



National Institute of
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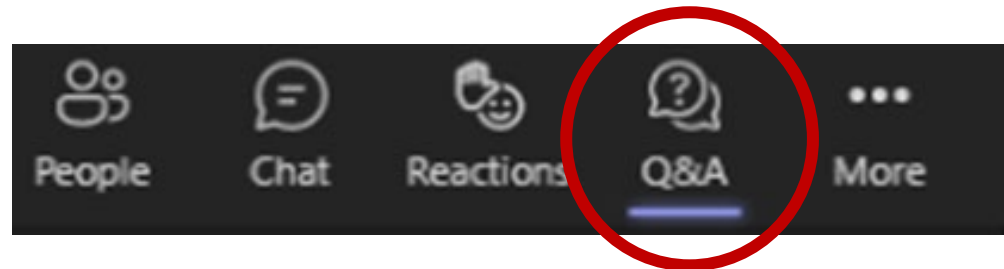
Grants Administration
Branch

NIGMS Predoctoral Basic Biomedical T32 Training Program - Informational Webinar

October 29, 2026

Webinar Information

- The webinar slides are available on the [NIH NEXUS Calendar of Events](#) page for this webinar.
- This meeting is being recorded and will be posted online.
- Please type your questions in the Q&A box instead of the chat box.



Disclaimer

- This presentation 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 instructions detailed in:
 - [How to Apply – Application Guide](#)
 - The Notice of Funding Opportunity (NOFO), and
 - Any Related Notices (see [Policy Change Notices](#))

***Each NOFO has unique requirements – please read and follow them closely
(and reach out to [NIGMS staff](#) with questions)***

Agenda

- General Considerations
- Reorganization of NIGMS's Basic Biomedical T32 Program Areas
- Selected Application Components for [PA-25-168](#)
- Budget Overview
- Peer Review
- Q&A

Basic Biomedical (BBM) T32 Team



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General Considerations

NIH Director's Unified Strategy Prioritizes Training

Training future biomedical & clinician scientists

NIH training programs should focus on training future physicians and scientists to lead American preeminence in biomedical research in the 21st century. Programs should allow trainees to design and conduct the highest quality scientific studies. Importantly, these programs should be based on merit, follow civil rights law, and not discriminate against anyone. NIH and the institutions we support must also uphold safe, equal, and healthy working and learning conditions conducive to high-quality research and free inquiry.

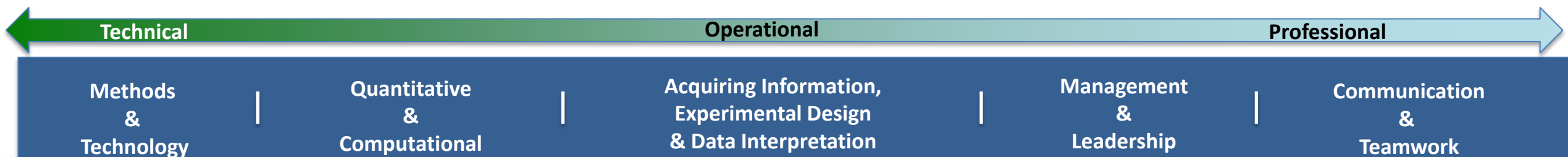
[Advancing NIH's Mission Through a Unified Strategy | National Institutes of Health \(NIH\)](#)

TWD Goal, Strategies and Approaches

- **Goal:** Support as many promising future scientists in as many places as possible (*“anyone, anywhere”*) to foster a biomedical research enterprise that improves the health of all Americans (*“everyone, everywhere”*).
- **Strategy:** Promote opportunity across career stages, institution types and regions.
 - Encourage applications from [IDeA States](#), [HBCUs](#), Tribal Colleges and Universities, and Resource Limited Institutions
- **Approaches:**
 - Mentored research and career development experiences.
 - Supportive peer cohorts.
 - Support for individuals through critical career transitions.

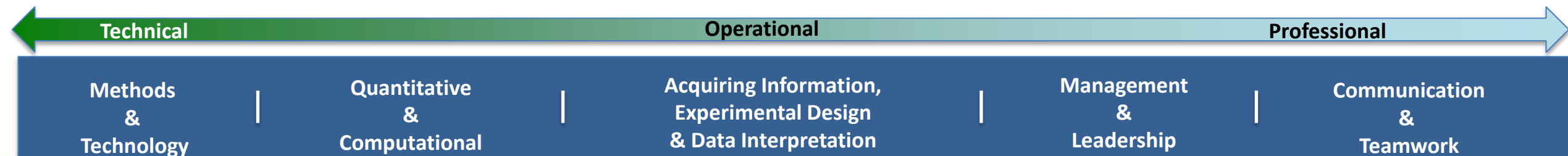
Major Themes in NIGMS Training Programs

- **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.
- **Safe and supportive research training environments** that promote the development of all trainees.



Major Themes in NIGMS Training Programs (cont.)

- **Mentor training and oversight** of trainee/mentor matches.
- **Career preparedness** — providing knowledge of and skills to transition into relevant 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, and making career outcomes publicly available.



Reorganization of Predoctoral Training Areas

Principles and Approach

- **Principles**

- Support research training relevant to the NIGMS mission.
- Ensure areas supported evolve with science (increasingly interdisciplinary).
- Promote applicant and trainee flexibility.
- *Aim to maintain well-justified institutional support while promoting opportunity across institution types and regions (“anyone, anywhere”).*

- **Presented in-depth analysis of Training Portfolio to NIGMS Advisory Council ([Feb 2026](#)).**

NIGMS Predoctoral Training Areas

Molecular, Cellular, and Developmental Biology

Investigate fundamental biological processes at the **cellular and molecular** levels

Biochemistry and Chemical Biology

Apply **chemistry-based and biochemical methods** to biological questions

Biophysics, Bioengineering, and Technology Development

Apply **physical and engineering principles** to uncover fundamental biological mechanisms

Physiology, Pathophysiology, and Pharmacology

Investigate how biological processes function across **complex systems** in health and disease

Quantitative & Computational Biomedical Sciences

Apply **quantitative approaches** to biomedical problems

Biomedical Behavioral Sciences Interface

Examine how well-defined and rigorous **biobehavioral factors** directly impact biomedical outcomes

Pathways for Basic Science-Industry Translation

Prepare students to **translate fundamental discoveries** into an industry context

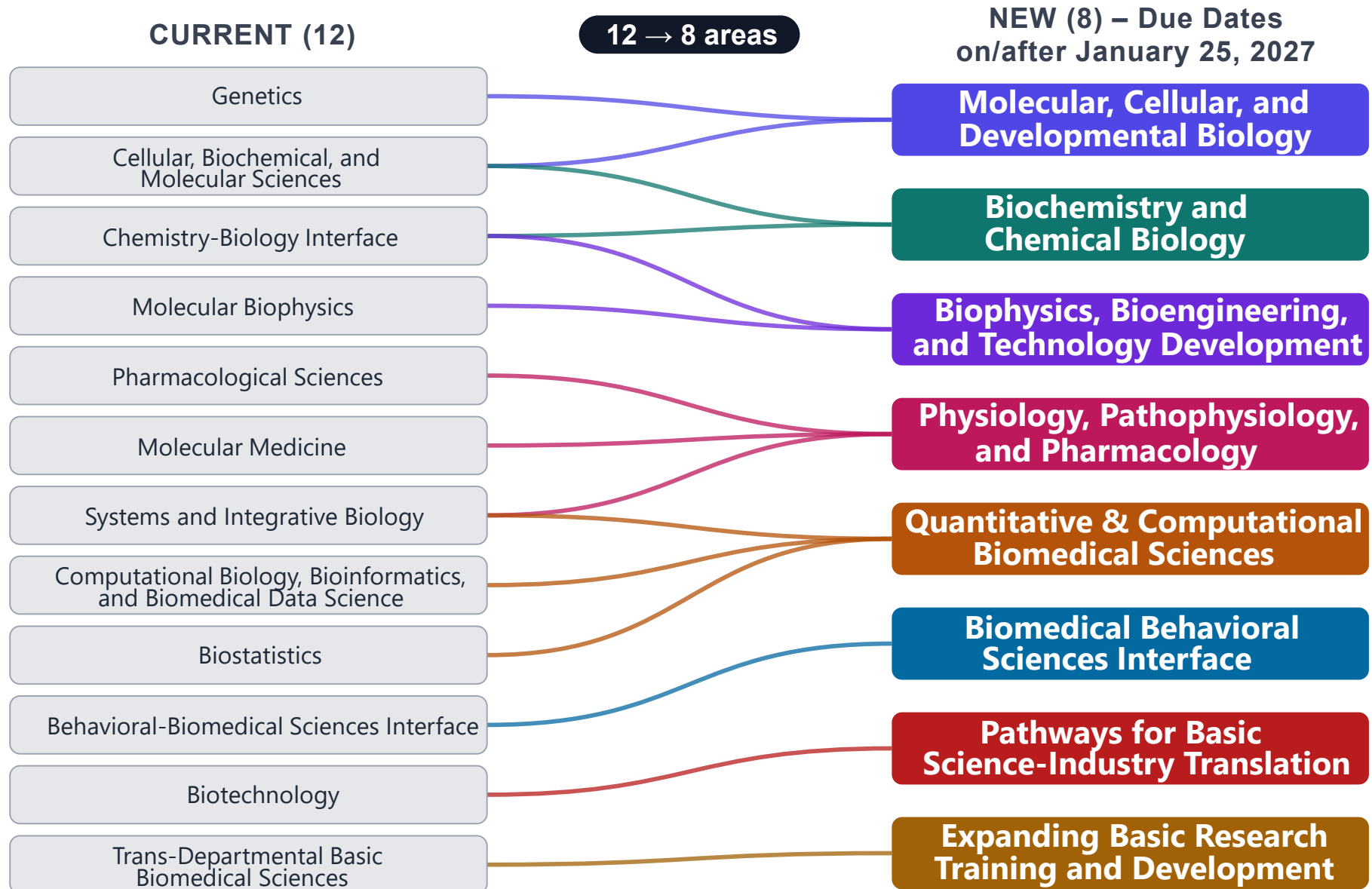
Expanding Basic Research Training and Development

Expand the institutions and regions where rigorous predoctoral biomedical research training takes place

Training area scope

- Awards may span **any combination** of the relevant disciplines and approaches within a program area.
- For example, a program in the Molecular, Cellular and Developmental Biology training area could provide training in:
 - Cell Biology only
 - Genetics only
 - Molecular, Cellular, and Developmental Biology and Genetics as part of a common training program
 - Separate Genetics and Developmental Biology tracks that may have some common activities.

Typical NIGMS Predoctoral Basic Biomedical T32 Portfolio Transitions



What this means for institutions

- Institutions should align competing applications with due dates on or after January 25, 2027 with these 8 new program areas.
 - Consistent with our current practice, each institution may hold only one award per program area.
 - For institutions with multiple current awards:
 - We expect that current awards will continue through their project period.
 - Future applications should be realigned so there is a maximum of one award per program area at the institution.
- We intend to maintain well-justified institutional support while expanding opportunities across institution types and regions.

FAQ: Program consolidation

Question: When 2 or more existing training programs are consolidated into one of the new broader areas, how will NIGMS determine the appropriate number of slots for that consolidated program? Will NIH explicitly consider the total number of trainees previously supported across the programs being combined?

Answer:

- NIGMS intends to maintain well-justified institutional support while promoting opportunities across institutions and regions.
- NIGMS will not automatically award an additive number of slots based on the awards' previous slots.
- The slot allocation will be determined by the program's training capacity, including the total trainee and faculty pools, and available funds.
- Because some consolidating programs may have significant faculty overlap, training capacity may be impacted by consolidation.
- Slot allocation requests should be well-justified.

**All applications must be submitted
through the parent T32 Ruth L.
Kirschstein National Research Service
Award (NRSA) Institutional Research
Training Grant ([PA-25-168](#))**

NIH Predoctoral Basic Biomedical Training Program Goal

To develop Ph.D. scientists with the knowledge, skills and experiences to transition into, and succeed in careers in the biomedical research workforce.

NIGMS Profile Page Shares NIGMS Priorities

Additional Information by Funding Category

Administrative Supplements	+
Conferences and Meetings	+
Individual Career Development	+
Individual Fellowship	+
Institutional Career Development	+
Institutional Training	+
Research Education	+
Small Business	+

<https://grants.nih.gov/funding/find-a-fit-for-your-research/nih-institutes-centers-offices/NIGMS>

NIGMS Institutional Training Interest Areas

NIGMS prioritizes Institutional Training relevant to its [mission](#). Training programs should be well integrated within one or more departments and have a strong, positive influence on the institution's research training and mentoring practices.

To promote broad geographic and organizational participation in rigorous research education programs, NIGMS strongly encourages applications from:

- Institutions in [IDeA-eligible states](#)
- [HBCUs](#)
- Tribal Colleges and Universities (TCUs), as defined under 25 U.S.C. 1603 (24).
- Resource-limited institutions that don't yet have NIH training programs.

NIGMS Predoctoral Basic Biomedical Training Program Structure

- Typically support up to 2 years of training during the first 3 years of graduate studies to provide maximum benefits in participation in courses, laboratory rotations, and professional development activities.
- Programs should be tailored to the organization's environment and provide additional benefits, including laboratory rotations, courses, and professional development activities.
- Predoctoral students may receive a maximum of five years of Kirschstein-NRSA support at the predoctoral level, across a combination of institutional and individual awards.

Key Dates (PA-25-168)

Application Due Dates		Review and Award Cycles		
New	Renewal or Resubmission	Scientific Merit Review	Advisory Council Review	Earliest Start Date
January 25, 2027	January 25, 2027	July 2027	October 2027	December 2027
May 25, 2027	May 25, 2027	November 2027	January 2028	April 2028
September 25, 2027	September 25, 2027	March 2028	May 2028	July 2028

- Current awards can be renewed through this Parent Announcement.
- Resubmissions are allowed for New and Renewal applications.
- Applications are considered for all three council rounds but are prioritized for funding after October and January councils. Although applications are accepted for all opportunity due dates, we recommend submitting to due dates that align with those councils.

Eligibility Overview

(See Section III of NOFO)

Organization	• Eligibility is not limited based on institutional NIH funding. • Multiple organizations may partner to submit one application.
Principal Investigator	• The PI should have appropriate expertise to provide both administrative and scientific leadership. • Multiple PIs are encouraged – at least one should be established investigator in scientific area of application.
Trainees	• Applicant organization selects and establishes qualifications, consistent with applicable law. • US Citizen, Permanent Resident, or noncitizen National. • Must pursue research training full time. • Must be enrolled in PhD or equivalent research doctoral degree program.

Important Consideration: each institution may hold only one NIGMS predoctoral T32 award per program area.

Additional Considerations for Basic Science – Industry Translation programs

- **Goal:** Prepare students to translate fundamental discoveries into an industry context.
- Program must include a **2- to 3-month industrial internship** at a biotechnology to provide meaningful research experience
 - Can include pharmaceutical organizations.
- Programs may be **broad across multiple areas** or **focused on a specific interdisciplinary topic** (e.g. tissue engineering, metabolic engineering, etc.)

Additional Considerations for Expanding Basic Research Training and Development Programs

- **Goal:** Expand the institutions and regions where rigorous predoctoral biomedical research takes place.
- Programs must be grounded in the basic biomedical disciplines and should support students from the range of biomedical fields at the institution.
 - Narrowly focused programs will be low funding priority.
- Applicants may not have an active NIGMS predoctoral basic biomedical T32 in any other program area **at time of award**.
- NIGMS encourages organizations with few/no NIH predoc T32s, IDeA state organizations, HBCUs and Tribal organizations to apply for this program area.

Notable Application Reminders

How to Apply - Application Guide

Use the most recent version linked [here](#).

Follow the Training Instructions.

Form-by-Form, Field-by-Field Application Instructions

Determine the Correct Application Instructions for Your Activity Code

Application Instructions	Description	SF424 (R&R) - Version I (Due dates ON/AFTER Jan. 25, 2025)
G General Instructions	Comprehensive guidance, including standard instructions that apply to all applications and all program-specific instruction call-out boxes (research, training, fellowship, career development, multi-project, and small business)	HTML / PDF Alert Updated December, 2025. See Significant Changes .
Filtered Application Instructions		
R Research Instructions	Standard instructions that apply to all applications plus research instruction call-out boxes. Activity Codes: Research (R), including Research Education (R25), and equivalent Cooperative Agreements (U)	PDF
K Career Development Instructions	Standard instructions that apply to all applications plus career development instruction call-out boxes. Activity Codes: Individual Career Development (K), excluding Institutional Career Development (K12, KL2, KM1)	PDF
T Training Instructions	Standard instructions that apply to all applications plus training instruction call-out boxes. Activity Codes: Institutional Training (T), including International Training (D43, D71, U2R) and Institutional Career Development (K12,	PDF

Selected Application Components and Page Limits

Application Components	Page Limit
Project Summary/Abstract	30 lines of text
Project Narrative	3 sentences
Introduction to Resubmission Application (if applicable)	3 pages
Program Plan	25 pages
Plan for Instruction in the Responsible Conduct of Research	3 pages
Plan for Instruction in Methods for Enhancing Reproducibility	3 pages
Each Biosketch (use SciENcv format and NIH supplement)	Length controlled by data entry
Progress Report (renewal applications only)	5 pages overview; 1 page per appointee
Organizational Eligibility and Support Letter	10 pages
Training Data Tables	

How to Indicate Program Area

- Use suggested title format (next slide)
- State in Project Summary/Abstract
- State in Institutional Support Letter

Program areas:

- *Molecular, Cellular, and Developmental Biology*
- *Physiology, Pathophysiology, and Pharmacology*
- *Biochemistry and Chemical Biology*
- *Quantitative and Computational Biomedical Sciences*
- *Biomedical Behavioral Sciences Interface*
- *Biophysics, Bioengineering, and Technology Development*
- *Pathways for Basic Science-Industry Translation*
- *Expanding Basic Research Training and Development*

Suggested Application Title Format

Use the format:

“[Program Area] Training Program
at [Name of applicant organization(s)]”

Examples:

- Biochemistry and Chemical Biology Training Program at Fantastic College
- Expanding Basic Research and Training Development Program at Awesome State University

Common Forms for Biographical Sketch and Current and Pending (Other Support)

- NIH has adopted the Common Forms for Biographical Sketch ([NOT-OD-26-018](#)).
- After May 7th, 2026, applications **must use** the Commons Forms for Biographical Sketch and NIH Biographical Sketch Supplement ([NOT-OD-26-079](#)).
- Program faculty are encouraged to use the NIH Biographical Sketch supplement to describe their commitment to training and mentoring.
- Refer to the [Common Forms FAQ](#) with questions about NIH Common Form policies, requirements, or what information to include on the form; or contact the NIH OS/Biosketch inbox at nihosbiosketch@nih.gov
- Technical issues with SciENCv should be directed to the SciENCv Helpdesk at nlmsciencv@mail.nih.gov

Other Attachments (optional)

Advisory Committee

An Advisory Committee is **not required** for a training program

- **If including an Advisory Committee**, provide a plan for monitoring of program progress
- **Only name pre-existing Advisory Committee members** in the application
- **Do not identify or contact potential Advisory Committee members** before receiving an award
- **File name:** Advisory_Committee.pdf

Note: The filename provided for each “Other Attachment” will be the name used for the bookmark in the electronic application in eRA Commons.

Note: For applicants that previously submitted through PAR-23-228, DO NOT include a Training Activities Attachment.

Including extra attachments or appendix items could result in the application being withdrawn without review.

Training Data Tables

- The data presented in these tables should be summarized in the relevant sections of the Research Training Program Plan.
- Tables 1, 2, 3, 4, 5A, 6A, and 8A are required for all applications. Table 7 is required for renewal applications only.
- Table highlights:
 - Table 1: Include predoctoral outcomes (Part I) only.
 - Table 2: Complete items 7-9 (predoctoral training outcomes); exclude items 10-12.
 - Table 5A:
 - May include interim research products (e.g., preprints) when final publication is unavailable
 - The individuals listed in Table 5A should match those listed in Table 8A.
 - Table 8A:
 - Renewal applications should complete Parts I and III only
 - New applications should complete Part II only.

NIGMS Resource page for [NRSA Tables](#)

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 and Tuition/Fees funding amounts announced annually in *NIH Guide for Grants and Contracts* and on the Ruth L. Kirschstein National Research Service Award (NRSA) [webpage](#).

Trainee Travel

- NIGMS will provide **up to \$300** per trainee for travel to scientific meetings and workshops.
- 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 (TRE)

- NIH provides 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 NRSA [webpage](#), with the following exception:
 - For applicants to the **Expanding Basic Research Training and Development program area**, NIGMS will provide TRE at a rate of **\$12,500/trainee/year**
- Organizations are expected to prioritize trainee benefits (such as health insurance).
- Training related expenses should be well justified.

Budget Justification

- State the number of requested funded trainee slots per year.
- Provide a justification for the number of requested funded slots per year in the context of the following:
 - Number of training grant eligible candidates provided in the trainee pool baseline data across all departments participating in the training program.
 - Number of participating faculty.
 - Other training grants at the organization that relate to the goals of this training program.
- Applications are encouraged to describe the total effort for personnel in the budget justification (delineate effort charged to the grant and effort compensated by other sources).

Peer Review Overview

Review

- All applications will be reviewed at the Center for Scientific Review (CSR).
- CSR has created review homes for institutional training project applications and established recurring special emphasis panels to review them. These panels will cluster applications with similar review criteria and in similar scientific areas to ensure that the applications are evaluated appropriately.
- Questions about review should be directed to the Scientific Review Officer (SRO) assigned to your application.

Scored Review Criteria

(Section V of NOFO)

- Training Program and Environment
- Training Program Director(s)/Principal Investigator(s)
- Preceptors/Mentors
- Trainees
- Training Record

Additional Review Criteria

Contribute to the overall impact score but do not get separate scores.

- **Training in the Responsible Conduct of Research**
- **Training in Methods for Enhancing Reproducibility**
- **Resubmissions** (when applicable)
- **Renewals** (when applicable)
- *Criteria generally not applicable:*
 - Protection of Human Subject
 - Inclusion of Women, Minorities, and Individuals Across the Lifespan
 - Vertebrate Animals
 - Biohazards
 - Revisions

Additional Review Considerations

- Not given individual scores and not considered in the overall impact score.
 - **Budget and Period of Support (# of slots)**
 - The number of slots awarded may be modified based on reviewer recommendation and as NIGMS budget allows.
 - *Select Agents (Generally not applicable)*

General Tips and Advice

Tips for Preparing Your Application

Submit
early!

- Always **read and study the entire Notice of Funding Opportunity (NOFO)** – purpose, guide notices, review criteria, etc., and follow all instructions.
- Follow the instructions outlined in the NOFO
 - Have clear goals and feasible plans related to the NOFO.
 - Tailor materials to the application.
- Program Officers and Scientific Review Officers are a resource to applicants
 - Contact PO **early** in the process - send **1 page program summary**.
 - Helpful to determine **eligibility** and **responsiveness** of proposal to the Institute or Center's (IC's) mission and priorities
 - Reach out **after summary statement** is released to discuss next steps
 - Contact SRO for compliance questions
- Go for it – don't self-eliminate (and resubmit if needed)

Tips for Writing Your Application

- Directly and clearly state the most important information. Reviewers should not be expected to “read between the lines”.
- Include clear, measurable and attainable program goals.
- Ensure biosketches are up-to-date and relevant for research education programs (personal statement).
- Data in figures and text should match.
- Present outcomes data in a straightforward manner.
 - Avoid exaggeration.
 - Avoid hiding data (reviewers will “do the math”).

Avoid Administrative Withdrawal

- Applications will be withdrawn prior to peer review if improper hyperlinks are used, if unallowed materials are included, or if any required attachments and content are missing.
 - Note that **not all** failures to comply are caught by the automated notification.
 - We cannot accept any missing items after the receipt deadline.
- **Attachments:** Include **only** the attachments specified in the NOFO.
- **Appendix:** Do not use the Appendix to circumvent page limits. Follow all instructions for the Appendix as described in the How to Apply - Application Guide.
- **Hyperlinks and URLs**
 - Are not permitted in the Research Plan/Approach
 - May be used in citing relevant publications in biosketches and publication lists.

<https://grants.nih.gov/grants-process/write-application/how-to-apply-application-guide/format-attachments>

Questions and Contacts

Scientific/Research Contacts

Predoctoral Basic Biomedical Training: NIGMSPredocT32@mail.nih.gov

Financial/Grants Management Contacts

NIGMS Grants Administration Branch: NIGMSNRSAGABNOFO@nih.gov

Peer Review Contact(s)

Center for Scientific Review (CSR)

Check your eRA Commons account for review assignment and contact information

Q & A