

NIH & NSF *Funding Advisor*

The monthly guide to preparing and submitting optimal grant applications

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3 Tips for Transferring Your Grant to Another Institution

Transferring an NIH grant from one institution to another can take up to three months to complete. Here are some tips to help ensure that your funding arrives at your new institution the same time you do.

1. Inform everyone involved

If you’re accepting a new position at another institution, NIH advises you to begin the process by notifying everyone involved as far in advance as possible.

“The receiving institution will need to work with the PI and the new institution about the award transfer and any conditions that may apply,” says **Larry Fritz, PhD,** Assistant Vice President and Dean of Graduate Studies and Research at Bloomsburg University of Pennsylvania.

Your NIH Program Officer (PO) and grants manager will be your closest allies as you wind your way through the process. They’ll help you avoid delays, which could adversely affect your research. Additional advocates

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Study Section Insider: What Is a New Application?

by Christopher Francklyn, PhD

The critical question for PIs is frequently whether a proposal truly represents a new direction from previous research or is a natural and discrete extension of already funded work. How you answer this question dictates whether a new application is a realistic possibility.

This issue also arises when you consider resubmitting a grant application that NIH did not fund on the first try. As you’re probably aware, the agency recently altered its resubmission rules such that you can submit only one amended application (referred to as an “A1”). If this is not funded, then you must prepare a “new” application.

As the implications of this change work through scientific practice, many investigators are unclear about the exact definition of a “new application.” And you will have to consider this for both revised and “new direc-

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during your transfer will be Office of Sponsored Programs (OSP) representatives at your new institution. The grant being transferred will support your new institution, and the new OSP has to follow protocols to complete the transfer.

“Clear communication will enable the OSP offices at both institutions to work out what needs to be done, to remain in contact with the funding agency and to keep the PI on track with the project,” Fritz says.

2. Think about timing

For the most efficient transfer, NIH guidelines suggest that you time your move to coincide with your grant’s anniversary date. For example, if your anniversary date is in September, propose your transfer date occur in June. By doing this three months ahead of the end of the budget period, NIH indicates the transfer will generally be put in place by the anniversary date.

If you can’t align the timing your move will be a mid-year transfer. This means your new institution will have to submit a progress report two months before the start of the next budget. The funds will be split for the current period between your old and new institution.

If your grant has less than three months left until conclusion, NIH may not approve the transfer. The agency’s guidelines state that “exceptional justification” will be required to prove that your remaining work warrants the transfer.

3. Track the documentation

Although the responsibility of completing and submitting the required documentation for the transfer falls mainly on your old and new institutions, you will assist both by providing the appropriate information. NIH recommends that you and your current institution define:

- Amount of funds expended from the grant
- Amount of funds to be relinquished

- Equipment to be transferred.

The grant belongs to the original grantee institution. Therefore, they can relinquish it or elect to hold onto the grant and name a new PI. NIH guidelines state that “it is prudent to deal with issues affecting the old institution while you are still there.”

The forms required by your current institution include a Relinquishing Statement (PHS 3734) and Final Invention Statement (PHS 568). A final financial report (SF 269) will be needed to close the grant.

Your new institution will have to file the brunt of the documentation, including:

- A progress report for the current year
- Goals for next year
- A description of the new facilities
- Budget pages
- Updated biosketches and support pages.

NIH cautions that before you can continue your work at the new institution, you will need to receive the proper approvals if your research requires humans or animals.

“We need to know that they have all the appropriate training and certifications so that when their contract starts, they’re not going to miss a beat,” says **Maria Montoro Edwards**, PhD, Assistant Vice President for Research and Sponsored Programs of Marywood University in Scranton, Pa. “I want to make sure that they’ve got their certifications, like human subjects training and that the IRB approvals have been transferred, so that everything is ready before they even set foot on campus to start the academic year.”

Also be prepared to provide the following during your initial contact with the new institution:

- A copy of the initial grant proposal
- Any reports that have been submitted
- Contact information of individuals at your old institution involved with the grant.

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“Having this information on hand will be invaluable. It enables both institutions to work together on things that perhaps the PI doesn’t need to be involved in, so that we can facilitate the transfer,” Edwards says.

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tion” research. There is a common set of principles that can help us think about a new application.

Is every new observation worth a new application?

If your funded work moves forward successfully, you should generate unexpected results, many of which will cause you to re-assess your original models. In turn, this should generate new hypotheses, which will require new experiments and perhaps maybe even new approaches.

Although your department chair and dean might want you to write as many new grants as possible, you may also want to maximize the success of your funded grant. You will need to consider whether the new observations are more suitable as new aims for the competing renewal of the existing work or as new aims for an entirely separate application.

Consequently, your first and most important consideration is whether the potentially new research focuses on a broad research question that is distinct from your already funded project, or is instead a more focused version of the original question or just an offshoot. Additionally, ask yourself if the new research marks a significant technical departure from your established work or just employs the same basic approaches. If you can answer yes to these questions, then there is a strong argument for considering a new application.

A final important question concerns the reviewers who would be qualified to assess your new project. If the work is sufficiently different and would go to a new study section, that is additional indication of a project worthy of a separate application.

How does NIH determine what is a new application?

NIH policy states that for an application to be new, it should represent a “significant and substantial change in content and scope.” As with all such broad policy statements, for PIs the challenge is to understand exactly what this means.

NIH’s Center for Scientific Review (CSR) states explicitly that it “[does] not use a set formula.” To assist in making the judgment, the center uses both its scien-

NIH recommends that all of the required documents, from your old and new institution, be submitted in one package. This will help prevent parts of your transfer from being misplaced or lost. After the complete package is reviewed and approved, NIH will issue a Notice of Awards to both institutions. ■

tists’ expertise and text recognition computer software. The critical fact is that it considers every application on a case-by-case basis. So what criteria drive the decision?

Perhaps the best way of assessing how NIH views this is to compare the changes it indicates *might* be substantial, which generally references two different fundamental modifications:

1. Using either a “significantly different model system” or a “changed disease model” could be significant.
2. Altering the nature of the research, meaning:
 1. a similar [to your original] methodological approach, for a substantially different question; or
 2. a significantly different question; or
 3. very different approach to address a similar issue.

The clear message appears to be that for you to have a substantially different (that is, a new application), you need to either significantly change your model system or your research question. Thus, when deciding how to respond to a new application request, the crucial strategic decision is to either:

- Stick with the fundamental research question driving your research, and change the model system and/or methodology; or

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- Keep your methodology and approach, but alter the scientific question that underlies your work.

Either change likely will represent a major shift in your program.

Some investigators make the mistake of believing that they can convince CSR that an application is new after introducing somewhat less substantial changes. Little evidence supports this position. In CSR's policy declaration on this, it mentions a number of changes it deems to be cosmetic, including re-wording the applica-

tion, designating/altering the composition of PIs, adding additional preliminary data, changing the award mechanism or review path, and generally tinkering with the application to comport with previous reviewers. If the packaging and presentation are different but the fundamental science is unchanged, then your application will almost certainly not be scored as new.

Dr. Francklyn is a veteran reviewer for NSF and NIH and served as an NIH study section chair. He is a professor at the University of Vermont, where his scientific expertise is in protein synthesis and RNA-protein interactions. He is also assistant editor of the Journal of Biological Chemistry. ■

K Awards: Choose the Best Mechanism For Your Proposal

Early stage investigators have numerous award mechanisms available, including NIH's Career Development (K) Awards. When determining which grant will benefit your research career the most, consider your experience level and whether you will look for a new institution relatively soon.

The K series supports mentored or independent career development. NIH designed it to prepare a PI to be an independent researcher or make significant contributions to her field of interest.

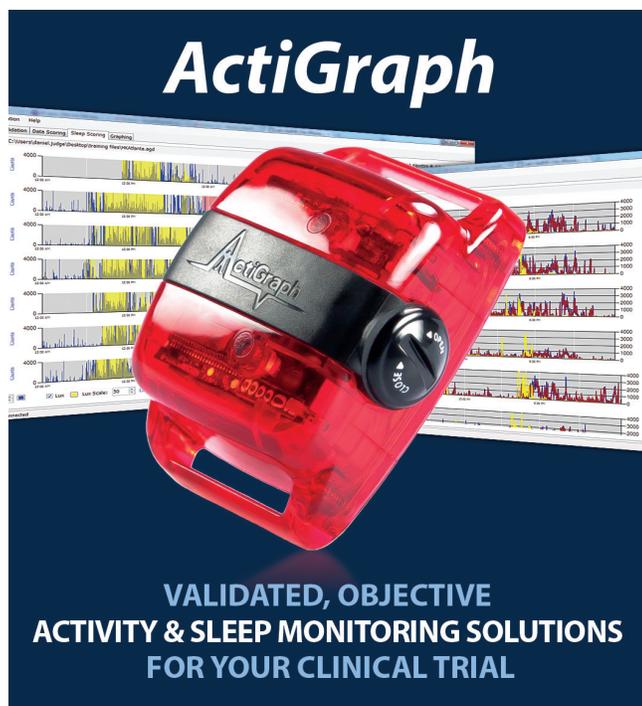
Where to start

"If you're very green, you should apply for a K award," says **Marissa Berg**, quality control manager for Resource Associates, The Grant Experts, a consulting firm in New Mexico. "Generally the threshold for any NIH grant is pretty intense. If you're a novice investigator, you're going to have challenges obtaining any NIH grant, in general, until you get some experience, either under another PI or get published."

There are 14 K awards, and at least eight of these will help PIs prepare for faculty positions. For example, the Career Transition Award (K22) provides support during the early years of your new academic position. And you should consider the Mentored Research Scientist Development Award (K01) if you are a new faculty member and need additional supervised experience. And scientists who have recently received independent research support may want to think about the Independent Scientist Award (K02).

"Also, with one of the K awards, you're awarded a year or two of post-doc funding, and then you receive an automatic larger award once you become a new faculty member. If you're at the post-doc level, it's awesome because you can walk into your faculty interviews with money in hand."

Once you have a K award, "you become much more competitive for the faculty recruitment process because they know that you've got an award. You don't have to start looking for grants once you walk in the door at a new institution," says **Susan Marriott**, PhD, professor in the Department of Molecular Virology and Microbiology at Baylor Medical College of Medicine in Texas.



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Prepare K application strategically

Before you begin writing your application, you should review the funded K applications of your peers to determine if your qualifications are well-suited for this grant type.

“You should make sure that your background is similar by looking over their biosketches. If so, then you’re probably on the right track” applying for a K grant, says Berg.

Remember, NIH limits your biographical sketch for a K award to four pages and should include:

- Your position title. If you are taking a new position and not currently located at the applicant institution, NIH guidelines suggest that you should include both your current and projected titles.
- Your education. The block at the top of NIH’s suggested Biosketch form should begin with your baccalaureate or other professional education and include postdoctoral training. Include the institution’s name and location, degree, dates, and field of study.
- Employment. Begin with your first position following your baccalaureate degree and list them by date.

You can find more information regarding the additional components of the Biographical Sketch at http://grants.nih.gov/grants/funding/424/SF424_RR_Guide_General_Adobe_VerB.pdf.

Publications are also important

In addition to your Biosketch, you’re required to list your publications. But many early-stage PIs may not have an extensive list. So what publications should you include?

According to NIH guidelines, however, you should limit peer-reviewed publications to 15. If you don’t have that many, the agency suggests including the following:

- Theoretical treatises and original research
- Reviews of book chapters and literature you have written
- Books or pamphlets you published or played a role in developing

Remember to include a list of authors, title, journal, volume and page numbers and publication year.

Choose mentor carefully

If you are applying for certain K awards, you must choose a primary mentor. You may also include a co-mentor and a consultant. Identify each of these as senior/key personnel on your application.

- Assign mentors and co-mentors as “Other Professionals” and enter them in the “Other Project Role” category
- Place consultants in the “Other Professional” role as well.
- Keep senior or key personnel under “Project Role.”

For more information about NIH Career Development Awards, go to <http://grants1.nih.gov/training/careerdevelopmentawards.htm>. Here you will find a visual guide to the K awards, data and administrative information, and podcasts on career development and independent career awards. There’s also an online tool that will help you select the right career award: <http://grants1.nih.gov/training/kwizard/index.htm>. ■

How You Approach NSF’s New Data Management Plan Depends on Field

Your NSF funding request now must include a data management plan that can be no longer than two pages. So what should you include in that plan?

“What you would do in one discipline won’t be the same as another,” says NSF spokesperson **Maria Zacharias**. “It’s not one-size-fits-all.”

The new NSF policy took effect in January 2011 and is designed to increase sharing of research and allow release of data on the Internet. The general idea is that PIs must share their data as quickly as possible, or by the end of an award.

Previous NSF policy merely stated that grantees must share their data within a “reasonable amount of

time” as long as costs are “modest.” But the agency didn’t always enforce it.

The new rule requires — as a condition of the award — that researchers release data via the data management plan. And cost is still an issue to consider.

What the plan should include

Your plan should describe how you intend to disseminate and share your research results, which might include the following:

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Data Plan continued from p. 65

- The types of data, samples, physical collections, software, curriculum materials and other items you will produce
- The standards used for data and metadata format and content — if existing standards are inadequate or absent, you should document this as well as your proposed solution
- Policies for accessing and sharing data, including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements
- Policies and provisions for re-use, re-distribution, and derivative production
- Plans for archiving data, samples, and other research products, and for preserving access to them.

Different divisions have different rules

Some NSF divisions have developed their own guidelines to help you create acceptable data management plans.

For example, the Directorate for Biological Sciences (BIO) indicates that each area of biology has its own definition of what constitutes “data” and its management. Therefore, BIO instructs you to create your data management plan based upon two things:

1. The data your project will generate
2. Your research area’s best practices and standards.

In addition, your plan should address the following, as appropriate:

- The kind of data you will collect, the standards you employ, and how long you will retain the data
- The physical and/or electronic resources and facilities (including those of third parties) you will use to store and preserve the data
- The data and metadata formats, media and dissemination methods you will use to make the information available to others
- The policies you will have to address data sharing and public access (including provisions to protect privacy, confidentiality, security, intellectual property and other rights)
- The rights and obligations of all parties managing and retaining research data (including contingency plans for key personnel departing the project).

On the other hand, the Directorate for Education and Human Resources (HER) requires your data management plan to address only two main questions:

1. What data will your project generate?
2. What is your plan for managing the data?

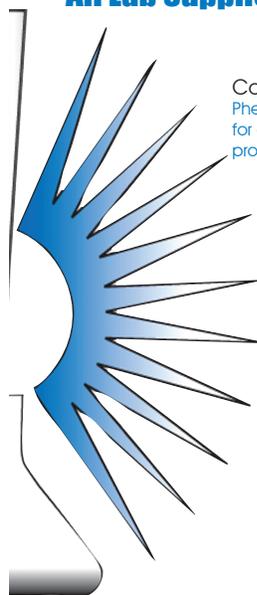
To accomplish this, EHR recommends that you consider the following matters when constructing your plan:

- The types of data you might generate and eventually share with others and under what conditions
- How you will manage and maintain the data until you share it with others
- Factors that might affect your ability to manage data — for example, legal and ethical restrictions on access to non-aggregated data
- The lowest level of aggregated data that you can share with others in the scientific community, given that community’s norms on data
- The mechanism you’ll use for sharing data and/or making them accessible to others
- Other types of information you should maintain and share regarding data — for instance, the way it was generated, analytical and procedural information, and the metadata.

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Enforce your plan

Although the data management plan is part of your grant application, NSF expects you to follow it once you receive an award and proceed through your research.

In fact, BIO and EHR state that, after they make an award, they will monitor your implementation of the data management plan through the annual and final report process.

For the annual report, which is required for all multi-year NSF awards, you will have to describe any progress made regarding data management and the sharing of research products. This might mean including citations of relevant publications, conference proceedings, or descriptions of other types of data sharing and result dissemination.

In the final project reports, you will have to describe how you implemented the data management plan, including any changes from the original. And you will have to provide the following details, according to BIO and EHR:

- Data produced during the award
- Data you will retain after the award expires
- Verification that data will be available for sharing
- Discussion of community standards for data format
- How you will disseminate data
- The format you will use to make data available to others, including any metadata
- The data's archival location.

Of course, not all projects will generate data. For example, your research may be purely theoretical or in support of a workshop. Nonetheless, you are still required to have a data management plan. The plan will simply state that you will produce no data and indicate why, NSF says. ■

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