NIH Institutional Training Grants (T-32) Pre-Award

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T32 grants: What do they support?

The NIH-sponsored T32 program provides funding for

**predoctoral, postdoctoral and short-term research training experiences**

*in specified areas of biomedical, behavioral and clinical research.*

• Short-term research training is uncommon, and often supports summer research experiences for students in health professional programs.
T32 grants: Whom do they support?

- U.S. citizens
- permanent residents of the U.S.

• You should be aware that this program does not support students or postdocs who are in the U.S. on temporary visas.
The NIH numbering system gives a code for each type of grant. R for research (RO1), T for training, F for fellowships, etc.

Awards are made with a number of slots. Slots are then awarded through an internal competition.

**T32 grants: How do they operate?**

- As institutional awards, not individual fellowships (F31s, F32s).
- Under guidance of established faculty member (“Program Director,” not “Principal Investigator”) who applies for grant on behalf of group of faculty trainers.
- Through training program’s internal review process (resulting in training positions or “slots” awarded to individual trainees).
T32 grants: How do you know if you should apply?

- Current T32 grantees: Contact your Program Officer.

- New T32 applicants: Contact the Program Officer at your prospective Institute.
1. The Program Announcement is a general NIH-wide PA, and it is available on the NIH web site. Sometimes instead of a program announcement, you will find a RFA which stands for “Request for Application.”

2. The NIH now has a T-table that lists all the training grant announcements or RFAs.

3. Application instructions and forms.

   The PHS 398 kit is available on the NIH web site, linked from the Training Grant section of the Grad School’s site. You can download the kit in MSWord or in PDF format. This is the regular application kit for research grants, but there are specific instructions and form pages for NRSA training grants at the end of the kit. The PA instructions will always override the PHS 398 instructions when they differ.

3. Contact your prospective Institute or Center for additional documents. Many of the NIH training grants are funded by NIGMS (National Institute for General Medical Sciences). NIGMS has specific formatting and submission instructions that are available on the web, and other institutes may have similar documents.

4. On occasion, you’ll also find a specific program announcement on the web for a defined topic, such as minority postdoctoral training.
This is the general NRSA website.
This is the T-table that I talked about earlier.

NIH “T-Kiosk” or “T-Table”: [http://grants.nih.gov/training/T_Table.htm](http://grants.nih.gov/training/T_Table.htm)
The program announcement is about 20 pages long. This is what the first page looks like.

Each Center/Institute has different rules about deadlines, and some accept applications at only one annual deadline.

Each Center/Institute also has their own funding priorities. So this is one of the reasons to contact them early.

Names, email addresses and phone numbers are listed at the end of the program announcement.

In the program announcement, you can also find other information that will be useful as you write your grant:

• The Special Program Considerations section describes program self-evaluation plans that applicants are encouraged to include in their proposals.

• The Allowable Costs section gives guidelines on grant costs such as stipends, stipend supplementation, tuition, fees, health insurance, travel, training-related expenses, and F&A (indirect) costs.

• The Review Criteria and Additional Review Considerations section tells you what the reviewers look for in terms of your applicant pool, minority recruitment plans, ethics training, and more.
Here is the first page of the special instructions for NRSA applications in the 398 form.
Before you start the competitive proposal process, you should check the website of your own institute (for example, NIGMS, NIMH, NIEHS) to see if your institute has its own requirements for tables. The NIH now provides sample table formats that you can use for your tables. These are also available with the PHS 398 instructions and forms.

If you are applying for a competitive renewal, also contact your Grants Specialist to see if there are any special requirements (contact info is on your award notice).
Instructions for Preparing an NRGM5 Predoctoral Training Grant (T32) Application

I. NIH Training Grant Information and Requirements

Applicants should follow the instructions described in both the T32 J22 grant application for Ruth L. Kirschstein National Research Service Award (NRSF), as well as instructions in the NIH Institutional Training Grant Application (T32). All NIH training grant applicants are expected to present detailed descriptions of:

- the objectives, organization, and direction of the training program
- the qualifications of the program director and leadership
- the qualifications of the proposed faculty participants, including their experience as trainers and their current research programs and grant support
- the qualifications of the core faculty members, program director, and faculty
- the criteria for fellowship recruitment and selection
- the size and quality of the applicant pool
- the institutional training environment, commitment, and resources
- the mechanisms to be used in evaluating the quality and success of the training effort
- how the program plans to provide individualized research training to its trainees
- how the program plans to provide individualized research training to its trainees
- any special training needs of the applicant pool
- the range of tools and techniques used in the training program

II. NRGM5 Training Grant Information and Requirements

A. Information for NRGM Applicants

The application must clearly define the "program" of training that the training grant is to support, the rationale for its organization, and the means for identifying students that are considered to be part of the program.

The application should clearly identify students who are eligible for support in the training grant. For competing continuation applications, students who have been supported in the past should also be fully identified, including their academic progress and eligibility for further support. The application should provide an overview of the program's goals and objectives and should clearly identify the student's role in the program.

A committee of experts, including faculty members and program staff, should be involved in the review of the application. The committee should evaluate the overall quality of the application and the likelihood of the program's success in achieving its objectives.

A proposal that meets the criteria for support under the NIH Training Grant Program is described in the following areas:

- Addressing the Needs of Underrepresented Minority Students
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A set of samples, useful in completing data relevant to an application, is provided by NRGM5. While applicants are not required to use these specific formats, their use is suggested as a convenient way to organize the data.

B. Special Requirements That Must be Included

- A description of the program's impact on the applicants' career development
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C. Budget Requirements

- The budget should reflect the program's needs and the expected costs of training
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D. Other Considerations

- The program should be inclusive and diverse
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A sample budget, useful in completing data relevant to an application, is provided by NRGM5. While applicants are not required to use these specific formats, their use is suggested as a convenient way to organize the data.
NIH web site also has a list of frequently asked questions on their site, and we strongly recommend that you also review this before starting on an application.

It has a lot of helpful information for both pre- and post-award activities.

On the graduate school training grant site, there is a link to this page.
T32 Resources: UW Websites

UW T32 Tips Web Site
http://info.gradsch.wisc.edu/research/t32/index.html

UW T32 Database
https://t32database.wisc.edu/
Contact Kim Voss (krvoss@wisc.edu)

• Here are URLs to some useful UW-Madison web sites having information about T32s.

• The first is a set of web pages with tips about T32 awards (they can also be reached off of the RSP page - training and education resources).

• The second is the link to the campus T32 database.

• The Graduate School contracted with DoIT to create a relational database that houses much of the information necessary to complete the supporting tables, and a committee of TG administrators worked on it for several years.

• The information can be reviewed and updated by individual faculty members or administrators on an annual basis.

• The database is only as complete as the information that is entered into it.

• If you need training on the database, please contact Kim Voss.
• And this is what the main page looks like. You can find it if you go to the Grad School site, choose “Administrative Staff” link, then under “Extramural Funding” choose the “NIH Training Grant Information and Database” link. This page follows the same sort of outline we are using today, ending before we get to “Post-award Issues.” We will present a separate Graduate School Seminar on “Post-Award Issues” in April 2008.

• If any of you have comments or suggestions as you use the Training Grant section of the Graduate School website pages, please send them to Heather Daniels (contact info is on the last page).
Here is the login page for the T32 website.
The first step is to determine which group of faculty to include as trainers.

For new awards, you’ll need to contact faculty about your plans and to ask whether they want to be involved.

For renewal applications, this is a good time to reevaluate trainers and perhaps to shorten your list. NIH is interested in seeing a cohesive and productive group of trainers, so this is a very valuable exercise.

Once you have identified your faculty, you should check the T32 database to see if they are already listed, and how much of their data requires updating. We recommend that you start this process at least 5 months prior to your deadline – even earlier for a very large grant.

In addition, you’ll need to ask each trainer to send you an updated biographical sketch (or pull biosketches from Community of Science). Biosketches are not included in the database.

**Recommended Timeline**

At least 5 months prior to deadline, determine faculty trainer list & review information available in the T32 database to determine what additional data you must collect from faculty trainers.

Enter new information and updates into the T32 database as you collect it.
Renewal applications will also require a lot of detailed information about current and past trainees. Some of it you can collect from your own files, and some of it will have to be provided by the trainers and trainees. This takes time to track down so start early – at least three months before the deadline.

We strongly recommend that you start thinking about the application and planning for the data collection and entry into the T32 database early.

Recommended Timeline: Renewals

For renewal applications, at least three months prior to deadline request current trainee research descriptions and publication lists and gather trainee history data.
Interdepartmental training grants support trainees from multiple degree-granting programs.

Interdepartmental training grants require quite a bit of information that you’ll need to collect from several graduate programs.

For May deadlines, you’ll be thinking about this just as programs are finishing their recruiting seasons so they will need some time to organize data for you.
When you get close to the submission date, you’ll need to obtain institutional approval.

As with any grant, there may be questions that come up, so don’t attempt to obtain all of the signatures/approvals on the last day.

Or, you may want to route – through WISPER -- the items listed on this slide well before the deadline; it is not necessary to wait until one week prior to submission if the budget, title, etc. are firmed up.

The grant should be virtually complete at this stage, but final touches can be put on the training plan and the last minute additions to your tables can be put in while your chair, dean’s office representative and RSP staff are reviewing.
Other Timeline Tips

- Check the T32 database to see what data is already available.

- For large grants, try to get extra help with data entry for the 8 weeks prior to deadline (for renewals, an LTE or student hourly can be paid from the training related expenses category on the grant.)
Here is a sample budget on the PHS 398 NRSA Substitute form. The standard NIH budget page is not used; a substitute page is available at the end of the 398 kit and can be downloaded in pdf or MSWord format.
Creating a Budget - Stipends

Current rates posted on NIH website


<table>
<thead>
<tr>
<th>Type</th>
<th>Years of Experience</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predoctoral</td>
<td></td>
<td>$20,772</td>
</tr>
<tr>
<td>Postdoctoral</td>
<td>Years of Experience</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>$36,996</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>$38,976</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>$41,796</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>$43,428</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>$45,048</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>$46,992</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>$48,852</td>
</tr>
<tr>
<td></td>
<td>7 or more</td>
<td>$51,036</td>
</tr>
</tbody>
</table>

Stipend amounts are prescribed by NIH. You’ll start by deciding how many “slots” of each type you are going to request, then refer to the NIH published rates and the UW-fringe and tuition rates to build your budget.

This slide shows the rates from last fiscal year (October 1, 2006 – September 30, 2007). These are the most current rates available. You can follow the link to the NIH webpage to find the notice establishing these rates.
For future years, estimate an annual increase of about 7% (check with your Dean’s office for specific instructions). Note that the increase is applied twice for the summer session, as it is assumed to be the summer following the academic year. Include this information in your budget justification.
Creating a Budget

- **Trainee Travel** – Check with your awarding component for their policy on this category

- **Trainee Related Expenses including Health Insurance**
  - **Trainee Related Expenses**: Provides funds to help defray the costs of associated expenses including staff salaries, equipment, and supplies. Request $2,200 per predoc and $3,850 per postdoc.
  - **Health Insurance**: Current fringe benefit rates are available at [www.rsp.wisc.edu/rates/index/html](http://www.rsp.wisc.edu/rates/index/html). Be sure to use the rates for fellows/trainees (pre- or post-doc as appropriate). Include an estimate for future increases.
  - NIH will limit the amount awarded to $2,000 per predoctoral trainee and $4,000 per postdoctoral trainee
Training related expenses are budgeted at the NIH rate of $2,200/predoc and $3,850/postdoc. Contact your Dean’s office for guidance on escalating health insurance rates. For this example, health insurance has been escalated by 3% per year.

### Trainee Related Expenses

<table>
<thead>
<tr>
<th></th>
<th>Calculation Per Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Predocs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Insurance</td>
<td>$\left(\left($20,772 \times 21.5%\right) \times 25 \text{ slots}\right) = $111,650.00</td>
<td></td>
</tr>
<tr>
<td>Trainee Related Expenses</td>
<td>$2,200 \times 25 \text{ slots} = $55,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>$166,650.00</td>
</tr>
<tr>
<td><strong>Postdocs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Insurance</td>
<td>$\left(\left($36,996 \times 14.5%\right) \times 2 \text{ slots}\right) + \left(\left($35,976 \times 14.5%\right) \times 2 \text{ slots}\right) = $22,032.00</td>
<td></td>
</tr>
<tr>
<td>Trainee Related Expenses</td>
<td>$3,850 \times 4 \text{ slots} = $15,400.00</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>$37,432.00</td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td></td>
<td>$204,082.00</td>
</tr>
</tbody>
</table>
Creating a Budget

Facilities and Administrative Costs (also called indirect costs or overhead) should be requested at a rate of 8% of total direct costs less tuition, fees, and equipment.

<table>
<thead>
<tr>
<th>Category</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stipends</td>
<td>$671,244</td>
</tr>
<tr>
<td>Travel</td>
<td>$29,000</td>
</tr>
<tr>
<td>Trainee Related Expenses</td>
<td>$204,082</td>
</tr>
<tr>
<td>Total</td>
<td>$904,326</td>
</tr>
<tr>
<td>Indirect Costs (8%)</td>
<td>$72,346</td>
</tr>
</tbody>
</table>

The table does not include tuition, as tuition on training grants is not subject to indirect costs.
For tuition and segregated fees and health insurance, make sure you include an estimated annual increase in costs.

You’ll also indicate on the budget forms the number of predoc and postdoc slots you are requesting.

For future years, you can increase the number of slots you are requesting. If you do increase the number of requested slots, also increase the other budget categories accordingly.

Use the current federal fiscal year’s allowance for stipends, travel, and training related expenses (except for health-insurance costs) in all 5 budget years. Awards will be automatically adjusted by grants management when changes to these levels are announced.
It is important to be aware that NIH does not cover the full costs of the training program and the Graduate School has capped their supplementation of the shortfall. These two sources of support may not cover the entire shortfall on the award.

Shortfall
(your award will not cover the full costs)

- Predoctoral Trainees*
  Graduate School will give $4,000 per predoctoral trainee per year to cover the shortfall costs. This may not cover the full cost of the shortfall. *Entire shortfall will be covered for fiscal year 09.

- Postdoctoral Trainees
  Individual departments/programs are responsible for covering any shortfall.

First, for financial conflict of interest, your Program Director must complete the University’s disclosure form prior to submission of the application http://www.rsp.wisc.edu/coi/index.html

Human Subjects/Biological Materials/Vertebrate Animals/Human Embryonic Stem Cells
Updated procedures will be available on the T32 web site http://info.gradsch.wisc.edu/research/t32/animalhumanbiol.html

First, for financial conflict of interest, your Program Director must complete the University’s disclosure form. She or he probably already will have done this for his/her research grants, but you’ll want to be sure so that this doesn’t hold you up on the deadline day. You can check with your Dean’s office to see if your Program Director has completed this form. This form has to be completed only one time per year and it covers the investigator for the entire year.

If any trainers on your grant have a biological safety protocol, you can obtain an umbrella protocol approval from the biological safety office. You’ll need to fill out just the first page of the protocol form, and the next slide shows what this looks like. You’ll also need to supplement this with a list of your trainers’ names (include all of your trainers, even the ones who don’t do biological-safety related research). You do not need to list your trainers’ biological safety protocols.
Most of the required information is PI contact information, and you will indicate that safety reviews will be handled by individual PIs on their research grants. Biological Safety will send back a green approval form that you can include with your t-form.
The PI and all faculty and trainees working with human subjects will need to complete the on-line training module. We also recommend that the administrator complete this training, as they often are the first point of contact when trainees have questions.

You can check online on the RSP website, Human Subjects Training Verification database query page (http://www.rsp.wisc.edu/hstraining.html) to see if your Program Director and others have completed this training.
RARC is the University’s Research Animal Resources Center. IRB is the “Institutional Review Board” for human subjects. For vertebrate animal protocols, we recommend contacting RARC well in advance of your deadline and asking them to provide you with the list of protocol numbers and approval dates. You will need to submit a list of investigators to them.
Minority recruitment plan has taken on extra importance to NIH in recent years. Minority recruitment plans and outcomes may affect the funding of your proposal.
Other Mandated Proposal Sections

Ministry Recruitment Plan
- Both Departmental/Program and University efforts are important.
- AOF (Advanced Opportunity Fellowships)
- SROP Students (Summer Research Opportunity Program)
- Graduate School Fairs
- Department/Program Website and/or Committee
- K-12 Outreach (PEOPLE Program, etc.)
- Faculty Travel for Recruitment
- Faculty Mentoring of Students (McNair, URS, etc.)
- Mailings/Recruitment
- GERS or similar programs
Other Mandated Proposal Sections

Training in Responsible Conduct of Research: Frequency and Format

Frequency (some, but not all, Institutes require training every year)

On campus courses
- Nursing 802 (Ethics & Conduct of Research)
- Medical History & Bioethics 999 (Research Ethics)
- Medical History & Bioethics 545 (Eth & Reg Issues - Clin Invstgn)
- Oncology 675 (Appropriate Conduct & Effective Comm of Sci)
- Chemistry 901 (Seminar in Scientific Ethics)
- Human Oncology 721 (The Conduct of Science)

Program/Departmental training

Seminars/Workshops-off campus

Graduate School Seminar Series (new in 07)

Make sure you check with the institute that you are applying to about their specific requirements in this area. There are many different ways to fulfill this requirement. Many of them are listed on this slide.
The WISPER Record

For document type, choose NIH Train.

If your training program involves biological safety, human subjects, vertebrate animals, or human stem cells, check “yes” to the clearances question(s).

This will be pretty straight forward if you are familiar with t-forms. This form can be found on the UW-Madison RSP website.

Use activity codes: 2, 4 (postdocs only), and 9.
Future Submissions--Grants.gov

T32 electronic submission is scheduled to begin September 2009.

Any electronic submission of training grant proposals is currently on hold.
Off to NIH for Review

- T32 applications will follow the general Peer Review Process which is described in the PHS 398 application booklet.

- Site visit (if held) will be approximately 6 months from submission deadline.
Site visits are stressful and they last one jam-packed day. However, think of them as an opportunity to sell your program.

Frequency of site visits varies greatly from institute to institute, although some of our grants have been visited at least every other time they are renewed. Other reasons for a visit are if your grant is large or you are asking for additional slots. The major tip is to make sure everything is nice for the team—put them in a good mood!!

The team visiting is a subset of the study section of about 20 people. They are fact finding and will report back to the entire group at the study section. The site visit team usually consists of 4 faculty members from other Universities plus two NIH officials. The SRA (Scientific Review Administrator) will be in touch with you about possible dates for the visit. Try to pick a number of dates that suit you and your steering committee, which is one of the important groups that the team will meet. The package you receive will also suggest further information that the team will need including updates of some of the tables and a tentative agenda.

The team will usually want you to arrange for coffee, juice, sweet rolls and/or bagels, soda, lunch, e.g box lunches from the Union. They each pay for this stuff (about $10-15 each for everything).

You need nametags for everyone taking part in the site visit, including the team. Make the names large and readable, so that all the UW participants can recognize each other!! Take any extra info they need to the hotel by about noon on the day of their arrival. This should include maps and a list of restaurants near the hotel, evening telephone numbers for the Program Director and the administrator in case the team wants further information.
You also need an agenda that lists the names of everyone they will meet. The time frame is usually about 8 a.m. to 4:00 p.m. and then the team leaves for the airport. Note the time division, which shows what the team thinks is most important---STUDENTS.
These have quite a bit of detail that you will need to gather from the students and take time to prepare, so start on them as soon as you know who will be involved in the visit.

The team will want to meet each trainee who is still on campus (even if they are no longer paid off the grant). They also want to see "junior" faculty, "senior" faculty, administration and the steering committee.

Before the site visit it is imperative to meet with all participants in each of the groups. This is best done by having individual sessions for junior faculty, senior faculty, junior students, intermediate students, senior students as the questions asked will vary depending on the group. Training sessions should stress that nobody is putting words in anyone's mouth, but gives some idea of the possible questions for each group and gives everyone a heads-up. See the Grad School's T32 website for possible questions that may be asked of each group.
Human subjects and biological safety protocols are available for look up electronically. When you e-mail Chip for login information, mention that you are a T32 administrator.
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Human Subjects and Biological Safety Protocol Database (PLUS)

PLUS URL:
https://my.gradsch.wisc.edu/plus/lookup.pl

Open to T32 Administrators
Contact Heather McFadden, in the Graduate School, hnmcfadden@bascom.wisc.edu for authorization. Login is NetID.

Human subjects and biological safety protocols are available for look up electronically. When you e-mail Chip for login information, mention that you are a T32 administrator.
WISPER Record Updates-Protocols

- List human subjects and vertebrate animal protocols in an excel worksheet with the following headers:
  - trainee
  - trainer
  - approval numbers
  - expiration dates
- Upload worksheet to attachments tab in WISPER.
WISPER Record Updates-
Project Set Up
- For Project Type: choose GM_20 for Research Training Program
- For FA Base: choose NIH Training
- If award is a new or competing continuation award, RSP will set up accounts for all years of the grant.
Other T32 Resources at UW-Madison

- Training Grant Administrators Networking Group
  (Contact Jane Lambert or Heather Daniels)

- T32 ListServ
  ntp-T32@lists.services.wisc.edu
  (Contact Heather Daniels)

Here are some other resources on campus for T32 administrators.
NIH Institutional Training Grants: Post-Award Issues Seminar

April 16, 2009

Register at the Office of Human Resource Development website: www.ohrd.wisc.edu (log in, then search by “Upcoming Events”).
Contact Information

- Becky Bound
  rbound@cals.wisc.edu
- Heather Daniels
  hdaniels@uwmad.wisc.edu
- Jane Lambert
  jflamber@wisc.edu

Feel free to contact any of us with questions regarding T32 pre-award issues.
Questions?

???

Thanks for coming and please complete your evaluation forms. (You may mail them in.)