp.org/

NSF Broader Impacts Review Criterion: Representative Activities:
www.nsf.gov/pubs/2007/nsf07046/nsf07046.jsp