F
or the past two years, I have had the privi-
gle of working for the National Science
Foundation as a program manager. The
National Science Foundation mission is “to
promote the progress of science; to advance
the national health, prosperity, and welfare; to secure
the national defense. With an annual budget of about
$5.91 billion, NSF is the funding source for approxi-
mately 20 percent of all federally supported basic
research conducted by America’s colleges and univer-
sities.”

As a program manager, my primary responsibility is
to arrange for peer review of proposals requesting
funding and making final funding recommendations.
It is fairly well known that the NSF programs are com-
petitive. Funding in the Division of Undergraduate
Education, where I currently work, is on average 20
percent for the FY06 fiscal year.

I frequently find myself talking with individuals
whose proposals have been declined for funding. I
offer them insight on how to improve their probability
for funding, should they choose to revise and resub-
mit the proposal. The following short list is what I
have found to be the most important tips for submit-
ting a successful proposal.

Carefully and completely read any available docu-
ments describing the desired contents and format of
the proposal. When a funding agency requests pro-
posals, it will provide some document(s) describing
what they want to fund. It will describe exactly what
information should be included in the proposal, which
is the information that the reviewers will be looking
for when they examine it. The proposals recommend-
ed for funding will contain the information requested.
Likewise, the proposals that are not recommended for
funding will often leave something out.

Given the competitiveness of the grant process,
leaving out a required or even requested piece of
information is a certain way to move your proposal to
the “do not fund” pile. Read the RFP (request for pro-
posals), determine how your idea matches the pro-
gram, and formulate your ideas around the require-
ments of the document.

Similarly, it is important to provide the necessary
information in the format required by the funding
agency. If they suggest that the document adhere to a
particular organizational format, it would be best to
use it. Pay particular attention to any word or page-
limits given. Keep in mind that an RFP receives a huge
number of proposals.

Most funding agencies will use any means available
to reduce the number of proposals submitted for fund-
ing to a manageable load. They can easily discard
those that do not adhere to a specified format. As one
example, the NSF has a policy that, if the project sum-
mary does not explicitly address the two primary
review criteria (intellectual merit and broader
impacts), they may return the proposal without
reviewing it.

Now it is quite possible that, after reading the solicita-
tion describing the types of ideas the funding agen-
cy is looking for, you might have some questions
about how your idea fits within the program guide-
lines. This emphasizes the importance of the second
point.

Discuss your idea with the funding agency – or
whoever is listed as a contact person for the program.

Typically, this person is very familiar with the pro-
gram itself, and with previously funded proposals.
They can often answer your questions regarding spe-
cific ideas you have and how they fit within the pro-
gram. Make certain you can clearly articulate the
goals, objectives and outcomes of your proposed
ideas. The more clearly you can present your idea and
how you plan to implement it, the better your chances
are of getting useful feedback regarding how well
your idea matches what they desire to fund, and how
best to present your intent.

Now that you have obtained feedback on your idea,
and you know that the idea meets the guidelines of the program solicitation, you can begin writing the proposal. The final tip deals with organizing your proposal.

**Organize your thoughts to consider goals, rationale, methodology, evaluation and dissemination** as these tend to be the most important aspects of the proposal. There may be many different perspectives on the specific definition of these terms. For simplicity, consider your goals to be statements of what you intend to accomplish. The rationale explains why you want to accomplish the goals and why it is important that you be able to do so. The methodology is how you plan to accomplish the goals. The evaluation is how you intend to show that you have accomplished the goals. Finally, dissemination shows that others will have access to what you have done. It is very important to show that there is a clear path and connection to and from each of these sections.

One very important aspect of writing a proposal is that each of the sections is often equally important. Many individuals tend to place great emphasis on the goals and methodology and little emphasis on other areas, deeming them less important. For example, evaluation is often a “tacked on” section, given minimal thought or detail. However this portion of the proposal describes how you will know whether or not you have accomplished your goals and as such, should not be treated lightly. The broader impact of the work they fund is typically very important to the funding agency. Therefore, the more widely the results can be disseminated, and the more broadly the results can be utilized, the more “bang for the buck” the agency will receive. The NSF, like other funding agencies, is very concerned about dissemination of the work performed and results obtained, as this will provide greater impact from the limited amount of funding available.

Funding agencies such as the NSF receive significantly more proposals than they can possibly fund in any given year. As a result, the process of determining whom to fund or not to fund is quite rigorous. These three simple guidelines are what I have found to be the most useful to those seeking funding.

**Some final thoughts:** Be open to critical review. Reviewer comments are not intended to be mean, they are meant to help you improve the proposal. Perseverance is essential. If you have questions concerning the feedback you receive on a rejected proposal, simply ask for clarification and resubmit a revised proposal. Funding agencies exist to provide money to fund worthy ideas. They will provide whatever they can to help you submit a successful proposal. And lastly — good luck!

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