Welcome!
The webinar will begin at 1:00 PM (ET).
Postbaccalaureate Research Education Program (PREP) (R25)

PAR-20-066

Prospective Applicant Webinar
November 30, 2021
Before We Start

• This webinar is being **recorded** and will be available online. The slides will also be **posted** online.

• Type your questions in the “Q&A” chat box.

• There will be a Q&A period at the end of the webinar.
Webinar Participants

Program
• Anissa J. Brown, Program Director
• Laurie Stepanek, Program Director
• Kenneth Gibbs, Chief of Undergraduate and Predoctoral Cross-Disciplinary Training Branch

Review
• Lee Slice, Scientific Review Officer

Grants Management
• Justin Rosenzweig, Grants Management Team Leader
Tweet us!

Follow us @NIGMSTraining
Disclaimer

This webinar and accompanying slides are for informational purposes only. They serve as an overview of the PREP program 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 FOAs and any Related Notices (included in the FOA’s Overview Information section), and the SF424 Application Guide.
Webinar Outline

I. Program Overview

II. Application Overview

III. Peer Review Overview

IV. Budget Overview
NIGMS Training Programs

<table>
<thead>
<tr>
<th>Community College</th>
<th>Undergraduate</th>
<th>Post-bac</th>
<th>Graduate MS</th>
<th>Graduate PhD</th>
<th>Postdoctoral</th>
<th>Faculty</th>
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<tr>
<td>U-RISE</td>
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<td>G-RISE</td>
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<td>IMSD</td>
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<td>Bridges to the Baccalaureate</td>
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<td>NRSA Fellowships</td>
<td>F31/F30, F32</td>
<td>F33</td>
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<td>PREP</td>
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<td>Bridges to the Doctorate</td>
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<td>NIGMS Diversity Supplement Program</td>
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<td>Innovative Programs to Enhance Research Training - R25</td>
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<td>National Research Mentoring Network – U24, U01</td>
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<tr>
<td>R25 Training Modules</td>
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PRERE Webinar for Prospective Applicants 2021
Program Goal

To develop a diverse pool of well-trained postbaccalaureates who will transition into and complete rigorous biomedical, research-focused doctoral degree programs (e.g., Ph.D. or M.D./Ph.D.) in biomedical fields relevant to the NIGMS mission.

PREP program Website: https://www.nigms.nih.gov/training/PREP
Program Considerations

- Institutions are strongly encouraged to identify candidates who will **enhance diversity** in alignment with the NIH’s Interest in Diversity (NOT-OD-20-031).

- Mentors should represent a **broad range** of biomedical disciplines.

- Participants should spend **75% effort** on research and **25%** on further skills development.

- Expectation is that most participants will transition out of PREP after 1 year; a 2\(^{nd}\) year is allowable if necessary to enhance a participant’s competitiveness.

- The **vast majority** (e.g., greater than 75%) of a program’s participants should enter research-oriented, biomedical doctoral degree programs (e.g., PhD or MD/PhD) within two years of completing PREP.
## Eligibility Overview

<table>
<thead>
<tr>
<th>Eligibility</th>
<th>PREP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institution</td>
<td><strong>Research Intensive</strong>&lt;br&gt;Average ( \geq 7.5\text{M} ) NIH Research Project Grant (RPG) funding per year over the past three fiscal years</td>
</tr>
<tr>
<td>Principal Investigator(s)</td>
<td>• Contact PI must have full time appointment&lt;br&gt;• At least one PI should be established investigator in the biomedical sciences&lt;br&gt;• Capable of providing both administrative and scientific leadership&lt;br&gt;• <em>Multiple PIs are encouraged</em></td>
</tr>
<tr>
<td>Participants</td>
<td>• US Citizen or Permanent Resident&lt;br&gt;• Earned baccalaureate degree ( \leq 36 ) months prior to applying to a PREP program; not currently enrolled in degree program&lt;br&gt;• <em>Intend to apply to research-focused biomedical doctoral degree program (e.g., Ph.D. or M.D./Ph.D.)</em></td>
</tr>
</tbody>
</table>
Program Participants: Eligibility

- The applicant institution selects the PREP participants who will receive salary support and establishes the qualifications of the participants before they are supported by the program.
- Institutions are strongly encouraged to identify candidates who will enhance diversity on a national basis (e.g., Notice of NIH's Interest in Diversity).

For salary support, must...

- be a citizen or a noncitizen national of the United States
- have a baccalaureate degree in a biomedically relevant science from an accredited college or university awarded no more than 36 months prior to applying to a PREP
- not be currently enrolled in a degree program
- Should intend to apply to research-focused biomedical doctoral degree programs (e.g., Ph.D. or M.D.-Ph.D.) during or immediately following completion of the research education program.
# Key Program Dates

<table>
<thead>
<tr>
<th>Program</th>
<th>FOA</th>
<th>Application Due Date</th>
<th>Review</th>
<th>Council</th>
<th>Budget Start</th>
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</thead>
<tbody>
<tr>
<td>Postbaccalaureate Research Education Program (PREP) (R25)</td>
<td>PAR-20-066</td>
<td>January 27, 2022</td>
<td>June/July</td>
<td>October</td>
<td>December</td>
</tr>
</tbody>
</table>
NIGMS Training Programs are expected to:

- Focus on technical, operational and professional **skills development**
- Promote **rigor and reproducibility** in research
- Teach the **responsible and safe conduct** of research
- Promote **diversity, equity and inclusion**
- Encourage **inclusive, safe, and supportive** research environments
- Use **evidence-informed** educational and mentoring practices
- Employ **cohort-building activities** that enhance the trainees’ science identity and self-efficacy
- Provide **individualized mentoring** and oversight throughout
- Introduce trainees to a **variety of scientific careers** and research areas
- Make **career outcomes** publicly available

[Image]

https://www.nigms.nih.gov/research-areas/areas-of-research/training-workforce-development-and-diversity
Webinar Outline

I. Program Overview

II. Application Overview

III. Peer Review Overview

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First Step in Preparing an Application

Read the FOA, Related Notices and **SF424 (R&R) Application Guide** thoroughly

**PREP FOA: PAR-20-066**

Must use **FORMS-G** and **new biosketch format** for applications **due after January 25, 2022**

*Update in last year*

*Cause for application withdrawal*
## The Application - Page Limits

<table>
<thead>
<tr>
<th>Section of Application</th>
<th>Page Limits *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Summary/Abstract</td>
<td>30 lines of text</td>
</tr>
<tr>
<td>Project Narrative</td>
<td>3 Sentences</td>
</tr>
<tr>
<td>Introduction to Resubmission Application (when applicable)</td>
<td>3</td>
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<tr>
<td>Specific Aims</td>
<td>1</td>
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<td>Research Education Program Plan</td>
<td>25</td>
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<tr>
<td>Advisory Committee (optional)</td>
<td>Typically, 1</td>
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<tr>
<td>Outcomes Data Collection and Storage Plan</td>
<td>2</td>
</tr>
<tr>
<td>Each Biographical Sketch</td>
<td>5</td>
</tr>
<tr>
<td>Institutional Support Letter</td>
<td>10</td>
</tr>
<tr>
<td>Institutional Eligibility Letter</td>
<td>1</td>
</tr>
<tr>
<td>Required Research Education Activities</td>
<td>2 pages per activity</td>
</tr>
<tr>
<td>Responsible Conduct of Research Syllabi</td>
<td>2</td>
</tr>
<tr>
<td>Elective Activities (optional)</td>
<td>2 pages per activity</td>
</tr>
<tr>
<td>Conflict Resolution Protocols (optional)</td>
<td>3</td>
</tr>
</tbody>
</table>

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*Notice of Change to the Instructions for Appendices (NOT-GM-21-044)*

If page limits are exceeded, the application may be withdrawn prior to review.
Research Plan Form

- Use FORMS-G version
- Introduction (only for resubmissions)
- Research Plan Section
  - Research Strategy section must be used for the Research Education Program Plan. Follow instructions in the FOA.
- Other Research Plan Section
- Appendix
Research Education Program Plan

(Page limit: 25 pages)

• Current Status of the Graduate Biomedical Science Academic Programs
• Rationale, Mission, Objectives, and Overall Research Education Plan
• Career Development
• Program Oversight, Participating Faculty Selection, and Mentor Training
• Progress Report, if applicable
• Program Director(s)/Principal Investigator(s)
• Program Faculty
• Program Participants
• *Recruitment Plan to Enhance Diversity
• *Plan for Instruction in Methods for Enhancing Reproducibility
• *Plan for Instruction in the Responsible Conduct of Research
• *Evaluation Plan
• *Dissemination Plan

*Applications lacking these sections will not be reviewed
Current Status of Graduate Programs

• Describe PhD student body in biomedically relevant disciplines

• In table format, include the following information:
  o Institutional data on PhD student enrollment for last 5 years and percentage from underrepresented groups
  o Number of PhD students from participating departments/programs and graduation rates for last 5 years (overall and from underrepresented groups)

_Do Not include this information in the required data tables attachment or appendix._
Rationale, Mission & Objectives

• Rationale for the proposed program, including feasibility given institutional context
  - Current institutional efforts to promote diversity and create inclusive training environments, including institutional and externally-sponsored programs for the last 5 years.
  - How the PREP program will enhance, but not duplicate, these efforts.

• Program-specific mission and measurable objectives that align with the overarching objective of PREP. Objectives should include, but not be limited to:
  - Program completion rate
  - % of participants who will complete the program in one year
  - % of participants who will transition into and complete research-focused, biomedical doctoral degree programs (e.g., PhD or MD/PhD)
Overall Research Education Plan

• How research experiences and courses will **accomplish the training mission** and objectives

• How activities will **employ evidence** to inform approaches to postbaccalaureate participant learning, mentorship, inclusion, and professional development

• **Examples of research education programs** for individual participants

• Rationale and strategies used for selecting participants

• Activities that will **build a strong cohort** while enhancing science identity, self-efficacy, and sense of belonging among members

• Strategy that will be used to develop the **appropriate IDP** for each participant
Career Development

• How participants will be provided with information about **career outcomes of previous participants** and about the overall biomedical research workforce employment landscape

• How participants will be provided with adequate, appropriate, and timely information regarding the **variety of careers** in the biomedical research workforce

• How participants will learn the **skills, knowledge, and steps needed to attain positions** in the biomedical research workforce
Program Oversight, Participating Faculty Selection, and Mentor Training

- Planned strategy and **administrative structure** to oversee and monitor the program and to ensure appropriate participant progress

- How the program will ensure that participating faculty:
  - employ and impart the highest standards of **scientific rigor**,
  - reinforce the materials on **RCR and methods to enhance reproducibility**,
  - engage in activities that promote **trainee career development**

- How **faculty are trained** to use evidence-informed teaching, training and mentoring for participants from all backgrounds

- Mechanism for **matching participants** with the appropriate participating faculty mentors

- Mechanism to **monitor mentoring**, including oversight of the effectiveness of the participant/faculty match, and a plan for removing faculty displaying unacceptable mentorship qualities
Progress Report (renewal applications only)

- Original specific measurable objectives, anticipated milestones, and outcomes

- Accomplishments during previous project period
  - Participant research
  - PREP-supported development activities (e.g., workshops, scientific meetings, lectures)

- Program outcomes during previous project period
  - Number of participants who matriculated into and completed PREP
  - % of participants who completed the program in one year
  - % of participants who matriculated into research-focused, biomedical doctoral degree programs and the number who completed the degree or continue in good standing

- **Must submit Table 8D: participant outcomes for up to 15 years**

- Lessons learned from previous program assessment and any resultant changes in the program
Program Director(s)/Principal Investigator(s)

- Expertise as well as administrative and scientific leadership
- At least one PI should be an established investigator in the biomedical sciences and have a record of using rigorous and transparent methods
- Sufficient bandwidth to oversee the program
- Demonstrated commitment to training the next generation of biomedical research workforce and leading recruitment efforts to enhance diversity and foster inclusive research environments
- Multiple PDs/PIs approach is encouraged
- The application should describe the administrative structure and leadership succession plan for critical positions
Program Faculty

Describe efforts to build diverse team (e.g., from underrepresented backgrounds, women, different career stages), and how the participating faculty:

- Promote the success of the participants and research education program
- Have sufficient time to commit to the research education program
- Receive training in evidence-informed teaching and mentoring practices
- Cooperate, interact, and collaborate

- Promote the development of skills in rigorous experimental design, methods of data collection, data analysis and interpretation, and reporting
- Provide opportunities for participants to initiate, conduct, interpret, and present rigorous, reproducible and responsible biomedical research with increasing self-direction
- Demonstrate a commitment to effective mentoring, and to promoting inclusive, safe and supportive environments
- Are evaluated as teachers and mentors
Program Participants

• Provide a **strong justification for the intended participants**, and the **eligibility criteria** and/or specific educational background characteristics that are essential for participation in the proposed research education program.

• Explain why participants will **strongly benefit** from being in the PREP program rather than going directly to doctoral-degree granting programs.

• Strategies for ensuring that participants have sufficient commitment to careers in biomedical research should be described.
Recruitment Plan to Enhance Diversity

• Describe outreach strategies and activities to recruit participants from underrepresented groups (see NOT-OD-20-031).

• Describe specific efforts to be undertaken by the research education program and how they may coordinate with recruitment efforts of the institution

• **Note:**
  • Centralized institutional recruitment efforts alone is not sufficient
  • Providing accommodations for is not the same as recruitment of participants with disabilities

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**Resources**

• NIGMS [Enhancing Diversity in Training Programs](#)
• NIH Extramural Diversity [Recruitment & Retention](#)

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If this plan is not included, the application will be considered incomplete and will not be reviewed.
Plan for Instruction in Methods for Enhancing Reproducibility

• Describe how participants will be instructed in principles important for enhancing research reproducibility

• Describe how instruction strategies are well integrated into the overall curriculum

• Describe how all participating faculty will reiterate and augment key elements during lab research training

Resources

• NIH Website on Rigor & Reproducibility
• NIGMS Clearinghouse for Data Reproducibility Training Modules
• NIGMS Funded Projects on Rigor & Reproducibility

If this plan is not included, the application will be considered incomplete and will not be reviewed.
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
  - Should be appropriate and reasonable for the nature and duration of the program

- Renewal applications must describe any changes in formal instruction over the past project period and plans to address these changes

- All participating faculty who served as course directors, speakers, lecturers, and/or discussion leaders during the past project period must be named in the application.

Resources

If this plan is not included, the application will be considered incomplete and will not be reviewed.
Program Evaluation Plan

Describe:

- Process to determine **whether the overall program is effective** in meeting its mission and objectives, and whether the scientific research climate is inclusive, safe, and supportive of participant development

- Plans for **being responsive to outcomes analyses**, critiques, surveys and evaluations

- Expand on “Outcomes Data Collection and Storage Plan”

- Explain how participant career outcomes will be **tracked**

- How the **program outcomes** will be nationally disseminated

- Describe how the **data** will be **safeguarded** and **preserved**

**⚠️** If this plan is not included, the application will be considered incomplete and will not be reviewed.

**NIH contribution toward evaluation costs are limited to a maximum of $3,000 for the 5-year project period.**
Dissemination Plan

A specific plan to nationally disseminate any findings resulting from or materials developed under the auspices of the program.

Examples include data or materials from successful training or mentoring interventions via web postings, presentations at scientific meetings, and/or workshops.

If this plan is not included, the application will be considered incomplete and will not be reviewed.
Letters of Support

- **Institutional Support Letter** (10 page maximum) – ensuring success of the planned research education program and its participants

- **Institutional Eligibility Letter** (1 page maximum) – certifying eligibility, i.e., an average of ≥$7.5M per year in the past 3 fiscal years

⚠️ If the institutional support and institutional eligibility letters are **not included**, the application will be considered incomplete and will **not** be reviewed.

- **Other Letters of Support** (e.g., partner Institutions or Organizations) can be included but may not have information required in the Institutional Support Letter
### Letters of Support

**PHS 398 Research Plan**

**Introduction**
1. Introduction to Application (for Resubmission and Revision applications)
   - Add Attachment
   - Delete Attachment
   - View Attachment

**Research Plan Section**
2. Specific Aims
   - Add Attachment
   - Delete Attachment
   - View Attachment
3. *Research Strategy*
   - Add Attachment
   - Delete Attachment
   - View Attachment
4. Progress Report Publication List
   - Add Attachment
   - Delete Attachment
   - View Attachment

**Other Research Plan Section**
5. Vertebrate Animals
   - Add Attachment
   - Delete Attachment
   - View Attachment
6. Select Agent Research
   - Add Attachment
   - Delete Attachment
   - View Attachment
7. Multiple PD/PI Leadership Plan
   - Add Attachment
   - Delete Attachment
   - View Attachment
8. Consortium/Contractual Arrangements
   - Add Attachment
   - Delete Attachment
   - View Attachment
9. **Letters of Support**
   - Add Attachment
   - Delete Attachment
   - View Attachment
10. Resource Sharing Plan(s)
    - Add Attachment
    - Delete Attachment
    - View Attachment
11. Authentication of Key Biological and/or Chemical Resources
    - Add Attachment
    - Delete Attachment
    - View Attachment

**Appendix**
12. Appendix
    - Add Attachments
    - Delete Attachments
    - View Attachments
Resource Sharing Plans

- Comply with the instructions for the Resource Sharing Plans as provided in the SF424 (R&R) Application Guide

- *If applicable*, include a software dissemination plan if support for development, maintenance, or enhancement of software is requested in the application.
Appendix

Required
- Required Research Education Activities (2 pages maximum per activity)
- Responsible Conduct of Research Syllabi (2 pages maximum)

Allowable
- Elective Activities (2 pages maximum per activity)
- Evaluation and Assessment Instruments
- Conflict Resolution Protocols (3 pp.)

⚠️ Applications will not be reviewed that
- do not include required appendices
- include unallowed appendices
- exceed page limit of any materials
  (see NOT-GM-21-044)

Appendix Policy FAQs
https://grants.nih.gov/grants/policy/appendix_policy.htm
Required Appendix Items

• **Required Research Education Activities (2 pages maximum per activity)** - required activities that all PREP participants will complete.

• **Responsible Conduct of Research Syllabi (2 pages maximum)** - Syllabi/Outlines to describe RCR training and when the trainees receive it
  
  • If very lengthy, please trim these syllabi or outlines to remove extraneous information.

If these are not included, the application will be considered incomplete and will not be reviewed.

See [NOT-GM-21-044](#) for more details
Optional Appendix Items

• **Elective Activities** - summary content from up to four additional elective courses and/or training activities (e.g., syllabi or summaries for courses, mentor training materials, outlines of professional development workshops, career exploration opportunities, or skills development activities). *Note- no more than 2 pages per activity.*

• **Conflict Resolution Protocols (3 page maximum)** detailed protocols for addressing problems with program participant and faculty matches, removal of faculty from the research education program with unacceptable training/mentoring skills and for conflict resolutions for multi PD(s)/PI(s) and mentor/mentee relationships.

• **Evaluation and Assessment Instruments blank** surveys, rubrics, and/or forms used to (a) document and monitor participant progress and (b) determine whether the research education environment is effective, inclusive, safe, and supportive.

See [NOT-GM-21-044](#) for more details
Other Attachments

RESEARCH & RELATED Other Project Information

1. Are Human Subjects Involved? Yes ☐ No ☐
   a. If YES to Human Subjects
      Is the Project Exempt from Federal regulations? Yes ☐ No ☐
      If yes, check appropriate exemption number: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8
      If no, is the IRB review Pending? Yes ☐ No ☐
      IRB Approval Date: ____________________________
      Human Subject Assurance Number: ____________________________

2. Are Vertebrate Animals Used? Yes ☐ No ☐
   a. If YES to Vertebrate Animals
      Is the IACUC review Pending? Yes ☐ No ☐
      IACUC Approval Date: ____________________________
      Animal Welfare Assurance Number: ____________________________

3. Is proprietary/confidential information included in the application? Yes ☐ No ☐
4. a. Does this project have an actual or potential impact - positive or negative - on the environment? Yes ☐ No ☐
   b. If yes, please explain:

4.a. If this project has an actual or potential impact on the environment, has an exemption been authorized or an environmental assessment (EA) or environmental impact statement (EIS) been performed? Yes ☐ No ☐
4.d. If yes, please explain:
5. Is the research performance site designated, or eligible to be designated, as a historic place? Yes ☐ No ☐
5.a. If yes, please explain:
6. Does this project involve activities outside of the United States or partnerships with international collaborators? Yes ☐ No ☐
6.a. If yes, identify countries:
6.b. Optional Explanation:
7. Project Summary/Abstract
8. Project Narrative
9. Bibliography & References Cited
10. Facilities & Other Resources
11. Equipment
12. Other Attachments

Required
• Program Faculty Biosketches (NOT-GM-21-020)
• Outcomes Data Collection and Storage Plan (2 pp.)
• Training Data Table 4
• Training Data Table 8D, for renewal applications only

Optional
• Advisory Committee (1 p.)

Applications will not be reviewed that
• do not include required attachments
• include unallowed attachments
• exceed page limit of any materials
Advisory Committee *Optional*

- **Not a required** component of a research education program.
- Describe how the Advisory Committee will assess the overall effectiveness of the program.
- Include the roles, responsibilities, and desired expertise of committee members, frequency of committee meetings, and other relevant information.
- Only pre-existing Advisory Committee members should be named in the application.
Faculty Biosketches

Personal statement should address:

• Training, mentoring, and promoting inclusive, safe and supportive scientific research environments. *Typically includes experience with mentoring URM and diversity interest.*

• Maintaining a record of, and providing training in rigorous and unbiased experimental design, methodology, analysis, interpretation, and reporting of results

If program faculty biosketches are not included, the application will be considered incomplete and will not be reviewed.

*Updated biosketch format and 5-page limit NOT-GM-21-020 and NOT-OD-21-073*
Outcomes Data Collection and Storage Plan (2 pages)

- A plan to track the outcomes for all supported participants for a minimum of **15 years beyond** the individual’s participation in the program.
- You are encouraged to make the aggregate outcome data available on your institution's website.
- A strategy to ensure the secure storage and preservation of program data and outcomes (i.e., centralized, safeguarded, and retrievable during leadership changes).

If this plan is not included, the application will be considered incomplete and will not be reviewed.
Required Training Data Table 4

Sample Table 4. Research Support of Participating Faculty Members

<table>
<thead>
<tr>
<th>Faculty Member</th>
<th>Funding Source</th>
<th>Grant Number</th>
<th>Role on Project</th>
<th>Grant Title</th>
<th>Project Period</th>
<th>Current Year Direct Costs</th>
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</thead>
<tbody>
<tr>
<td>Jones, Janine L.</td>
<td>NIH</td>
<td>1 R01 GM76259-01</td>
<td>PD/PI</td>
<td>Structure and Function of Acetylcholine Receptors</td>
<td>06/2014--05/2018</td>
<td>$190,000</td>
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<td>Jones, Janine L.</td>
<td>NIH</td>
<td>5 K08 AI00091-03</td>
<td>PD/PI</td>
<td>Purification &amp; Identification of Receptors</td>
<td>11/2012-11/2017</td>
<td>$140,000</td>
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<td>Ehlers, Roger G.-</td>
<td>Univ</td>
<td></td>
<td>PD/PI</td>
<td>University start-up funds</td>
<td>08/2014-07/2017</td>
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<td>Mack, Thomas R.</td>
<td>Fdn</td>
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<td>PD/PI</td>
<td>Control of Angiogenesis</td>
<td>03/2011-02/2015</td>
<td>$185,000</td>
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<td>Mack, Thomas R.</td>
<td>NSF</td>
<td>PCM 80-12935</td>
<td>PD/PI</td>
<td>Cell Culture Center</td>
<td>12/2012-11/2015</td>
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<td>Mack, Thomas R.</td>
<td>NIH</td>
<td>1 P01 HL71802-05</td>
<td>Project PI</td>
<td>Subproject 4: Oncogenic Kit Receptor Signaling in vivo</td>
<td>10/2011-09/2015</td>
<td>$165,000</td>
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<td>Smith, James P.</td>
<td>None</td>
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<tr>
<td>Zachary, Andrew</td>
<td>NIH</td>
<td>1 U01 AI28507-01</td>
<td>PD/PI</td>
<td>Human Monoclonal Antibodies as a Therapy for Staphylococcal Enterotoxin</td>
<td>07/2013-06/2018</td>
<td>$200,000</td>
</tr>
</tbody>
</table>

Average Grant Support per Participating Faculty Member: $282,000

**Rationale:** This table provides evidence of the **strength of the research environment**, the availability of **funds to support research conducted by the trainees**, and the **appropriateness** of the participating faculty in terms of their **active research support**.
### Part I. Those Appointed to the Training Grant

<table>
<thead>
<tr>
<th>Trainee</th>
<th>Faculty Member</th>
<th>Start Date</th>
<th>Summary of Support During Training</th>
<th>Degree(s) Received and Year(s)</th>
<th>Topic of Research Project</th>
<th>Initial Position</th>
<th>Current Position</th>
<th>Subsequent Grant(s)/Role/Year Awarded</th>
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<tbody>
<tr>
<td>Gonzalez, Marc</td>
<td>Bradley, Andrea</td>
<td>6/2008</td>
<td>TY1: GM R25</td>
<td>BS 2007 MD/PhD 2020</td>
<td>Therapeutic potential of cell signaling in Alzheimer disease</td>
<td>MD/PhD student UCLA School of Medicine Further Training</td>
<td>Medical Resident Dept of Neurology Cedars-Sinai Hospital Further Training</td>
<td></td>
</tr>
</tbody>
</table>
Common Pitfalls

- Not reading the FOA and Notices thoroughly

- Unclear or incomplete presentation of data
  - Outcomes exaggerated
  - Data tables don’t align with narrative (reviewers “do the math”)

- Specific aims do not align with institutional assessment and resources

- Proposed project lacks innovation (i.e., activities do not align with stated aims or do not employ the latest evidence-informed educational practices)

- Failure to state program challenges and strategies to address them (especially for renewals)

- Faculty biosketches are not up-to-date nor relevant for research education program (personal statement).
Webinar Outline

I. Program Overview
II. Application Overview
III. Peer Review Overview
IV. Budget Overview
Review of Applications

• PREP applications reviewed by standing NIGMS review committees: TWD-C and TWD-D.
  www.nigms.nih.gov/Research/application/Pages/reviewcommittees.aspx

• Committees are equivalent: applications assigned to one of two committees to balance conflicts and workload.

• Receipt letter from scientific review officer (SRO) will provide information about meeting dates, instructions for providing updates, link for committee roster, and people to contact during the review and post-review process.

• Scores and summary statements accessed through PI’s eRA Commons account.
Review of Applications

• Please read the review criteria while preparing your application to make sure that all the required information is included.

• Review panel will assess your application against the review criteria.

• Reviewers will provide an overall impact score to reflect their assessment of the likelihood for the project to strongly advance research education by fulfilling the goal of this R25 Education Program, in consideration of the following review criteria and additional review criteria.
Scored Review Criteria

- **Significance**
  - Does the proposed program address a key audience and important need in research education?
  - Specific to this FOA: Is there convincing evidence that the proposed program will provide participants from diverse backgrounds with the experiences and skills that will allow them to transition into and complete rigorous biomedical, research-focused doctoral degree programs?
Scored Review Criteria, cont.

- **Investigator(s)**
  - Is the PD/PI capable of providing both administrative and scientific leadership? Is there evidence that an appropriate level of effort will be devoted by the program leadership?
  - **Specific to this FOA**: Do the PD(s)/PI(s) have a demonstrated commitment to training the next generation of the biomedical research workforce, leading recruitment efforts to enhance diversity, and fostering inclusive research environments? Does at least one member of the PD/PI team have a demonstrated record of using rigorous and transparent methods in a biomedical field? Have the PD(s)/PI(s) received training on how to effectively mentor participants, including those from underrepresented groups, and promote inclusive, safe, and supportive research training environments? Do participating faculty come from a broad range of biomedical disciplines within the NIGMS mission? Do the participating faculty have a record of conducting ethically sound, rigorous and responsible scientific research? Do the participating faculty come from diverse backgrounds? If not, are there plans to recruit faculty to enhance the program faculty diversity?
Scored Review Criteria, cont.

• Innovation
  - Does the applicant make a strong case for this program effectively reaching an audience in need of the program’s offerings? Where appropriate, is the proposed program developing or utilizing innovative approaches and latest effective practices to improve the knowledge and/or skills of the intended audience?
Scored Review Criteria, cont.

• **Approach**
  - Does the program clearly state its goals and objectives? Is there evidence that the program is based on a sound rationale? Is the plan for evaluation likely to provide evidence about the effectiveness of the program?
  - **Specific to this FOA:** Will the research experiences, courses for skills development, and structured activities achieve the stated mission and objectives of the research education program? Are the rationale and strategies for recruiting and selecting participants who strongly benefit from being in the PREP program well conceived? Does the program employ modern, evidence-informed approaches to training, mentorship, inclusion, and professional development? Are the activities likely to build a strong cohort of research-oriented individuals? Does the application describe an effective strategy and administrative structure to oversee and monitor the program to ensure appropriate and timely progress for the participants? Is there a clear mechanism for matching the participants with appropriate participating faculty, and for monitoring mentoring, including oversight of the effectiveness of the participant/faculty match?
Scored Review Criteria, cont.

- **Environment**
  - Will the scientific and educational environment of the proposed program contribute to its intended goals? Is there evidence of institutional commitment?
  - **Specific to this FOA**: Is there clear institutional commitment to develop and promote a culture in which the highest standards of scientific rigor, reproducibility, and responsible conduct of research are advanced? Are the core facilities and technology resources necessary for the success of the program well supported? Is there evidence that the research facilities and laboratory practices ensure the safety of program participants? Is there evidence that the institution fosters and rewards excellence in training and mentoring (for example, through institutional policies)? Are diversity and inclusion promoted at all levels of the research environment (participants/trainees, staff, faculty, and leadership)? Are appropriate policies and procedures in place to protect the participants from harassment and other prohibited practices? Are the research facilities accessible to participants/trainees with disabilities?
Additional Review Criteria (part of Overall Impact score but no separate scores given)

- Training in Methods for Enhancing Reproducibility [plan] – Acceptable Y/N?
- [Protections for Human Subjects, Vertebrate Animals, Biohazards]
- Resubmissions
- Renewals

Additional Review Considerations (no separate scores given and not considered in Overall Impact score)

- Recruitment Plan to Enhance Diversity [plan] – Acceptable Y/N?
- Training in the Responsible Conduct of Research [plan] – Acceptable Y/N?
- Resource Sharing Plans
- Budget and Period of Support (# Participants)
Application Preparation - Reminders

- Read the FOA thoroughly and make sure that your application addresses all the training elements and that all requested materials are included.

- Make sure that materials are supplied in the correct locations, per FOA instructions.

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

Applications will be withdrawn if anything is missing or unallowed materials are included!
## Review Process: Usual Timeline

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Activity</th>
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<tbody>
<tr>
<td>(From submission date)</td>
<td></td>
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<tr>
<td>1 - 2 months</td>
<td>Referral</td>
</tr>
<tr>
<td>2 - 6 months</td>
<td>Review Panel</td>
</tr>
<tr>
<td>6 - 7 months</td>
<td>Summary Statement Available</td>
</tr>
<tr>
<td>7 - 8 months</td>
<td>Advisory Council</td>
</tr>
<tr>
<td>8 - 9 months</td>
<td>Funding Decisions</td>
</tr>
<tr>
<td>9 - 10 months</td>
<td>Award Start Date</td>
</tr>
</tbody>
</table>
Webinar Outline

I. Program Overview
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III. Peer Review Overview
IV. Budget Overview
Budget: Participants

• Support is allowed for participants in the form of salary or wages. Total compensation can include fringe benefits, and tuition remission and fees.

• TRAVEL: Applicants may request support for travel of PREP participants to attend or present scientific papers at domestic scientific conferences.
Budget: Overview

• The total direct costs for each award are limited to $400,000 annually.

• The total project period may not exceed 5 years.

• Indirect Costs are reimbursed at 8% of modified total direct costs (exclusive of tuition and fees and expenditures for equipment).
Budget: Program-Related Expenses

• Consultant costs, equipment, supplies, travel for key persons, and other program-related expenses may be included in the proposed budget.

• Limited program evaluation costs (maximum of $3,000 for the 5-year training grant period).

• A single consolidated budget for PREP is required, with each item clearly justified.
Budget: Personnel Effort

• Individuals designing, directing, and implementing the research education program may request salary and fringe benefits appropriate for the person months devoted to the program.

• Salary support for the PD(s)/PI(s) [or combination of multiple PD(s)/PI(s)] is limited to up to a total of 1.2 person-months (10% full-time) effort per year.

• Salary for a program coordinator to assist the PD(s)/PI(s) is limited to up to 6 person-months (50% full time)
xTrain for Participant Appointments

• All PREP participants must have an appointment form submitted through the eRA Commons to xTrain before they may receive compensation.

• If participants cannot continue in the grant program for the full appointment period, an amended appointment must be submitted to xTrain with the correct appointment period.

xTrain Web Page - application guide, quick reference sheets, FAQs, training materials: https://era.nih.gov/services_for_applicants/other/xTrain.cfm
## For Additional Information

<table>
<thead>
<tr>
<th></th>
<th>PREP</th>
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<tbody>
<tr>
<td>Funding Opportunity Announcement (FOA)</td>
<td>PAR-20-066</td>
</tr>
<tr>
<td>NIGMS website</td>
<td>PREP (R25)</td>
</tr>
</tbody>
</table>

**Frequently Asked Questions – Application Guide, Electronic Submission of Grant Applications**
Critical Deadlines

• Letter of Intent Due Date(s)
  • Not Applicable

• Application Due Date(s)
  • January 27, 2022

• Earliest Start Date
  • December 2022
Questions?

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