Tips for How to Write a Successful NSF Grant

1. **Super Topic**. Pick a topic that is fascinating to a broad audience. Talk about it in a way that is accessible to scholars outside your field. Program directors want to be known for supporting important work, and if the reviewers don’t think the topic is exciting and foundational, your proposal won’t have high intellectual merit. High risk may be a GOOD thing, just make sure to talk about what might still be gained scientifically if you fall short of your goals.
2. **Right Program.** Talk to the program director by phone (preferably) or email several months before the deadline. Explain your project in one minute of air time and ask if it is a good fit.
3. **Big Impacts**. Educating students and creating course materials are good, but insufficient, broader impacts. Ask colleagues to help you think of generalizations, and give these possibilities their due in the narrative. Reviewers and senators want to support work with societal as well as scientific value.
4. **Great People**. Put together a qualified team. Highlight your related past work in your bio and prior NSF results. You don’t have to be senior scholar or a star, but you must be capable and productive.
5. **Thorough Knowledge**. Ace your literature review; doing so establishes your understanding of the community, your ability to do hard thinking up front, your rigor, and your study’s motivation.
6. **Clear Goal.** Pose specific research questions or hypotheses that you derive from your lit review.
7. **Appropriate Methods**. Don’t use the wrong methods. Provide details, and show how these methods will yield answers to your questions. For example, estimate the number of informants or subjects, provide sample interview questions or test protocols, and note how you will analyze data.
8. **Creative Ideas**. Be creative when it comes to dissemination; consider you tube movies, infographics, or other unusual ways to represent findings. Your university probably has media staff; meet with them in advance to brainstorm ideas and determine additional budget expenses.
9. **Easy to Read**. Reviewers each read 10-15 proposals over 1-2 days; make it easy for them to read, understand, and remember your ideas. Additional reviewers may glance over the first couple of pages only; make sure to start off strong. Provide a logical roadmap; section headings and consistent terminology help. Make good use of line breaks and other white space (especially around graphics) to present a clean document. Limit use of italics, bold, boxes, lines, shading and other distractions.
10. **Tight Proposal.** Edit, edit, edit. Don’t throw your hat in the ring with a poorly composed proposal that shows you have not thought through the major issues or tidied up the small ones.
11. **Visualizations**. Include graphics for the management plan, such as a table listing personnel and duties, or a Gantt chart laying out the timing of activities. Charts, tables, photos, and other graphics elsewhere in the proposal may be helpful; make sure to label, title, and discuss each one.
12. **Right Scope.** Create a scope for high-quality research. Rookie PIs promise too much and ask for too little. Reviewers and program directors like ambitious proposals, so don’t be afraid to get close to the max on the funding limit if the work requires it (and give yourself time to write up results).
13. **No Rushing.** Allow at least two full weeks, if not more, to write the final proposal after you have thought it through, another one week for your budget office to process it. Arrange any letters of collaboration prior to this period. The best proposals reflect deep, unrushed thinking.
14. **Try Again.** These days, proposals that review panels rate “highly competitive” may still be rejected due to strong competition; program directors and reviewers expect you to try, try again.