NSF GRFP - Tips for Future Applicants from the 2019 NSF GRF Awardees and Honorable Mentions

Updated: 9-13-19

NSF Award Recipient: Madeleine (Maddy) Ann Meadows-McDonnell '18

- Biological Sciences and Environmental Science & Policy double major
- Major Advisors: David Smith and Danielle Ignace. Research Mentor and Thesis Advisor: Danielle Ignace.
- Support for NSF GRF application: Danielle Ignace acted as Maddy's mentor through the application process and wrote a letter of recommendation in support of her application.
- Intended Graduate School Field of Study: Life Sciences Environmental Biology
- Current Institution: Lab Manager at Smith College (Danielle Ignace's lab) and University of Massachusetts,
 Amherst (Kristina Stinson's lab)
- Graduate Institution, if not a current graduate student: University of Connecticut, PhD program in Natural Resources and the Environment
- Graduate advisor/topic: Dr. Beth Lawrence, "How do shifts in salt marsh plant species dominance associated with human activities alter patterns of carbon sequestration and the stability of soil organic matter?"
- Email: mmeadowsmcdonnell@gmail.com

What is most exciting or important to you about being offered the NSF GRF award?

The best part of earning the GRFP award is the validation that comes with winning funding. It's easy in academia, especially as a recent undergraduate alum, to question my decision to pursue a PhD. Will anyone care about the work that I care about? Will I make significant contributions to scientific research? Winning the GRF award has encouraged me to stay the course and has reminded me that what I am passionate about matters, and that I am the qualified person to carry out the research.

Comments and advice for future applicants:

I took a chance on the GRFP application because you get a bonus application opportunity if you apply before you enter grad school. In other words, you only get one application chance if you are already in graduate school, but there [is one or more extra opportunities] if you apply before entering grad school. I had nothing to lose by applying for the GRFP as an undergrad, if anything, I was able to make a meaningful connection with my future advisor and get feedback on my application from GRFP reviewers. I treated my application as a practice round in preparation for my second application attempt, but I put in so much hard work and time that I was able to have a successful application the first time around. Even if I hadn't won the award, I would have entered graduate school with an advisor I admired and was supported by, with a strong research proposal. You have nothing to lose by applying, but so much to gain, even if you don't win the award itself.

For the application itself, I found the most helpful resource to be example applications from previously successful applicants. There are a multitude of websites online that compile successful applications for people to use as a reference. I also had a lot of support from my proposed PhD advisor, and the application gave me an opportunity to work with her on an academic project. Because we had worked so closely together on my GRFP application, I knew that she would be an excellent advisor for my PhD. Establishing a strong connection with a potential advisor is key when forming a research proposal, because you'll have mentorship and support in the topic that you're proposing. I found that for the personal statement, a lot of the successful applications I saw had a strong personal narrative. Although the GRFP has specific requirements for the structure of the application, creating your narrative around each of those headings makes it flow in a more natural and compelling way.

NSF Award Recipient: Jane Weinstock '16

- Geosciences major (advisor Jack Loveless, early research mentors Sara Pruss and Bob Newton), minor in Biological Sciences (advisor and research mentor David Smith), Fulbright research fellowship in Panama 2016-2017
- Support for NSF GRF application: Work with Bosiljka Glumac and the Smith Fulbright Program on a successful application for a Fulbright research fellowship in Panama (2016-2017) was excellent preparation for completing the NSF GRF application. Bosiljka Glumac, Bob Newton, and David Smith wrote recommendations and advised during the grad. school and NSF GRF application processes.
- Intended Graduate School Field of Study: Life Sciences Ecology (primary), Geosciences Biological Oceanography (secondary)
- Proposed Graduate Institution: In the application, I listed University of Hawaii at Manoa. I now plan to attend the MIT-WHOI Joint Program
- Email: <u>Jane.B.Weinstock@gmail.com</u>

What is most exciting or important to you about being offered the NSF GRF award?

This fellowship allows me to pursue a PhD at my first choice institution, which I may not have gotten into otherwise due to limited funding. Also, a reliable source of funding while in graduate school means that I will be able to focus more on my research and on getting the most out of my program.

Comments and advice for future applicants:

I would be happy to talk with anyone applying in ecology/marine biology/oceanography or any other related field!

If your proposed research is interdisciplinary, be sure to get advice about which primary Field of Study you should apply under. Your Field of Study determines who reads your application and what other proposals yours is being compared to, so you want to pick one where you feel your application will shine. To do this, you can look on the NSF website and read about how NSF defines each discipline, and you can also ask advice from researchers in your field, particularly if they have experience with the GRF review process.

NSF Award Recipient: Jade Ziqiu Zhang '18

- Geosciences major. Advisor Amy Rhodes, research adviser and mentor Sara Pruss, additional mentors Paulette Peckol, John Brady
- Support for NSF GRF application: Three Smith College faculty members wrote letters of recommendation: Sara Pruss, Paulette Peckol, John Brady.
- Current Graduate School Field of Study: Current, Geosciences Geochemistry
- Current Institution: Current, The University of Michigan, Ann Arbor
- Email: jadezz@umich.edu

Comments and advice for future applicants:

I am happy to chat with the rising seniors and give them some advice about the GRFP.

NSF GRF Honorable Mention recipient: Amelia Catherine Ashmead Burke '15

- Self-designed major in Middle Eastern Studies. Advisors and mentors: Greg White, Nadya Sbaiti, Joshua Birk, Paul Wetzel, Abdelkader Berrahmoun, Fulbright research fellowship to Morocco 2015-2016
- Current Graduate School Field of Study: Current, Anthropology and History, joint PhD program
- Current Institution: The University of Michigan, Ann Arbor
- Email: Acaburke@umich.edu

Did preparing the NSF GRF application and the NSF GRF honorable mention help you with your graduate school plans in any way?

I applied a second-year PhD student, so it helped me clarify some of the questions I will focus on for my dissertation research.

Comments and advice for future applicants:

I would be happy to talk to anyone considering applying, especially from the social sciences. Don't hesitate to reach out!

NSF GRF Honorable Mention recipient: Jessica Morgan '17

- Biochemistry major, Advisors and mentors: Nathan Derr, Robert Merritt, Robert Newton, and Judith Wopereis
- Support for NSF GRF application: Nathan Derr and Robert Merritt
- Current Graduate School Field of Study: Current, Life Sciences Plant Biology
- Current Institution: The University of Chicago
- Preferred email: jmorgan2@uchicago.edu

Did preparing the NSF GRF application and the NSF GRF honorable mention help you with your graduate school plans in any way?

I used this as the basis of my project for my qualifying exam/dissertation work. I have since passed my qualifying exam and met with collaborators at ORNL (Oak Ridge National Laboratory) to make the nanomaterials I described in my application. I also worked very closely with my advisors when working on my application and got their opinions on the approach/direction I wanted to take my project.

Comments and advice for future applicants:

Also I would be more than happy to talk to anyone/help them directly with their applications.

NSF GRF Honorable Mention recipient: Jenna Michelle Zukswert '13

- Biological Sciences and Environmental Science and Policy double major; completed MSc, Forestry, University of British Columbia in 2016
- Advisors and mentors: Robert Merritt (biology), Jesse Bellemare (ES&P, thesis co-advisor), and Amy Rhodes (thesis co-advisor)
- Support for NSF GRF application: Jesse Bellemare provided a letter of recommendation and read over copies
 of the research and personal statement. Jesse Bellemare and Amy Rhodes also provided reference letters
 for my PhD application (separate, but related).
- Current Institution: Ecologist, Penobscot Experimental Forest, University of Maine
- Current or Intended Graduate School Field of Study: Life Sciences Ecology
- Intended Graduate Institution: SUNY College of Environmental Sciences and Forestry
- Email: j.zukswert@alumni.ubc.ca

Did preparing the NSF GRF application and the NSF GRF honorable mention help you with your graduate school plans in any way?

Preparing the NSF GRF application helped me reflect a bit on what I have done in my education and career, what I want to do, and how I can help make a broader impact through my research and activities. I did not get the fellowship, so I may not necessarily be doing the work that I proposed, but I know that I will be going into my studies with a better idea of the kind of work that I find interesting, as well as a greater awareness of why I am doing a PhD and where this next step fits into my career and life goals. This also gave me a chance to work with prospective mentors as I was crafting the research statement, helping me learn more about what collaborating with them is like, and helping them learn a bit more about what I am like as a collaborator and a researcher.

Comments and advice for future applicants:

I'd be happy to talk with any students who might have questions about the NSF GRF application!

And a few more tips about NSF GRFP from Smithies:

Clarke Knight, '14, PhD candidate in Environmental Science, Policy & Management at the University of California, Berkeley suggests that Open Grants, has a great archive of recently funded NSF GRFPs, so you can see what has worked (re: broader impacts).

Alexis Ziemba, '12, NSC, PhD 2019 in Rensselear Polytechnic Institute has published an article on NSF GRFP tips. https://neuronline.sfn.org/Articles/Professional-Development/2019/How-to-Be-a-Competitive-Applicant-for-the-NSF-Graduate-Research-Fellowship