NIGMS Postdoctoral Research Associate Training (PRAT) Program Applicant Webinar

Program Overview and Application Webinar
August 10, 2022
Before We Start

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

• There will be a 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 of the NIGMS PRAT 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.
Today’s Webinar - Participants

PRAT Program Leadership
• Edgardo Falcon-Morales, Ph.D., PRAT Director
  Division of Training, Workforce Development,
  and Diversity

Scientific Review
• Latarsha Carithers, Ph.D., Chief, Training,
  Mentored Research, and Diversity Section
Today’s Webinar - Format

• PRAT Program

• PRAT Application Process

• PRAT Review

• Your Questions
PRAT Program
NIGMS PRAT Program

- Competitive three-year postdoctoral fellowship program that provides high quality research training in the basic biomedical sciences in NIH intramural research laboratories, and prepares fellows for leadership positions in biomedical careers
- Provides stipend, health insurance, and travel/training allowance
- Access to extensive NIH resources – facilities, expertise, collaborations, and office of intramural training and education
- Structured postdoctoral program with defined training components

https://www.nigms.nih.gov/Training/Pages/PRAT.aspx
PRAT Curriculum Principles

- Leadership
- Communication
- Networking
- Mentorship
- Biomedical Ecosystem Knowledge
- Diversity
- Service
Sample of PRAT Training Activities

• Seminar series (twice per month)
  o UT Southwestern, University of Arizona, Children’s National Health System, MBL, CSU Long Beach, UC Davis, NIAID

• Professional skills development & communications training
  o Three Minute Talks
  o DISC Workshop – Understanding your Behavioral Style
  o NIH Funding Panel

• Annual Symposium – “Science and Society”
  o Keynote speakers: Anthony Fauci (NIAID); Kathleen Gray (UNC-Chapel Hill)
Sample of PRAT Training Activities

• Established & Early Career Scientific Leaders

Julie Funk  
University of Arizona

Arturo Zavala  
California State University, Long Beach

Michael D.L. Johnson  
University of Arizona  
2020 NIGMS Director’s Early Career Investigator Lecturer

• Annual Scientific Symposium

Namandjé Bumpus  
Johns Hopkins University

Gina Poe  
UCLA

Anthony Fauci  
NIAID/NIH

Kathleen Gray  
UNC-Chapel Hill
Sample of Post-PRAT Institutions

- Yale
- Uniformed Services University of the Health Sciences (USU)
- University of Washington
- NIH
- FDA
- Genentech
- Pfizer
- AAAS
- Cooley

N=102 PRAT alumni (2005 – 2020)

Recent PRAT Alumni – Career Outcomes

Sample of Post-PRAT Institutions
NIGMS PRAT Program - Eligibility

• **Citizenship** - US citizens and permanent residents

• **Scientific focus** – All research areas supported by NIGMS

• **Career stage**
  - Current NIH postdocs must have started **no earlier than June 1, 2021**
  - Graduate students who intend to begin postdoc experience at NIH by fall 2022

*We are especially interested in ensuring the applicant pool reflects the diversity of the biomedical Ph.D. talent pool.*
NIGMS Research Areas

- Biological chemistry
- Biophysics
- Bioinformatics
- Cell & molecular biology
- Computational biosciences
- Developmental biology
- Genetics
- Immunology
- Neuroscience
- Pharmacology
- Physiology
- Technology development
Currently 21 PRAT Fellows at 11 ICs

- CC (n=1)
- NCI (n=2)
- NHGRI (n=3)
- NIAID (n=1)
- NIAMS (n=2)
- NICHD (n=4)
- NIDA (n=2)
- NIDDK (n=1)
- NIEHS (n=2)
- NIMH (n=1)
- NINDS (n=2)

PRAT Application Process
Identifying a Mentor

- The NIH Intramural Program has approximately 1200 investigators who can be identified by scientific focus area or by name.
- OITE webpage of postdoc positions (career services tab)
- Intramural Training Directors can also be extremely helpful in understanding training opportunities and mentors in their institutes.
PRAT Application Process

• Competitive application process - Fi2 (i= intramural) mechanism with applications submitted via grants.gov
  
  
  o Read everything **thoroughly**

• Specific guidance for each part of the application (e.g. length, content, due date)

• Begin or continue record of independent funding

All instructions in the SF424 (R&R) Application Guide must be followed!
# NIGMS PRAT Program – FOA

**Department of Health and Human Services**

## Part 1. Overview Information

<table>
<thead>
<tr>
<th><strong>Participating Organization(s)</strong></th>
<th>National Institutes of Health (NIH)</th>
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<tr>
<td><strong>Components of Participating Organizations</strong></td>
<td>National Institute of General Medical Sciences (NIGMS)</td>
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<tr>
<td><strong>Funding Opportunity Title</strong></td>
<td>Postdoctoral Research Associate Training (PRAT) Program (Fi2)</td>
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<td><strong>Activity Code</strong></td>
<td>FI2 Intramural Postdoctoral Research Associate</td>
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<td>Reissue of PAR-19-286</td>
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<td><strong>Funding Opportunity Announcement (FOA) Number</strong></td>
<td>PAR-22-191</td>
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<tr>
<td><strong>Companion Funding Opportunity</strong></td>
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**FOA = Funding Opportunity Announcement**
Important dates for this coming cycle:

- Due Date – October 3, 2022
- Review timeframe- Feb/March 2023
- Selection – May/June 2023
- Starting Date – September 2023

<table>
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<tr>
<th>Application Due Dates</th>
<th>Review and Award Cycles</th>
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<tr>
<td><strong>New</strong></td>
<td><strong>Renewal / Resubmission / Revision (as allowed)</strong></td>
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<td>October 03, 2024</td>
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Interacting with Institute AOR

- Application needs to be submitted by Institute where proposed work will be conducted. Each Institute has one or more designated AORs. (Most likely the Training Director)

- Make sure you contact your AOR **early in the process**
  - Many can be found here: [https://www.nigms.nih.gov/training/PRAT/Pages/prat-faq.aspx#q7](https://www.nigms.nih.gov/training/PRAT/Pages/prat-faq.aspx#q7)
  - Contact edgardo.falcon@nih.gov if you need help identifying who this is

- The AOR will submit the application on your behalf and has important information you need.

- The AOR needs to create an eRA Commons account for PI and Sponsor(s)

- You will need to schedule a time to upload your grant with your AOR. Respect the AOR’s deadlines.

AOR= Authorized Organization Representative
Application 101

• Terminology
  • The institute where you perform the work (e.g. NIMH) as the applicant
  • You, the postdoc, are the PI (no multi-PIs)
  • Your preceptor is the sponsor (you can have multiple)

• Ensure all requirements of the FOA are met – incomplete applications are returned without review

• Demonstrate integration of research and training components, and additional training potential

• Contact AOR early in the process
Leadership Statement (1 page)

• Past leadership and service activities in the scientific community, or to enhance public engagement or understanding of scientific research

• Commitment to diversity in the biomedical sciences, and your leadership, mentoring and outreach activities to enhance diversity – especially involving groups underrepresented in the biomedical research enterprise

• Planned activities during the fellowship to develop or enhance leadership skills

• The leadership statement is a required component of the PRAT application. Applications without a leadership statement will not be reviewed.
Reference Letters

- **Electronic submission** of a letter of reference is a separate process from application submission.

- Reference letters are submitted directly through the eRA Commons and do not use Grants.gov

- This process requires that the referee be provided:
  - The PI’s (candidate’s) eRA Commons user name,
  - The PI’s first and last name as they appear on the PI’s eRA Commons account, and
  - The number assigned to this Funding Opportunity Announcement (PAR-22-191).

- Letters can be submitted well in advance of application being submitted—ask early.

Letters are due 5 PM on due date.  **NO GRACE PERIOD**
PRAT Application Review
Review of Applications

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

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

• Scores and summary statements accessed through PI’s eRA Commons account.
Review Criteria – Section V of FOA

• Scored Review Criteria

Fellowship Applicant

• Is the applicant appropriately prepared for the proposed Research Training Plan?

• With proper guidance and support, does the applicant have the potential to reach the career goals outlined in the Research Training Plan?

• Does the candidate show the potential to develop into a leader in the biomedical research community? Does the candidate describe a compelling commitment to diversity in the biomedical sciences, and robust plans to develop or enhance their leadership skills?
Review Criteria – Section V of FOA

• Scored Review Criteria

Sponsors, Collaborators, and Consultants

• Is there evidence of a match between the research and clinical interests (if applicable) of the candidate and the sponsor(s)? Do(es) the sponsor(s) demonstrate an understanding of the candidate’s training needs as well as the ability and commitment to assist in meeting these needs?
• If a team of sponsors is proposed, is the team structure well justified for the mentored training plan, and are the roles of the individual members appropriate and clearly defined?
• Do(es) the sponsor(s) have sufficient time to commit to the proposed Research Training Plan given their other professional obligations?
• Is/Are the sponsor(s) committed to mentoring and promoting inclusive, safe, and supportive research training environments? Do(es) the sponsor(s) use evidence-informed training and mentoring practices that promote the development of trainees from all backgrounds?
• If applicable, are the collaborator(s) and/or consultant(s) appropriate for the proposed Research Training Plan?
• Do(es) the sponsor(s) promote the use of the highest standards of practice for safety, scientific rigor, and the responsible conduct of research?
• If the applicant is proposing to gain experience in a clinical trial as part of his or her research training, is there evidence of the appropriate expertise, experience, resources, and ability on the part of the sponsor(s) to guide the applicant during the clinical trial research experience?
Review Criteria – Section V of FOA

• Scored Review Criteria

Research Training Plan

• Is the proposed research project well integrated with the proposed Research Training Plan?
• Is the prior research that serves as the key support for the proposed project rigorous? Has the applicant included plans to address potential weaknesses in the rigor of the prior research?
• Has the applicant presented strategies to ensure a robust and unbiased approach, as appropriate for the research project proposed?
• Has the applicant presented adequate plans to address relevant biological variables, such as sex, for studies in vertebrate animals or human subjects?
• Is the proposed time frame feasible to accomplish the proposed research training?
• Does the Research Training Plan provide adequate opportunities for career development and networking?
• Will the Research Training Plan provide the skills needed for the candidate to transition and succeed in the proposed career?
Review Criteria – Section V of FOA

• Scored Review Criteria

Training Potential

• Does the training plan take advantage of the candidate’s strengths, address gaps in needed skills, and align with the candidate’s scientific interests and values? Does the training plan document a clear need for, and value of, the proposed training? Will the applicant benefit significantly from the Research Training Plan?

• Will the proposed Research Training Plan provide the candidate with the requisite individualized and mentored experiences in order to obtain the appropriate skills for a career in the biomedical research workforce?
Review Criteria – Section V of FOA

• Scored Review Criteria

Institutional Environment & Commitment to Training

• Will the institutional environment promote the success of the candidate? Are the institutional commitment and resources likely to fostering the candidate’s mentored training and career development?
• Will the research environment, research facilities, and equipment allow for the completion of the research component of the Research Training Plan?
• Is there a clear institutional commitment to develop and promote a culture in which the highest standards of safety, scientific rigor, reproducibility, and responsible conduct of research are advanced?
• Is there evidence that there is a strong institutional commitment to mentoring and promoting inclusive, safe, supportive, and accessible research training environments?
• Are diversity, equity, and inclusion promoted at all levels of the research training environment (trainees, staff, and leadership)?
Review Criteria – Section V of FOA

• Additional Review Criteria (part of Overall Impact score but no separate scores given)
  - Protections for Human Subjects
  - Inclusion of Women, Minorities, and Individuals across the lifespan
  - Vertebrate Animals
  - Resubmissions
  - Biohazards

• Additional Review Considerations (no separate scores given and not considered in Overall Impact score)
  - Training in the Responsible Conduct of Research
  - Select Agents
  - Resource Sharing Plan
  - Authentication of key biological and/or chemical resources
PRAT Application – Tips for Successful Review

• Fellowship Applicant
  o Tell your story
  o Clearly articulate career goal

• Sponsors, Collaborators and Consultants
  o Important to provide a detailed and tailored plan for you (e.g., mentorship, career advancement)
  o Robust training plan, mentoring and training record (as applicable)
  o If multiple mentors, explain how they’ll work together for your training
  o Use current NIH biosketch
  o Collaborators should provide letters of support (different from reference letter)
PRAT Application – Tips for Successful Review

• Research Training Plan
  o Rationale
    • Significance – literature/preliminary data supporting feasibility
    • Central hypothesis (in addition to aim specific hypotheses)
  o Approach
    • Ambitious but not unrealistic
    • Aims should be related but not interdependent
    • Discuss expected outcomes, potential challenges, and alternative strategies
    • Statistical analysis (e.g., sample size, power analysis) and attention to relevant biological variables
  o Avoid jargon, and don’t “oversell” proposal
PRAT Application – Tips for Successful Review

• Training Potential
  - Clarify *training* benefit (e.g., new system, techniques, or skills)
  - Can include OITE programs, FAES Courses, conferences, etc.
  - Should include PRAT program activities

• Institutional Environment and Commitment to Training
  - Why this is the best environment to conduct the proposed research training

The entire application is reviewed — a rigorous research proposal is necessary but not sufficient
Criteria for Application Withdrawal

• For any application due date, multiple applications have the same primary sponsor.

• Missing biosketch for any key personnel (PI or sponsors) or leadership statement.

• Inappropriate or incomplete letters of reference.
  - Three letters of reference are **required**
  - Key personnel on the application (e.g. your sponsor and collaborators) cannot provide reference letters.
Common Mistakes – Big Picture

• Not giving yourself enough time to:
  o Identify a mentor in the NIH Intramural Research Program
  o Work on the proposal
  o Work with the AOR on logistics of submission

• Incomplete application – letters of reference, biosketch, or leadership statement

• Forgetting to send an update if a paper is accepted between submission and review of the application

NIGMS PRAT Program – 2023 Recruitment

• Timeline
  o October 3, 2022 – Application deadline
  o February/March 2023 – Peer review
  o May/June 2023 – Notification
  o September 2023 – PRAT start

• PRAT home page

• PRAT Funding Opportunity Announcement

• For more information – edgardo.falcon@nih.gov & follow us @NIGMSTraining
Tweet us!

Follow us @NIGMSTraining
Thank you for listening & good luck with your application!

Questions?