

Keys to Successful Grantsmanship: Perspectives from the NIH Peer-Review Process

As you send your cherished research grant application to the National Institutes of Health (NIH), do you envision mountains of packages cascading out of delivery trucks onto the desks of overwhelmed reviewers? If you do, your vision is not far from wrong.



Donna J. Dean

At the September 2000 meeting of the Howard Hughes Medical Institute's predoctoral and physician postdoctoral fellows, Donna J. Dean, senior adviser to the acting director of NIH, described the complicated path your grant application follows as it, along with 40,000 other

applications each year, enters the complex NIH network. Despite the considerable amount of money that NIH distributes in grants each year—almost \$20 billion—the process is highly competitive, and researchers need to be both good scientists and good marketers of their research ideas. The wise researcher learns how to ease an application through the system and increase the chances of getting NIH to fund the research.

Learn the NIH System

When a grant application arrives at NIH, a referral officer at the Center for Scientific Review (CSR) decides which NIH institute would be interested in funding the project and which study section, or peer-review panel, should review the grant application. In some cases, the referral officer may decide that the grant application is of interest to one of NIH's sister institutions, such as the Food and Drug Administration or the Agency for Health Care Policy and Research.

A researcher can improve his or her chances of success by steering the application to the proper home institute and study section. Useful information about the structure of NIH and the application

review process can be found on the following websites:

- The NIH website (www.nih.gov) describes the institutes and their research interests.
- The CSR website (www.csr.nih.gov) describes the more than 100 study sections within CSR as well as the scientific areas covered by each study section. This website also provides the review criteria and guidelines followed by the study section members.
- The American Association for the Advancement of Science's Next Wave website (nextwave.sciencemag.org) has articles about specific aspects of the grant process.

NIH may be immense, but each application is carefully tracked and seriously considered. Once your application enters the NIH system, you will receive a confirmation of receipt in four to six weeks. If you do not, contact the referral office. As a backup, request a delivery receipt from your package carrier to ensure that you can prove you met the submission deadline. The confirmation letter includes the institute and study section to which your application is assigned and the name of the scientific review administrator.

Craft Your Cover Letter

Take time to craft a cover letter that highlights specific information for the referral officer. Key items to include are

- A succinct, clear project title that describes the research.
- A brief statement about why your research is timely and how it addresses a relevant health issue.
- Your suggestions for at least one institute at NIH to fund your project and two or three study sections to review the application.
- An objective explanation if a reviewer has a possible conflict of interest that may affect your application. It is best to address this issue up front. You may request

that specific individuals not participate in the review of your application. Such requests are common and will not be held against you.

Becoming a Knowledgeable Applicant

When applicants are gathering information about the NIH grant process, Dean noted that they should talk with NIH staff rather than rely solely on comments from mentors and department heads. “Absolutely the biggest mistake young investigators make is being afraid to contact NIH,” she said. “Learn how the system works, and interact with people.”

As your application moves through the review process, always know who is responsible for it at each point. (The scientific review administrator is responsible for shepherding your application through the study section’s review process. The program administrator assumes primary responsibility once the study section’s summary statement has been completed.) Applicants should feel free to call the appropriate person, who can provide advice.

Don’t be discouraged if your proposal isn’t funded. When you get your summary statement, it’s time to think about reapplying. “Don’t slavishly accept all

summary statement criticisms,” Dean said. Consider a well-reasoned response to the comments. Consultation with program staff of the institute is absolutely key at this point.

Dean also offered the following suggestions:

- Be optimistic but realistic. If your application is turned down, wait until you regain your objectivity and then establish a dialogue with your program administrator to find out why.
- Keep an eye on the future. Topics related to aging, emerging organisms/infectious diseases, the neurosciences, and the human genome sequence, for example, are especially timely.
- Attend seminars outside your area of interest to help stimulate new ideas. Seeing connections not apparent to others can make your research stand out.
- Be aware of the context into which you’re sending your proposal. It has to have some relationship to health. Dean observed, “We’re not the National Institutes of Science.”

For additional articles on applying for NIH grants and making career decisions, go to www.hhmi.org/fellowships.