

## RESEARCHERS' CORNER

## Tips for Writing and Getting a Training Grant

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**T**raining grants are valuable resources to start new training programs or facilitate innovative transformation of existing programs. Sometimes they cover only the salary of the trainees, and in other cases, they support the entire program infrastructure, including faculty and administrator salaries. Most training grants in general internal medicine are funded by the federal government (e.g. the Health Resources Service Administration (HRSA), the Agency for Healthcare Research and Quality (AHRQ), or the National Institutes of Health (NIH)). Occasionally, not-for-profit foundations may help fund specific types of training grants (e.g. American Cancer Society), but these are much less common than the opportunities funded by federal agencies.

Putting together a training grant holds the promise of expanding programs, attracting trainees, and supporting faculty to mentor and lead. This article shares wisdom learned after having submitted 20 training grant applications—16 successful and four unsuccessful—over the last 16 years focusing on learners ranging from medical students to faculty. Although the principal investigator (PI) of such grants could be a junior faculty member, it is important for the PI to show a track record of success in his/her field and to include experienced educators (or researchers) in both the grant writing team and training program that the grant is proposed to support.

The following action items will help you develop a successful grant application:

### Months to Years Before Submission

1. *Keep a good record of past trainees and their achievements.* Training programs should

maintain current contact information, achievements, faculty roles, and publications. NIH research training grants require detailed information about trainees from the previous five years or longer, depending on the grant. This is difficult to compile at the last minute, so this is one of the first steps to work on when even considering writing a training grant. It is useful to put this information in a table if not already required.

2. *Familiarize yourself with grant support services.* Find help at your home institution, and build local and regional networks for collaboration.

### After the Announcement

1. *Make use of grant support services throughout the entire grant writing experience.* Many educators don't avail themselves of institutional grant assistance because they either are not aware of it or they believe it is only for investigators. Our development office has a terrific grants team that helps gather letters of support from the dean and hospital CEO and also includes descriptions of the institutional environment. If not available, ask your department or division chair for support from an administrator who has submitted grants before. Experienced grant writers know how to manage page limits, font, and other formatting requirements. Include these team members from the beginning to help keep the grant application on track.

3. *Figure out the budget early.* Experienced grant reviewers will want to see that your proposed

program is feasible within the financial constraints of the grant. This will also help frame the scope of the proposed project. All applicants have the same budget limitations, so applications that promote an ambitious but realistic project are going to be looked upon more favorably than others. Furthermore, some grants have very complicated formulas that divide the trainee grant between trainee-related expenses and faculty support (or other non-trainee costs). It is important to get the grants management office involved to discuss any questions about how to calculate the budget with the granting agency personnel early in the process. Often granting agencies will have informational webinars on the grant mechanism, and it is important that someone from the team participate in these sessions.

4. *Optimize the proposed number of trainees.* The mandate for almost all trainee grants is to expand the number of qualified professionals—this is true no matter the field. One must navigate the tension between aiming for a sufficiently ambitious number and being able to realistically fill those slots. When applying for a grant that highlights research mentorship, there needs to be an appropriate ratio—at least 2:1—of potential faculty and mentees, as some faculty may not be available or a good fit for all trainees. For grant renewals, one of the criteria will be whether the applicant filled the number of funded slots in the

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prior cycle. There is also a tension between in-depth focus on a few trainees (i.e. fellowship program) and opportunities to reach much higher numbers of trainees through technology (i.e. online modules for medical students). Some grants will naturally limit this by focusing on specific groups of learners (e.g. T32 for post-doctoral fellows), but others may leave it open. Justifying the numbers of learners and highlighting the fit with the grant purpose is the key.

### When Starting to Write

1. *Focus on the grant review criteria.* The grant review criteria and scoring are important to consider early and often! Make sure that the grant application explicitly keys in on the scoring criteria, making it very clear to the reviewers how and where the grant proposal addresses those criteria. At times, we have made a table with the page numbers or sections cross-referenced against the scoring criteria. Foundations want to know how their money is funding their key priorities.
2. *Be innovative.* Most granting agencies are looking for programs that are truly innovative and will make a difference. Grants should expand and improve training programs to meet the current health care environment whether it is research or clinical training. The innovation should draw on the applicant's strengths, particularly those of the faculty. For example, we have drawn upon our work with health care disparities in urban populations to frame much of the innovation in prior grants.

This is also a good opportunity to create new collaborations. Many HRSA grants require interdisciplinary applications, which create the ideal opportunity to reach across the silos in academic medicine. It is sometimes challenging to write a collaborative grant if collaborative relationships don't already exist. I have had the experience of writing such a grant before the relationship was established, and the grant was not funded. However, at the next cycle, the relationship begun in the first grant cycle blossomed and allowed for a truly innovative and collaborative proposal. The grant writing itself develops the collaboration and sometimes can lead to unexpected positive outcomes, so it is useful to reach out even if the end result is uncertain.

3. *Sell your strengths.* Successful programs or even new programs all build on their past successes, and this is important to showcase in an application. A corollary is that the key strength for training grants is generally the faculty and staff available to lead the program and mentor the trainees. Applications should detail information on the faculty, including their accomplishments and how those accomplishments fit into the goals of the proposed application. Include all potential faculty members who might help sell the grant, but be sure to include only faculty who are actually involved in the program. Reviewers can see through falsely padded applications.
4. *Include robust evaluation plans.* Utilizing an outside evaluator to aid in evaluation has been highly rated in our prior reviews. We

had an evaluator who retired and had difficulty finding another to replace her, so we began inviting directors from other programs to review our proposal as well as internal documents and annual ratings of the program. This has proved fruitful not only in name but also in practice in that we are able to benchmark ourselves against other programs and also get practical tips and advice from those programs. Another evaluation option is to include yearly reviews by trainees and faculty of the training program, similar to those done in Accreditation Council for Graduate Medical Education (ACGME)-accredited training programs. These evaluations can then be reviewed and organized into action plans.

5. *Don't give up!* Even if the grant is not funded, good ideas generally will stand the test of time. Consider reapplying in the next cycle, having carefully reviewed the feedback from the unfunded submission. Talk with the project officer to understand the feedback you have received and understand the areas of weakness that prevented it from getting funded. I applied multiple times for a particular grant mechanism that was eventually funded with an improved application.

While addressing these three phases of proposal preparation, do not forget to have fun and enjoy the endless possibilities for impacting new groups of high-quality trainees. The hard work you put into this process can reap rewards for many generations of physicians in training to come.

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