**NSF Merit review process**

https://www.nsf.gov/bfa/dias/policy/merit\_review/

[What reviewers are asked to evaluate in a proposal.]

When evaluating NSF proposals, reviewers will be asked to consider what the proposers want to do, why they want to do it, how they plan to do it, how they will know if they succeed, and what benefits could accrue if the project is successful. These issues apply both to the technical aspects of the proposal and the way in which the project may make broader contributions. To that end, reviewers will be asked to evaluate all proposals against two criteria:

* **Intellectual Merit**: The Intellectual Merit criterion encompasses the potential to advance knowledge; and
* **Broader Impacts**: The Broader Impacts criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes.

The following elements should be considered in the review for both criteria:

1. What is the potential for the proposed activity to:

a. Advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and

b. Benefit society or advance desired societal outcomes (Broader Impacts)?

2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?

3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?

4. How well qualified is the individual, team, or organization to conduct the proposed activities?

5. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?

Grant writing perspective

There are things I can do to get my proposal close to the top, but there are also things I’ll never be able to control. Those things may work for me or against me of course.

#1: Do I have an ambitious/transformative research idea? A ‘good’ project is not going to cut it if resources are scarce and there is competition. Your project must be excellent.

I’ve learned to only apply to NSF if I feel like I have a great idea. This may be less applicable for less competitive grant opportunities.

Can a non-expert quickly grasp and appreciate what I want to do? Motivating examples can be very helpful.

#2: Is it a complete package?

An ambitious and exciting idea is great but there also needs to be a clear path to achieving it.

A pilot or demonstration project can be very effective for persuading reviewers that what you are proposing is feasible and likely to produce interesting findings.

#3 If I’ve got these two things, then I have to do a good job of selling it.

It’s not what I think I am saying that matters. It’s what others are hearing.

Seek feedback early, encourage criticism, keep revising until the day it is due (every little bit helps!).

#4 Follow the instructions! Most grant processes have firm deadline and are unforgiving when it comes to format etc.