



National Institute of
General Medical Sciences



Division of Training,
Workforce Development
and Diversity

National Institute of
General Medical
Sciences

April 12, 2024

NIGMS Medical Scientist Training Program (T32) (PAR-24-128)

Program: Mercedes Rubio
Grants Management: Brett Hodgkins
Review: Latarsha Carithers



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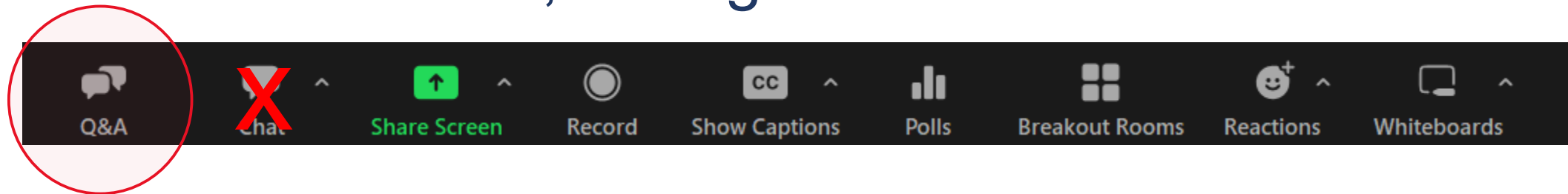
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Webinar Information

- The webinar video and slides will be available on the NIGMS website.
- Please type your questions in the Q&A box, instead of in the chat box, throughout the webinar.



- If time permits, there will be an open Q&A period at the end of the webinar.

Disclaimer

- This webinar and accompanying slides are for informational purposes only. They serve as an overview and are not meant to be comprehensive in coverage of all required components of an application.
- For any submission, applicants are responsible for following the instructions detailed in the SF424 Guide, the Notice of Funding Opportunity and any Related Notices.

Outline

1. Overview of Basic Biomedical and Medical Scientist Training Programs
2. Key Changes to current NOFO
3. Key Program Considerations
4. Highlights of the Application Components
5. Grants Management Overview
6. Peer Review

Overview of Basic Biomedical & Medical Science Training Programs Branch

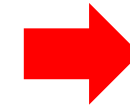
- Basic Biomedical Sciences Training ([PAR-23-228](#)):
 - Twelve areas that correspond to the NIGMS-supported areas of basic biomedical sciences and/or other emerging areas within the NIGMS mission.
- Clinician-Scientist Training:
 - Leading Equity and Diversity in the Medical Scientist Training Program (LEAD MSTP; [PAR-23-030](#))
 - Medical Scientist Training Program (MSTP; [PAR-24-125](#))

Consult with [NIGMS Program Official](#) before submitting.

Additional Disclaimer

- Leading Equity and Diversity in the Medical Scientist Training Program (LEAD MSTP; [PAR-23-030](#))

<https://www.nigms.nih.gov/training/instpredoc/pages/PredocDesc-Contacts.aspx#lead-mstp>



2022 Webinar Videos



2022 Webinar Slides

MSTP Program Objectives

- To develop a diverse pool of well-trained clinician-scientist leaders available to address the nation's biomedical research needs.
- Provides support to eligible, domestic organizations to develop and implement effective, evidence-informed approaches to dual degree training and mentoring that will keep pace with the rapid evolution of the biomedical research enterprise and lead to the completion of both clinical degree (for example, M.D., D.O., D.V.M., Pharm.D., etc.) and a research doctorate degree (Ph.D.).

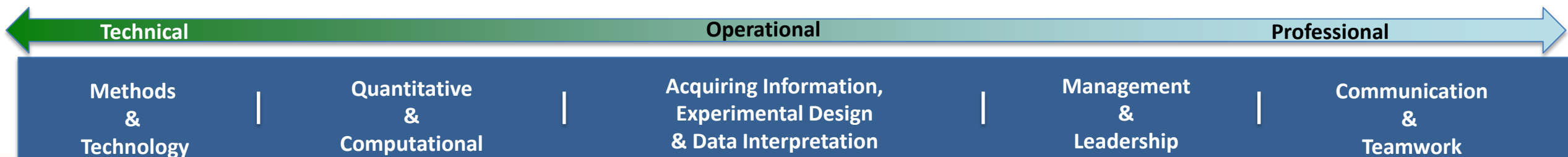
Major Themes in NIGMS Predoctoral T32 Training Programs

- **Training objectives**-- specific, obtainable and measurable
- **Trainee skills development**--use of evidence-informed approaches to provide technical, operational, and professional skills
- **Rigor and transparency, responsible & safe conduct** of research throughout the training experience
- **Commitment to diversity and inclusion**
- **Promote a culture of safety**



Major Themes in NIGMS Training Programs (continued)

- **Mentor training and oversight** of trainee/mentor matches
- **Career preparedness**—provide knowledge of and skills to transition into the range of careers in the biomedical research workforce
- **Strong organizational support** for research training
- **Evaluation**—the collection and dissemination of data on the success/failure of education aims. Make career outcomes publicly available



Key Program Dates

<u>Application Due Date</u>	<u>Council</u>	<u>Budget Start Date</u>
May 25, 2024	January 2025	July 2025
Sept 25, 2024	May 2025	July 2025
Jan 25, 2025	October 2025	July 2026
May 25, 2025	January 2026	July 2026
Sept 25, 2025	May 2025	July 2026
Jan 25, 2026	October 2026	July 2027
May 25, 2026	January 2027	July 2027
Sept 25, 2026	May 2027	July 2027
Jan 25, 2027	October 2027	July 2028

Key Changes to Current NOFO

Summary of Key Changes

Application Information	Summary of Changes
Types of Applications Allowed	RESUBMISSION applications are only accepted for RENEWAL applications
Required “Other Attachments”	Two required: Baseline Data on Trainee Pool Recruitment Plan to Enhance Diversity
Optional “Other Attachments”	Two Optional: Advisory Committee Training Activities
Appendices	NOFO-specific requirements for appendices have been eliminated

New vs. Renewal Applications

- Application is considered NEW if the applicant organization:
 - Does not have a funded MSTP OR
 - Funded through [PA-16-152](#), or [PA-18-403](#)
- Application is considered RENEWAL if the applicant organization:
 - Has a funded grant through NIGMS notice of funding opportunity [PAR-19-036](#) or [PAR-21-189](#).
- There are different requirements for New vs Renewals (for example, Training Tables and Progress Report)

What is new in PAR-24-128?

- New language to encourage the following:
 - Faculty training and resources for trainees with disabilities.
 - Trainee feedback, climate evaluation, and confidentiality considerations when evaluating the program.
 - Program director's/principal investigators' involvement with day-to-day activities, including trainee interactions.
 - Program oversight, including trainee development, progress, and mentor/mentee relationships.
- New language to clarify that training programs are typically not considered human subjects research.
- Research training program-specific instructions in the Facilities and Other Resources section.

Resubmissions: New vs. Renewal Application

- NEW applications (organizations with no MSTP or funded through [PA-16-152](#), or [PA-18-403](#)) that are not funded **are not** allowed to submit a RESUBMISSION application (no –A1).
- Unsuccessful NEW applications are encouraged to reapply by submitting another NEW applications that utilizes constructive feedback from the previous review.
- RENEWAL applications (grant funded through NIGMS NOFOs ([PAR-19-036](#) or [PAR-21-189](#))) that are not funded on the initial attempt may be revised and resubmitted as a RESUBMISSION application (as an –A1).

New, Renewals and Resubmissions

There are different requirements for New vs Renewals (for example, Training Tables and Progress Report) and for Resubmissions.

Content	New No –A1s	Renewal NOFOs PAR-19-036 or PAR-21-189	Resubmission (-A1) NOFOs PAR-19-036 or PAR-21-189
Response to Prior Review: <ul style="list-style-type: none">• Introduction to Resubmission• Mentions of previous overall or criterion scores• Reviewers' comments• Mention or marks how the application has been modified	X	X	✓
Progress Report: <ul style="list-style-type: none">• Update of training goals are achieved and outcomes• Publication list	X	✓	✓
Table 7: Appointments to the Training Grant	X	✓	✓

What is new in the “Other Attachments” Section?

- The number of required “Other Attachments” is reduced:
- Two “Other Attachments” are required:
 1. Baseline data on the trainee pool
 2. Recruitment plan to enhance diversity
- Two “Other Attachments” are now optional:
 1. Advisory committee
 2. Training activities

All remaining “Other Attachments” from the previous NOFO have been eliminated.

Described in the NOFO is the content that is to be incorporated into various sections of the Program Plan.

No additional “Other Attachments: may be included in this section or the application will be withdrawn without review.

What is new in the Appendices Section?

NOFO-specific requirements for appendices have been eliminated. Applications may only contain appendices that are allowed according to the SF424 Application Guide.

Applications that contain any additional appendices will be withdrawn without review.

Applicants may incorporate information previously allowed in the “Other Attachments” and appendices (for example, retention plans, trainee data collection and storage, conflict resolution protocols) into the training program plan as indicated in the NOFO.

Highlights of Application Components

Follow the SF424, NOFO and Notices

- Check the SF424 Application Guide:
 - Form H for institutional training grants prior to January 2025 deadline
 - Form I for institutional training grants after January 2025 deadline (see: [NOT-OD-24-086](#))
 - [Training Instructions For NIH and Other PHS Agencies](#)
- NOFO supersedes the SF424 Application Guide
- Notices supersedes the NOFO and the SF424 Application Guide
- Check the NOFO and Notices for required items (there could be updates):
 - Required attachment
 - Optional material
 - Appendices

Selected Application Components & Page Limits

Application Components	Page Limit
Project Summary/Abstract	30 lines of text
Research Training Program Plan	25 pages
Required Other Attachment #1: Recruitment Plan to Enhance Diversity	3-page max
Required Other Attachment #2: Baseline Data on the Trainee Pool	
Suggested Format Table A for Single Component Suggested Format Table A & Table B for Multi-Component/Multi-Organizational	
Optional Other Attachment #1: Advisory Committee	1-page max
Optional Other Attachment #2: Training Activities (for example, streamlined syllabi with topics, timelines, activities, credits, etc.)	10-page max
Each Biosketch (include commitment to scientific rigor, training & mentoring, to promoting inclusive, safe, and supportive scientific environments)	5-page max
Organizational Support Letter	10-page max

Research Training Program Plan Format

[View Burden Statement](#) **PHS 398 Research Training Program Plan**

Introduction

1. Introduction to Application (for Resubmission and Revision applications) [Add Attachment](#)

Training Program Section

2. * Program Plan [Add Attachment](#)

3. Plan for Instruction in the Responsible Conduct of Research [Add Attachment](#)

4. Plan for Instruction in Methods for Enhancing Reproducibility [Add Attachment](#)

5. Multiple PD/PI Leadership Plan (if applicable) [Add Attachment](#)

6. Progress Report (for Renewal applications) [Add Attachment](#)

Faculty, Trainees and Training Record Section

7. Participating Faculty Biosketches [Add Attachment](#)

8. Letters of Support [Add Attachment](#)

9. Data Tables [Add Attachment](#)

Other Training Program Section

10. Vertebrate Animals [Add Attachment](#)

11. Select Agent Research [Add Attachment](#)

12. Consortium/Contractual Arrangements [Add Attachment](#)

Appendix

13. Appendix [Add Attachments](#) [Delete Attachments](#) [View Attachments](#)

Multiple Sections - FOLLOW THE NOFO!

- ← Training Program Plan (25 page maximum) – use headers
- ← Responsible Conduct of Research
- ← Instruction in Methods for Enhancing Reproducibility
- ← Multi-PD/PI Leadership Plan (if applicable)
- ← Renewal Only – Progress Report
- ← Biosketches (5 pages max each)
- ← Required Organizational Letter (10 pages maximum)
- ← Required Data Tables
 - New: 1, 2, 3, 4, 5A, 8A
 - Renewal: 1, 2, 3, 4, 5A, 7, 8A
- ← Generally, not applicable

Appendix – Follow [SF424 Application Guide](#)

2. Research Training Program Plan

Follow the NOFO, not the SF424 Application Guide

- ✓ Rationale, Mission and Objectives
- ✓ Curriculum and Overview of Training Plan
- ✓ Career Development
- ✓ Program Oversight of Training and Mentoring
- ✓ Training Program Director(s)/Principal Investigator(s) (PDs/PIs)
- ✓ Preceptors/Mentors (Participating faculty)
- ✓ Career Review Process, Trainee Appointment & Financial Support
- ✓ Training Outcomes
- ✓ Program Evaluation, Dissemination and Data Storage

3. Plan for Instruction for Enhancing Reproducibility

- Applicants are required to comply with the instructions for **Plan for Instruction in Methods for Enhancing Reproducibility** as provided in the SF424 Application Guide
- Rigor & Reproducibility Resources
 - [NIH Website on Rigor and Reproducibility](#)
 - [Clearinghouse for R25 Training Modules](#)

4. Plan for Instruction in the Responsible Conduct of Research (RCR)

- All applications must include a plan to fulfill NIH requirements for instruction in RCR.
 - Five required components must be addressed
 - Components should be well integrated into the overall curriculum at multiple stages of trainee development in a variety of formats and contexts
- Explain how teaching of RCR synergizes with the curriculum designed to enhance trainees' abilities to conduct rigorous and reproducible research.
- Describe how all program faculty will reiterate and augment key elements when trainees are performing research in their labs.
- Applicants are required to comply with the SF424 Application Guide instructions
 - [RCR Policy](#)
 - [Resources](#)

6. Progress Report (RENEWAL Applications ONLY)

- Intended to demonstrate that the program successfully strengthened the research training environment and promoted broad participation in the biomedical research workforce.
- Describe:
 - Implementation of Proposed Activities
 - Results and Changes from Program Evaluations
 - Impact and Dissemination
- If challenges or program shortcomings are identified, describe sound plans for overcoming or remediating them.
- Include up to one page summary, per trainee, of progress of those appointed to the training grant (see SF424).

Faculty, Trainees, and Training Record Section

[View Burden Statement](#) **PHS 398 Research Training Program Plan** OMB Number: 0925-0001
Expiration Date: 09/30/2024

Introduction		
1. Introduction to Application (for Resubmission and Revision applications)	<input type="text"/>	Add Attachment Delete Attachment View Attachment
Training Program Section		
2. * Program Plan	<input type="text"/>	Add Attachment Delete Attachment View Attachment
3. Plan for Instruction in the Responsible Conduct of Research	<input type="text"/>	Add Attachment Delete Attachment View Attachment
4. Plan for Instruction in Methods for Enhancing Reproducibility	<input type="text"/>	Add Attachment Delete Attachment View Attachment
5. Multiple PD/PI Leadership Plan (if applicable)	<input type="text"/>	Add Attachment Delete Attachment View Attachment
6. Progress Report (for Renewal applications)	<input type="text"/>	Add Attachment Delete Attachment View Attachment
Faculty, Trainees and Training Record Section		
7. Participating Faculty Biosketches	<input type="text"/>	Add Attachment Delete Attachment View Attachment
8. Letters of Support	<input type="text"/>	Add Attachment Delete Attachment View Attachment
9. Data Tables	<input type="text"/>	Add Attachment Delete Attachment View Attachment
Other Training Program Section		
10. Vertebrate Animals	<input type="text"/>	Add Attachment Delete Attachment View Attachment
11. Select Agent Research	<input type="text"/>	Add Attachment Delete Attachment View Attachment
12. Consortium/Contractual Arrangements	<input type="text"/>	Add Attachment Delete Attachment View Attachment
Appendix		
13. Appendix	Add Attachments Delete Attachments View Attachments	

- 7. Participating Faculty Biosketches
- 8. Letters of Support
- 9. *NIH* Training Tables

7. Faculty Biosketches

- Personal statements should be tailored to the application:
Address how faculty mentor is committed to training and mentoring, and promoting rigor, reproducibility and safety as described in the NOFO
- New Format (NOT-OD-21-073): **Failure to follow the appropriate Biosketch format may cause NIH to withdraw your application from consideration.**

8. Letters of Support

- Organizational Support Letter (10-page maximum) must be attached as part of Letters of Support
 - The letter must be on organizational letterhead and signed by a President, Provost, Dean or similar key leader that describes the activities and resources provided by the organization that will ensure the success of the planned training program and its trainees.
 - The areas of commitment to be described in the organizational support letter are noted in the NOFO.
 - **If this letter is not included, the application will be considered incomplete and will not be reviewed.**
- Additional letters of support are permitted; however, these letters may not contain any information that is required in the Organizational Support Letter.
- Combine all Letters of Support into a single PDF file.

9. Required NIH Training Tables

Introduction	Date Posted	File Link/Format/Size
Introduction to Data Tables – Read this first!	9/16/2022	MS Word (53 KB) PDF (437 KB)

Data Tables	Date Posted	Blank Data Tables File Link/Format/Size	Instructions and Sample Data Tables File Link/Format/Size
New Applications			
New Predoctoral Training Submit tables: 1, 2, 3, 4, 5A, 6A, 8A	9/16/2022	MS Word (40 KB)	MS Word (87 KB) PDF (453 KB)
Renewal or Revision Applications			
Renewal or Revision Predoctoral Training Submit tables: 1, 2, 3, 4, 5A, 6A, 7, 8A	9/16/2022	MS Word (43 KB)	MS Word (93 KB) PDF (472 KB)

[Training Instructions For NIH and Other PHS Agencies](#)

[NIGMS Informational Videos: How to Complete NIH Training Tables](#)

NIH Training and Suggested Formats Tables

TABLE	CONTENT
Table 1	Census of participating departments (# of total and Participating trainers, trainees, other pre/postdocs)
Table 2	Details on Participating faculty (name, rank, dept, research interest, training record)
Table 3	Other federal institutional training grants (T32, T35, R25, K12)
Table 4	Participating faculty research support
Table 5	Trainee publications (organized by mentor)
Table 7	Appointments to the training grant by year (ONLY IN RENEWALS)
Table 8A	Program outcomes of trainees (support, start/end dates, research topic, initial and current positions (New Application=Part III , Renewal Application=Parts I, II and IV))
Suggested Formats Table A & Table B	Baseline Data on the Trainee Pool: Applied, Admitted, and Matriculated Located in Other Project Information

NIH Training Tables for Applications

In the Program Plan, applicants should summarize key data from the training tables that highlight the characteristics of the training grant eligible pool, program faculty, organizational support, student outcomes, and other factors that contribute to the overall training environment of the program.

Required NIH Training Tables

New: 1, 2, 3, 4, 5A, 8A

Renewal: 1, 2, 3, 4, 5A, 7, 8A



Faculty, Trainees and Training Record Section		
7. Participating Faculty Biosketches	<input type="text"/>	<input type="button" value="Add Attachment"/>
8. Letters of Support	<input type="text"/>	<input type="button" value="Add Attachment"/>
9. Data Tables	<input type="text"/>	<input type="button" value="Add Attachment"/>

- **Do not submit Table 6A**
- Instead, use Suggested Format Table A, Suggested Format Table B (if applicable), and upload **Attachment(s)** in the **“Other Project Information”** section

Applications that do not include the required NIH training tables or that submit additional data tables in the Data Table section will be withdrawn prior to review.

NIH Training Table: 6A

- NIGMS does not require Training Table 6A in its Institutional Predoctoral T32 training grant applications (new and renewals).
- **If Table 6A is included, the application will be considered noncompliant and may not be reviewed.**
- Applicant must submit “Baseline Data on the Trainee Pool.” Applicants are encouraged to use Suggested Format Table A for single department program applications and Suggested Format Table A and Suggested Format Table B for applications with multi-departmental or multi-organizational structures.
- For more information about the Data Tables for NIGMS Institutional Predoctoral T32 training programs, please visit the [Predoctoral NIH Data Tables and Suggested Data Formats](#) website.

Removing Table 6A from your application

- To avoid the inclusion of Table 6A in a training data table set generated via xTRACT, applicants should **omit the "Start year of the most recently completed academic year" when prompted in the Applicants/Entrants section.** (See [FAQ's](#) for more info)
- The resulting PDF will then exclude Table 6A.

Prepare Research Training Dataset (RTD) for New Application

New RTD	419 The Effects of Romulan Ale on Senior Staff
PD/PI	Rhoades, Dusty

Applicants and Entrants ?

Start year of the most recently completed academic year:

Submit

The Pre-doc and Post-doc data may be edited via the links below, once the Start of the most recently completed academic year has been provided.

[Pre-Doc Applicants and Entrants](#)

[Post-Doc Applicants and Entrants](#)



Instructions for Table 8A

- Renewal applications should complete:
 - Part I. Those Appointed to the Training Grant
 - Part II. Those Clearly Associate with the Training Grant
 - Part IV. Program Statistics
- New applications should complete Part III. Recent Graduates *only*
- The data presented in Table 8A should be discussed in the Training Program Plan narrative.

Resources

- [NIGMS Predoctoral Research Training Grant Website](#)
- [Predoctoral Training Grants FAQs](#)
- [NIGMS T32 Staff](#)

Resources (continued)

- [NIGMS Informational Videos: How to Complete NIH Training Tables](#)
- [T32 Data Tables & Instructions](#)-- Form H (prior to January 2025 deadline); Form I after January 2025 deadline (see: [NOT-OD-24-086](#))
- [Frequently Asked Questions](#)
- [xTRACT User Guide and Resources](#)
- [xTRACT Videos](#)

Advice for Applying

- Submit early—at least two days before the deadline
- Always review your application and check for completeness
There is a two-day reviewing period
- Correct any errors and address all warnings
 - Note that not all failures to comply are caught by the automated notification

<https://grants.nih.gov/grants/how-to-apply-application-guide/submission-process/submit-track-view.htm>

Budget Overview

Stipends, Tuition and Fees

- Kirschstein-NRSA awards provide stipends as a subsistence allowance to help defray living expenses during the research training experience.
- NIH will contribute to the combined cost of tuition and fees at the rate in place at the time of award.
- Stipend levels, as well as funding amounts for tuition and fees and the institutional allowance are announced annually in the *NIH Guide for Grants and Contracts*, and are also posted on the Ruth L. Kirschstein National Research Service Award (NRSA) [webpage](#).

Trainee Travel

- NIGMS will provide **up to \$300** per trainee for travel.
- Trainees must be appointed to the training grant at the time of the actual travel for this to be an allowable cost.
- Plans for trainee travel should be well justified.

Training Related Expenses

- NIH will provide funds to help defray other research training expenses, such as health insurance, staff salaries, consultant costs, equipment, research supplies, and faculty/staff travel directly related to the research training program.
- The most recent levels of training related expenses are announced annually in the *NIH Guide for Grants and Contracts*, and are also posted on the Ruth L. Kirschstein National Research Service Award (NRSA) [webpage](#).



National Institute of
General Medical Sciences



Latarsha Carithers

Scientific Review
Officer,
TMRD Section,
Scientific Review
Branch

Peer Review

Questions? Contact us!
Latarsha.Carithers@nih.gov

Disclaimer

This webinar and accompanying slides are for informational purposes only. They serve as an overview of the review of T32 Programs and are not meant to be comprehensive in coverage of all required components of an application.

Applicants are responsible for following the instructions detailed in the NOFOs and any Related Notices (included in the FOA's Overview Information section), and the SF424 Application Guide.

T32s Reviewed by Two Committees

- TWD-A (SRO TBD) & TWD-B (Dr. Latarsha Carithers)
- 15 study section members each
- Strong focus on Graduate/Medical Scientist Training
- Span the range of program expertise
- Geographic distribution
- Diversity and gender distribution
- Supplemented with temporary members to augment expertise
 - Volunteer! See our new volunteer portal at:
<https://correspondence.nigms.nih.gov/IRGReviewerVolunteers>



Peer Review Cont.

- The roster for the review meetings will be available 30 days prior to each meeting at:
 - TWD-A:
<https://public.era.nih.gov/pubroster/standingCommitteRoster.era?CID=104227>
 - TWD B:
<https://public.era.nih.gov/pubroster/standingCommitteRoster.era?CID=104228>
- Committees are equivalent: applications assigned to one of two committees to balance conflicts and workload.



Review Process: Usual Timeline

Timeframe

Activity

(From submission date)

1 - 2 months

Referral

2 - 6 months

Review Panel

6 - 7 months

Summary Statement Available

↑ SRO POC

7 - 8 months

Advisory Council

↓ PO POC

8 - 9 months

Funding Decisions

9 - 10 months

Award Start Date

- Scores and summary statements accessed through PI's eRA Commons account
- Post review- reach out to your PO for next steps

Peer Review

- **Section V of the NOFO has the Application Review Information**
- Review panel will assess your application against the review criteria.
- Please read the review criteria while preparing your application to make sure all the required information is included.



Formatting Tips

Check Application

- Allow enough time to carefully check application after submission. We cannot accept any missing items after the receipt deadline.

Page Limits

- Supply all requested materials within page limits.
- Do not “overstuff” sections that don’t have page limits or use appendices to get around the limits.

Appendices: Note that the Appendix should only be used in circumstances covered in the [NIH policy on appendix materials](#) and as the NOFO specifically instructs applicants to do so.

Other Attachments: Fewer attachments

Supplemental Materials: Please see supplemental Material Policy <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-19-083.html>



Other attachments: Shortened!

- **Required: (New...ish) Baseline Data on Trainee Pool**
 - Trainee Characteristics: Suggested format: <https://www.nigms.nih.gov/training/instpredoc/Pages/predoctoral-nih-data-tables-data-formats.aspx>
 - **(NEW)** Multi-Component Program Data
- **Required:** Recruitment Plan to Enhance Diversity (3-page max)
- **Optional:** Advisory Committee (if one is intended for the program, 1-page max)
 - To avoid conflicts in the review process, **only pre-existing** Advisory Committee members should be named in the application.
 - Potential Advisory Committee members **should not be identified or contacted** prior to receiving an award.
- **Optional: (NEW) Training Activities (10 Page maximum):** brief descriptions of required and representative elective courses, workshops, and training activities
- **(REMOVED): DO NOT INCLUDE:** ~~Trainee Retention Plan, Outcomes Data Collection and Storage Plan, Dissemination plan~~



Appendix: Optional and Shortened!

- Only allowable Appendix materials (the Appendix is also Optional) :
 - **Blank data collection forms, blank survey forms, and blank questionnaire forms** - or screenshots thereof
 - Simple lists of interview questions (for evaluations and behavioral research **NOT** trainee application interviews)
 - Blank informed consent/assent forms
 - Other items only if they are specified in the
 - **Note: In your blank forms and lists, do not include items such as: data, data compilations, lists of variables or acronyms, data analyses, publications, manuals, instructions, descriptions or drawings/figures/diagrams of data collection methods or machines/devices.**
 - NOFO as allowable appendix materials
- No other items are allowed in the Appendix. Applications will be withdrawn and not reviewed if they do not follow the appendix requirements in these instructions



Tables

- All new applications are required to have tables 1-5 and 8A (part III only).
- Renewal applications must also have Table 7.
- Baseline data on the trainee pool: Suggested Format Table A and, if applicable, Suggested Format Table B replaces old Table 6. **Do not include Table 6 or your application will be withdrawn.**
- **Table 8**
 - For new applications, part III allows up to 5 years of outcomes data, but your application can include up to 15 years of outcomes in the text program plan for your previous or existing training programs
 - For current programs, Table 8 part I & II: 15 years of outcomes

Review Criteria

Scored Review Criteria

Training Program and Environment (Most expansive)

- Rationale, Mission, and Objectives
- Curriculum and Overall Training Plan
- Career Development
- Program Oversight, Participating Faculty Selection, and Mentor Training
- Organizational and Departmental Commitment to the Program

Training Program Director/Principal Investigator

- MPI: add information on leadership plan/roles conflict resolution and why MPI plan benefits program/trainees

Preceptors/Mentors

Trainees (**Revised**)

- Candidate Review Process
- Trainee Appointments and Financial Support

Training Record (**Revised**)

- Training Outcomes
- Program Evaluation, Dissemination, and Data Storage



Substantially Revised Review Criteria

Trainees

- Candidate Review Process
- Trainee Appointments and Financial Support

Training Record:

- Trainee Outcomes
 - Training Outcomes (renewals) or Training Grant Eligible Pool (new applications)
- Program Evaluation Plan, **Dissemination, and Data Storage**



Review Criteria Continued

Additional Review Criteria:

Overall Score Impacting but do not receive individual scores

- Resubmissions (only for renewals)
- Renewals
- Training in Methods for Enhancing Reproducibility
- Recruitment Plan to Enhance Diversity
- Training in the Responsible Conduct of Research
- Protection of Human Subject (Generally not applicable)
 - Inclusion of Women, Minorities, and Individuals Across the Lifespan
- Vertebrate Animals (Generally not applicable)
- Biohazards (Generally not applicable)
- ~~Revisions (NOT APPLICABLE)~~



Renewals

Only for applications who were initially funded under PAR-17-341 or PAR-20-213

- *Implementation of Proposed Activities*
- *Results and Discussion from Program Evaluations*
- *Impact and Dissemination*



Recruitment Plan to Enhance Diversity

- Is the recruitment process responsive to the Baseline Data on the Trainee Pool?
- Does the training program's recruitment plan describe effective strategies to reach a broad range of potential trainees that are program-specific and go beyond organizational recruitment efforts?



Additional Review Considerations

Will not be given individual scores and will not be considered in the overall impact score. Concerns must be resolved prior to funding.

- Budget and Period of Support (# of slots)
- Select Agents (Generally not applicable)



Application Preparation Problems

- Institutional Support Letter
 - **ONE** letter signed by a senior institutional official
 - Other letters of support are allowed but suggest limiting them and these letters **MUST NOT** contain any info required in the Institutional Support Letter
- Appendix issues
 - **Follow new instructions**
 - Evaluation forms: Do not include data or “example” filled out forms
- Post submission materials:
 - Pre-prints are unallowable



Application Tips

Content

- Read the program announcement and ensure that your application contains the necessary elements.
- Successful submission through Grants.gov and eRA Commons does not mean appropriate responsiveness to and compliance with the program announcement.



Application Tips

Comprehensive

- Address all requirements of the program announcement.
 - For example:
 - If you don't have institutional baseline data, explain how you plan to obtain it.
 - New programs, if you haven't fully formed your evaluation plan, at least acknowledge that you are working on it.
- Describe how your program “works”
 - For example:
 - How are students recruited and selected? By whom?
 - What does the advisory committee do, if you have one? How often do they meet?
 - How have you used evaluation information in designing/improving your program?



Application Tips Cont.

Clear

- Don't bury important information.
- Don't expect reviewers to “read between the lines” to figure out what you are proposing.
- Present outcomes data in a straightforward manner:
 - Don't exaggerate.
 - Don't hide data (reviewers will “do the math”).
 - It is far better to present results as they are and address how the program aims to improve.



Application Tips Cont.

Current

- Make sure faculty biosketches are up-to-date, in correct format, and relevant for training program (including statement of commitment to training and promoting safe and inclusive environments)
- Provide data on current and prior students
- Use the most recent institutional data

Consistent

- **Data in tables and text should match**
- Data should be consistent across tables
- Match justification to budget items
- Refer to the correct program in text and tables
- Include a timeline for the activities



New and Smaller Program Tips

- *There are no secrets in peer review:* All the criteria are in Section V.
- With new and smaller programs, please reach out to the Program Officers or SROs at NIGMS
 - Program Officers: Can address structure and program goals and if funded, program performance and reporting.
 - SRO: Can address review related or application compliance questions.
- Time and commitment to the program, while not totally free, is crucially important
 - Big and small programs can run afoul of this. PI/MPI and participant faculty should have demonstrated time committed to the program and the trainees



Problem Areas

Program Evaluation

- Consider reaching out to colleagues with evaluation experience + other resources. NOFO does not specify a dedicated evaluator.
- Discuss both short- and long-term evaluation goals. Performance and outcomes of the Students AND the program
- Evaluation information on the TWD training resource page: <https://www.nigms.nih.gov/training/Pages/Training-Resources.aspx>
- TWD Webinar on Evaluation and program assessment: <https://loop.nigms.nih.gov/2022/06/twd-webinar-on-program-assessment-and-evaluation/>

Recruitment Plan to Enhance Diversity

- Is it responsive to the baseline data for the program? Are there program specific activities beyond the organizational recruitment efforts?

Training in Methods for Enhancing Reproducibility

- Integrated throughout the program

RCR

- Remember there are **5 areas of assessment**: Format, Subject Matter, Faculty Participation, Duration (at least 8 contact hours), and Frequency (at least once every four years)
- Integrated throughout the program



Questions and Contacts

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