

TWELVE STEPS TO A WINNING RESEARCH PROPOSAL
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I have been an NSF

5. Develop a viable research plan: A viable research plan is a plan to accomplish your research objective that has a non-zero probability of success. The focus of the plan must be to accomplish the research objective. In some cases, it is appropriate to validate your results. In such cases, a valid validation plan should be part of your research

criteria, even marginally, can disqualify your proposal from consideration.

10. Know the review process: Know how your proposal will be reviewed before you write it. Proposals that are reviewed by panels must be written to a broader audience than proposals that will be reviewed by mail. Mail review can seek out reviewers with very specific expertise in very narrow disciplines. This is not possible in panels. Know approximately how many proposals will be reviewed with yours and plan not to overburden the reviewers with minutia. Keep in mind that, the more proposals a panel considers, the more difficult it will be for panelists to remember specific details of your proposal. Remember, the main objective here is to write your proposal to get it through the review process successfully. It is not the objective of your proposal to brag about yourself or your research, nor is it the objective to seek to publish your proposal. Again, your proposal is a proposal, it is not a research paper.

11. Proof read your proposal before it is sent: Many proposals are sent out with idiotic mistakes, omissions, and errors of all sorts. NSF program managers have seen proposals come in with research schedules pasted in from other proposals unchanged, with dates referring to the stone age and irrelevant research tasks. Proposals have been submitted with the list of references omitted and with the references not referred to. Proposals have been submitted to the wrong program. Proposals have been submitted with misspellings in the title. These proposals were not successful. Stupid things like this kill a proposal. It is easy to catch them with a simple, but careful, proof reading. Don't spend six or eight weeks writing a proposal just to kill it with stupid mistakes that are easily prevented.

12. Submit your proposal on time: Duh? Why work for two months on a proposal just to have it disqualified for being late? Remember, fairness dictates that proposal submission rules must apply to everyone. It is not up to the discretion of the program officer to grant you dispensation on deadlines. That would be unfair to everyone else, and it could invalidate the entire competition. Equipment failures, power outages, hurricanes and tornadoes, and even internal problems at your institution are not valid excuses. As adults, you are responsible for getting your proposal in on time. If misfortune befalls you, it's tough luck. Don't take chances. Get your proposal in two or three days before the deadline.

These twelve steps are nothing more than common sense. They are so obvious that they hardly bear mention. What is more, they are all necessary conditions. If you fail on any one of these steps, you will reduce your chance of success to practically nothing. Think about it. If you were a reviewer, would you recommend for funding a proposal that doesn't meet these criteria? So why then do fully half the proposals submitted flagrantly omit them? It's a fact. Most proposals do not follow these simple steps for success. Therein lies your opportunity. If you take the time to follow these steps, your proposal will be that

an academic researcher. First, you have to know yourself as well as you can. Who are you? Where are you going? Where do you want to go? I strongly urge people, especially young faculty just starting their careers, to write a strategic plan for their life. Where are you today? Where do you want to be in five years, ten years, twenty years? Then create a roadmap of how to get from where you are to where you want to be in the future. The focus of this roadmap should be the things over which you have control, and it should acknowledge the things over which you have no control. If you can't write such a plan, then your goals for the future