

ADVICE FROM OU GRFP AWARD WINNERS

Preface:

The advice here is provided by undergraduates or graduate students at the University of Oklahoma (OU) who have won a NSF GRFP award. Individuals who won the GRFP award as a graduate students are provided first. Individuals who won the GRFP award as an undergraduate are provided second.

Graduate Students:

Burkley Gallo –

1. ****most important advice**** Go out of the box with your research proposal. Don't tether it to something you think you'll do for your Ph.D. or M.S. work - go bigger. My proposal outlined a field campaign that I knew would be extremely expensive and that no one was currently doing, so I knew that I wouldn't be pursuing this project as a graduate student. However, I thought the idea had merit and blended two fields of atmospheric science in a way that hadn't been done yet and could yield good information. Creativity is key.
2. Have as many people as possible read your materials and give you suggestions (from your field and others, as well as friends and family who aren't in academia). I had a friend go through it and help me reshape the personal statement entirely, which helped bring the focus to why I could do a lot with the award.
3. When writing your research proposal, ensure that scientists from all fields can see the aim of the proposed work - so if you have jargon, provide context for that jargon.

I wish all the future applicants the best of luck! If you'd like any more bits of advice or clarification on anything I've written, please let me know.

Rachel Hartnett –

1. My advice to applicants, although I am not as familiar with the particular format now that there are two essays instead of three, would be to make sure that you are clear and concise as possible. Don't repeat information and use all the space available within your page limits. You can reference the other essay if necessary. Figures and tables are very useful in conveying information--put them in first and don't remove them for additional text. They are worth the space. Finally, remember that your audience is general, and they are funding you as a future scientist, so don't skimp on the personal experience part of the essay. (One other side note is to make sure you add in the proposal how you would analyze the data you collect; it is often overlooked.)

Jackson Helms –

I want avoid giving specific writing advice, because each person's background, goals, and proposal will differ. But below are some general guidelines.

1. **Start early.** Just writing the proposal is a substantial project, and with such a competitive program, it needs to be as well done as possible. I recommend starting the proposal at least two months before the due date, if not earlier.
2. **Read examples.** Ask your advisor and colleagues for old GRFP proposals—both successful and unsuccessful ones. Many professors or departments collect these from willing donors. (e.g. there are some available at the OU EEB program's website, http://www.ou.edu/eeb/EEB_Resources--Successful%20Proposals.html). Even though the format changes from year to year, this is the only direct information you're likely to get about the difference between successful and unsuccessful applications.
3. **Ask for help.** You probably chose your advisor partly for their successful publication record. Advisors, committee members, fellow grad students, and other colleagues have a ton of collective paper and proposal writing experience. Feel free to lean on them to help organize your thoughts, design an appropriate research plan, and review your drafts (and a successful proposal will almost certainly go through many, many drafts before its ready). You'll still have to do all the writing and work yourself, of course, but input from thoughtful and experienced colleagues is invaluable.
4. **It's about you.** Unlike many other grants which focus solely on the proposed research, the GRFP is about the candidates themselves. The program is meant to fund promising new scholars who can make a solid contribution to their field. The research itself is still critical, but a huge part of the application is about you and your potential. All the application documents should flow together to form one consistent narrative about your personal and professional development, and how your background has led you to and prepared you for this project and your research career.
5. **Apply often.** The GRFP is a competitive program, and many good proposals get rejected. But (if I remember correctly) you can apply up to three times, depending on your situation—once in your last year of undergraduate work, and once each in the first two years of your Ph.D. program. Each application you submit is likely to be better than the last, so start early and keep trying. My first proposal, written as an undergrad, was rejected, but I was finally awarded the GRFP on the second try in my first year of grad school.

Jane Lucas –

1. My biggest piece of advice would be to gather examples of previously successful proposals in order to help craft your own proposal. Small things, like bolding key ideas, help to aid reviewers and can make a big difference. Similarly, make sure to craft your personal statement in a way that highlights how you will be successful in the future, not just a story of your past.

Undergraduate Students

Akanimoh Sanmi Adeleye –

In addition to all of the great advice already provided here is my advice for the statement of purpose and the research proposal.

Statement of Purpose:

1. Have as many people read your statement of purpose as possible. Especially professors, they know what is missing and what to will help you stand out.
2. Have no spelling or grammatical mistakes.
3. If you do not feel inspired reading your statement, others will probably not as well. Delve deep into your passion.

Research proposal:

1. It is important to write your proposal as just that, a proposal. Everything should be clear and precise and should make the reader feel as though you are in the early phases of the project or just need the money to begin your experiment.
2. Make it detailed but remember to explain why it is important and how it will first improve general technology and then impact the users or society.

Melissa Chanderban –

- Read the solicitation carefully and make sure you follow ALL requirements. You don't want to get disqualified for having a wrong font.
- I found it easier to format my essays using LaTeX (it also looks a bit cleaner). I used Word for spellcheck and for others to edit, then transferred the text to LaTeX.
- Have others critique your essays! Friends, lab mates, your PI, past GRFP winners. The university also has "experienced GRFP resource persons" to help out.
- Read past winners' essays.
- Start early. I started my essays the summer before I applied and wrote a little bit each day. That gave me plenty of time to send drafts for criticism and notice errors.
- Contact your letter writers early on as well.
- Reading your essays aloud helps identify any flow issues.
- Submit to NSF with plenty of time to spare. Don't lose all your hard work to a poor Internet connection. There are also questions to answer within the application.
- Avoid clichés and jargon.

- Be confident in your writing. Avoid "I feel like" or "I think."
- Do not neglect broader impacts! It's literally 50% of the review criteria.
- Talk about future plans for BI as well.
- Your research plan should be feasible for you to perform.
- Be careful if writing about research that may pertain to medicine and health; this starts to go into NIH territory and NSF may disqualify you.
- Use figures in the research plan where applicable.
- If you are from an underrepresented STEM demographic, this can be used in BI (e.g. overcoming adversity, bringing STEM education to members of your community).
- Don't be afraid to apply as an undergrad. You only get two chances: one as a senior undergrad and one within the first two years of grad school, so you should take advantage of the former. Even if you don't win, you can use reviewer feedback to improve your next application.
- Overall, your essays should outline why the NSF should fund YOU. Why are YOU uniquely qualified to perform this research? How will YOUR BI and IM make you an impactful member of the STEM community?