NSF-GRFP: Tips for a Successful Application

UPRM Students Experiences

NSF-GRFP: Tips for a Successful Application

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General Tips

The NSF-GRFP Program funds the person not the research
- Specific importance is given to the Broader Impacts and the Intellectual Merit sections in both statements and letters of recommendations.
- Following guidelines is extremely important (i.e. applicants can be disqualified for not using the given margin length)

E-systems can “lock up” near deadlines, when too many users are on the system. To avoid possible problems and missing your deadline, submit early!

The NSF has absolute deadlines for submitting complete GRFP applications (with letters and transcripts) into FastLane

Review Criteria

Two National Science Board-approved Review Criteria

- **Intellectual Merit:**
  This criterion encompasses the potential to advance knowledge

- **Broader Impacts:**
  This criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes
Personal Statement: Structure

1st Paragraph
- Engage the reader by telling your story (with details) of how you got to this moment in which you are applying for an NSF Fellowship.

Previous Experiences and/or important details of your story (chronological order)
- Be sure to explain the importance of each one of your research and/or work experiences right after it is mentioned
- Use a sentence to connect in a logical order each of your different experiences

Intellectual Merit:
- Here is where you inform the reader of any publications, awards and the importance of your specific work in each of your experiences

Broader Impacts
- Moment to highlight your outreach and/or volunteer experiences and how you plan to continue impacting society

Future Goals
- How you see yourself in ten years and how do you envision graduate school helping you achieve your goals

*It is recommended to use headings to highlight the important sections of your statements (e.g., Broader Impacts and Intellectual Merit)

Personal Statement (Cont.)

Description of previous research and/or work experiences:
- Explain what you did, how you did it, and relevant outcomes/results
- Mention the importance of this experience to your professional growth
- Mention names of professors and/or professionals that you worked with
- Include publications and conference presentations with references
- Specify if you worked independently or as a part of a team
Research Statement: Structure

Present an original research topic
Mention research collaborations, lab facilities

Structure:
- **Background / Introduction** – nature of the specific problem you intend to address
- **Preliminary work** – previous work/results you and your advisor have accomplished in your area of research.
- **Aims or Research Questions**
- **Methods** – how you will collect and analyze the data; includes equipment.
- **Intellectual Merit** – 2 to 3 sentences explaining why your research is necessary, its scope and relevance.
- **Broader Impacts** – how you will involve people from underrepresented groups, how you will communicate your results and who will benefit.
- **Important Literature Citations** (3-5)

Recommendation Letters

One of the most important parts of your application!

Choose at least three reference writers
- Give them plenty of time to prepare the letters
- They should know you as a scientist and personally
- Share your application materials and the merit review criteria (good letters address Intellectual Merit and Broader Impacts)
- Track letter submission using FastLane; you must have 3 letters for a complete application

Who should you ask for a recommendation letter?
- Professors that you have done research with or that know you well that can address both Intellectual Merit and Broader Impacts
- Potential graduate adviser (if you have worked with him previously)
- Summer REU research advisers
- Internship mentors and/or supervisors
Share your statements and ask for feedback!

Contact information of NSF-GRFP fellows:

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NSF-GRFP: Tips

PABLO DÍAZ HYLAND
Remember the missions of the NSF

Select, recognize, and financially support, early in their careers, individuals with the demonstrated potential to be high achieving scientists and engineers

Broaden participation in science and engineering of underrepresented groups, including women, minorities, persons with disabilities, and veterans. NSF especially encourages women, members of underrepresented minority groups, persons with disabilities, and veterans to apply

- Fragment from the GRFP solicitation

Tips

Note that if there is a government shutdown, the NSF page won’t be available and the deadline won’t be extended

Don’t ask for letters of recommendations. Ask for strong letters of recommendations

Make sure that your statement can be easily read by a nontechnical person like a 10 year old child

Use words that speak the language of the NSF such as underrepresented minorities

Put the deadline one week before. Don’t stress yourself

The NSF funds the researcher, not the research

Prewriting ~60%; Writing a draft ~10%; Revising ~30%
Grammar tips

Eliminate unessential adjectives, adverbs and prepositions

Use strong words:

- Collaboration, innovation, interdisciplinary, transformational
- Determination, initiative, perceptive, dedicated

Avoid passive verbs. Use strong, active verbs

NEVER use “I hope”. Use instead “I will”.

Tips

Turn on all spelling, grammar, and style checkers in your MS Word or other word processing program

Read your essay out loud

Your work will not speak for yourself unless you give it a voice. Reviewers are too busy to find hints

Use claims and evidence that you deserve to present yourself as a potentially game-changing scholar

How would your friends and advisor describe you? What is most exciting about your work to them?
Tips

The reviewers are more of a rejection committee, rather than a selection committee

Your research statement supports your personal statement, not the other way around

Don’t waste the opportunity to apply as an undergrad. Even if you don’t win it, you have a second chance in grad school.

You may regret not applying as an undergrad

Tailor your NSF essay to other applications based on their goals and objectives

~50-60 hours working with NSF and ~10 hours with the other ones

NSF-GRFP: Tips

ALEXANDRA PADILLA
- Establecer una idea para un proyecto que te motiva a escribir porque escribir sobre algo que no te inspira es difícil
- Tener un grupo de personas que puedan dar 'feedback' sobre tu propuesta
- Profesores
- English writing group
- Pedir cartas de recomendación a profesores con quien has trabajado o tomado clase y que te conozcan bien (know that they will write you a great reference)
- Si eres una minoría, embrace it. Demuestra que aunque eres una minoría, no vas a dejar que eso te limite
- Menciona los internados y las responsabilidades relacionadas a esos internados en los cuales has participado
- Be confident (y diles que a veces es difícil y que a mí, aun teniendo una beca de NSF se me hace difícil crear en mi pero tienen que tener confianza por que eso se lee en la solicitud)
- Hazlo con TIEMPO! Dejarlo para el último momento no es una Buena idea
- Ten en mente un departamento o miembro de la facultad con quien quieres trabajar: reach out to them, ask them for advice
- Make a plan: demuestra que sabes que es un PhD y que entiendes como vas a dividir tu tiempo
- Make sure you address the Boarder Impacts and Intellectual merit of your research project. Eso es lo que ellos quieren. Que puedas demostrar que puedes pensar mas alla del research