Grant Writing Advice

Contributed by Meredith Spence Beaulieu:

<u>Applying for Fellowships</u>

Applying for a fellowship is likely something you will encounter as a graduate student. This of course is a way to procure funding to support your research during your graduate career, but it is also a great professional development opportunity. If you don't have experience in grant writing, the process can seem quite daunting. This list of tips is intended to give some insight into what makes a successful fellowship application, but also utilize the advice of those around you (both peers and mentors), as each person is likely to have their own fellowship writing style and there is not a single formula for success.

<u>General writing advice:</u>

- Don't use discipline-specific jargon. Always keep in mind that for most major fellowships, a biologist from any specialty can be assigned to your proposal, so you should be writing in a way that any biologist can understand what you're talking about.
- Write in first person. Use past, active, or future tense as appropriate—but *always* first person. It can feel strange to do this for scientific products, but it really does make for a more impactful research statement. Particularly for fellowships, this subtly shifts the reviewer's thoughts back to you as a person doing the things you're proposing (rather than them magically being done on their own). Even for manuscripts, first person is becoming more encouraged and accepted, and it makes papers more engaging and easier to read.
- Have as many people as possible read your proposal! This includes your advisor and other faculty mentors, but also postdocs, lab assistants, and your fellow graduate students. No matter the level of the reader's expertise, your proposal will get better with each new read. But, don't feel obligated to accept every suggestion or change. It's okay to trust your gut about some things if you feel strongly (unless every single reviewer has the same note, in which case: change it!).

<u>Fellowship-specific writing advice:</u>

- Even if the project is collaborative (and it most certainly is, as at minimum your advisor will be a coauthor), write "I" rather than "we" for fellowship proposals. You are, after all, discussing *your* particular research, which any reviewer will understand is supervised by your advisor, and selling yourself as the best person to do it. It's fine to contextualize your research within the frame of a larger project, in which case "we" may be best, but spend the majority of the space talking about your work and use "I."
- Convince the reviewers that your project is novel/innovative and worth pursuing. Also convince them that you will be able to get useful and interesting results from your project. Reviewers should be excited about your work and feel assured that it is feasible.
- Particularly for the NSF GRFP, emphasize why your project is important in the pursuit of general science knowledge. NSF doesn't care so much about applications, such as medicine or agriculture. They want to know that your project fills some need in basic science. Generally, understand the funding mechanism and make sure you're highlighting the things that they're looking for.
- Show them why you're the best person to do the research that you're proposing. For example, I studied dog heartworm disease as a graduate student. I tried to convince them that I was in a unique position to research this topic, because I was in an entomology program studying mosquitoes (vector), I had years of experience in the veterinary field (host/parasite), and I had a background in mathematics (modeling disease systems).
- In your personal statement, don't just tell them what you did, tell them why it mattered. For example, don't say "I volunteered at BugFest for the past 2 years." Say "I designed interactive activities for the largest entomological festival in the country, BugFest, and in doing so honed my science communication skills and represented women in science to the general public."
- If there is a future goals section, it can be good to include short-term research goals as well as long-term career goals. (e.g. Instead of just saying, "I want to be in industry doing research as a career," I said "Building off the proposed project, I will do ____ for field work in the future, ____ for laboratory/empirical experiments, and ____ toward building a mathematical disease model. This will prepare me for a future as an industry researcher because ____.") Even if the prompt is just asking for career goals, I think having the research goals shows them that you're capable of coming up with a research plan for more than just one experiment. It shows them that you'll be able to continue producing research results throughout your MS or PhD career, and how that will lend to your chosen career goals. Most fellowships fund you for multiple years, but the research proposal section really only has room to detail one experiment. Take a couple sentences to a paragraph of your personal statement to say how you'll fill the rest of the time if funded.
- Most importantly, highlight who you are as a person. A lot of the time, these fellowships fund people, and not necessarily their projects. Show them why you're interesting, what unique accomplishments you've achieved, how you interact with the broader community, etc. Also keep in mind that they're looking to fund future STEM leaders, so read the personal statement prompt as "Why will you be a STEM leader?" rather than "What have you accomplished that makes you qualified?" (although do still highlight those accomplishments!). It's a subtle difference, but I think it's an important one.

<u>Technical advice:</u>

- SAVE/UPLOAD YOUR DOCUMENT AS A PDF!!! There can be slight differences in formatting between different editions of Word or between different word processors. These differences can make a couple lines float onto a new page and push you over the page limit. If you save as a PDF, your documents won't magically reformat when you upload them.
- Submission sites are notoriously slow and glitchy. Give yourself at least a few hours to submit in case something goes wrong, but ideally submit a couple days before the deadline if you can.

In general, fellowships are extremely competitive. The people that get funded certainly submit good proposals, but so do a lot of other people that don't end up getting funded. In my opinion, a lot of it is the luck of finding an advocate on your review panel. **Write the best and most interesting proposal you can, and hope that one person really enjoys it.**