## NIH Predoctoral Fellowship Information Session

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Office of Graduate and Postdoctoral Affairs January 22, 2025

Vicky Prince, Ph.D., Professor, OBA, BSD Faculty Training Grant Coordinator, F31 mentor and reviewer

#### **Guests and Recent Awardees**

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Kevin Doherty, Director, Fellowships and Writing, UChicagoGRAD <a href="mailto:kevdoh@uchicago.edu">kevdoh@uchicago.edu</a>

Mira Antonopoulos, Neurobiology

minianto@uchicago.edu

PI: Paschalis Kratsios, Neurobiology

Amanda Johnson, Development, Regeneration and Stem Cell Biology <a href="mailto:amandabrooke@uchicago.edu">amandabrooke@uchicago.edu</a>

PI: Margaret Gardel, Physics and PME

Taylor Graham, Immunology

tagraham@uchicago.edu

PI: Peter Savage, Pathology

## Why Apply?

- I am already fully funded, what are the advantages?
  - Institutional allowance: \$4,750.
    - \* \$2,200 towards your health insurance
    - ▼ The balance to fund your project and travel costs
  - Competitive award adds significant prestige to your CV and establishes your ability to win external funding
  - More likely to be funded for a postdoctoral fellowship
  - More likely to be funded on a career development award
  - Childcare allocation of \$3,000/year, if applicable

## **Objectives**

- The purpose of the Ruth L. Kirschstein National Research Service Award (NRSA) Individual Predoctoral Fellowship (**Parent F31**) award is to enable promising predoctoral students to obtain individualized, mentored research training from outstanding faculty sponsors while conducting dissertation research in scientific health-related fields relevant to the missions of the participating NIH Institutes and Centers.
- The proposed mentored research training must reflect the candidate's dissertation research project and is expected to clearly enhance the individual's potential to develop into a productive, independent research scientist.
- Related NRSA F30 is to provide support to individuals for combined MD/PhD

## **Individual Fellowships Available**

- Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral Fellows (F31)
- Ruth L Kirschstein National Research Service Awards for Individual Predoctoral Fellowships to Promote Diversity (F31)
- Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral MD/PhD and Other Dual Doctoral Degree Fellows (F30)

#### **Participating Institutes**

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#### All NIH institutes participating in the NRSA program

- National Cancer Institute (NCI)
- o National Eye Institute (NEI)
- o National Heart, Lung, and Blood Institute (NHLBI)
- National Human Genome Research Institute (NHGRI)
- National Institute on Aging (NIA)
- National Institute of Allergy and Infectious Diseases (NIAID)
- National Institute on Alcohol Abuse and Alcoholism (NIAAA)
- National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)
- o National Institute of Biomedical Imaging and Bioengineering (NIBIB) F31 Diversity only
- Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)
- National Institute on Deafness and Other Communication Disorders (NIDCD)
- National Institute on Dental and Craniofacial Research (NIDCR)
- o National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)
- o National Institute on Drug Abuse (NIDA)
- National Institute of Environmental Health Sciences (NIEHS)
- National Institute of Mental Health (NIMH)
- o National Institute of Neurological Disorders and Stroke (NINDS)
- National Institute on Minority Health and Health Disparities (NIMHD)
- o National Library of Medicine (NLM)
- National Center for Complementary and Alternative Medicine (NCCAM)

## Eligibility

- Citizen or non-citizen national of the United States, or permanent resident. Individuals on temporary or student visas are not eligible.
- Must have a baccalaureate degree and be enrolled in a PhD (F31) or equivalent program or a formally combined MD/PhD (F30) program in the biomedical, behavioral, health services, or clinical sciences.
- F31 Applicants must be at the dissertation research stage of their doctoral training (Admitted to candidacy).
- Applicants must identify a sponsor(s). Sponsor(s) should have NIH funding or equivalent. (The sponsor is most likely your thesis advisor/PI)
- Applicants must show evidence of both high academic performance in the sciences and substantial interest in areas of high priority to the participating Institutes.

#### **Timeline**



- NIH deadline for all applications (F30 & both F31s):
  - April 8
  - August 8
  - December 8 (likely but TBD)
- Application Process
  - Variable timeline, but most people need <u>at least</u> two months
  - Many people involved in submission
    - × Your sponsor (and co-sponsor, if applicable)
    - Your program chair
    - × Your three referees
    - Your PI's department grant administrator
    - University Research Administration (central office)

### How to Apply

- Talk to your thesis advisor (sponsor/PI)
- Meet with your PI's department grant administrator
- Read the <u>funding opportunity announcement</u> (also called FOA or <u>guidelines</u>) for your particular program (F30 or F31)
- Read the individual fellowship <u>application guide</u>

Be sure to use version: SF424 (R&R) - Version I (Due dates ON/AFTER Jan. 25, 2025)

#### **MSTP F30 Trainees Note:**



- Application for a Ruth L. Kirschstein National Research Service Award for Individual Predoctoral MD/PhD and Other Dual Doctoral Degree Fellows (F30) is a requirement for your program
- The MSTP office does not manage the pre- or post-award activity, you must work with your PI's lab departmental grant/finance office
- The MSTP office will allocate the F30 funds to offset your tuition, stipend and insurance, MSTP pays the balance
- You must inform the MSTP office if your application is successful
- 50% of the time funded by the F30 must be during the research phase
- PI's departmental grant/finance office will still manage the award after you return to the medical school phase of your training even though you are no longer working in the lab
- Aside from the medical training piece, the F30 & F31 guidelines are mostly the same; this workshop applies to both funding mechanisms

## Talk to Sponsor/PI

- To determine if you and your sponsor/PI are eligible
- To determine if now is the right time to apply
- To determine which NIH institute is most appropriate
- To discuss expectations and timeline
- To obtain contact information for your PI's department grant administrator

# Meet with PI's Department Grant Admin.

- Make contact <u>as soon as</u> you know you are going to apply
- Discuss expectations and timeline
- The PI's department administrator will help you by
  - Adding the PI role to your NIH eRA Commons account
  - Completing all your forms
  - Uploading the components of your application
  - Routing the application for institutional signature allow sufficient time for this (~7-10 days)
  - Answering many questions about the process

## How to Apply - FOA (guidelines)

Eligibility requirements

Award information

- Review and selection criteria
- Summary of recent changes to <u>application</u> and <u>review</u>

F30, PA-23-260

F31 Diversity, <u>PA-23-271</u>

F31, <u>PA-23-272</u>

### **How to Apply – Application Guide**



- Outlines required elements of the application
- Instructions for
  - Formatting
  - Page limits
  - References
- You do <u>not</u> need to download the application package or complete the forms



#### FORMS VERSION I SERIES

Released: November, 2024



#### FELLOWSHIP INSTRUCTIONS FOR NIH AND OTHER PHS AGENCIES

SF424 (R&R) APPLICATION PACKAGES

Guidance developed and maintained by NIH for preparing and submitting applications via Grants.gov to NIH and other PHS agencies using the SF424 (R&R)

### **How to Apply – Application Guide**

- The PI's department administrator will complete all the forms for you using the AURA system (currently using **Form I**)
- The fellowship application guide:

  <a href="https://grants.nih.gov/grants/how-to-apply-application-guide/forms-i/fellowship-forms-i.pdf">https://grants.nih.gov/grants/how-to-apply-application-guide/forms-i/fellowship-forms-i.pdf</a>
- Note that FOA instructions always supersede the standard application instructions
- Read it all VERY carefully it is long and complex

### **How to Apply – F31 Diversity**

- F31 Individual Predoctoral Fellowship to Promote Diversity in Health-Related Research (Parent F31) awards require an institutional letter "Description of Candidate's Contribution to Program Goals" that explains how a student's participation will further goals to promote diversity in health-related research (see NIH Diversity Notice).
- This statement will be written in partnership with your program chair, who should reach out to OGPA for standard language to seed the letter.

## **How to Apply – The Basics**

Follow all instructions for formatting and page limits

 Create your application documents in Microsoft Word (or similar) and convert to .pdf just before submitting

 Do not worry about registering for systems or gathering data for completing the forms. This will be done for you.

## Requirements of Sponsor(s)



#### **BASED ON OUR PRIOR EXPERIENCE:**

- Federal research funding
  - Covering the first two years of the fellowship
  - Preferably NIH Ro1 or equivalent (other major grants can be acceptable)
- Recent publications
- Established student track record
  - Students with first-author papers
  - Students with fellowships
  - Graduates have continued in science or science-related careers.
- If your sponsor lacks credentials a co-sponsor may help

## \*\*New\*\* Fellowship Application Outline



## Candidate's Goals, Preparedness and Potential – 3 pages total

- Overall Training Goals
- Candidate's Preparedness
- Candidate's Self-Assessment
- Scientific Perspective

#### **Research Training Plan**

- Training Activities and Timeline—3 pages
- Research Training Project Specific Aims—1 page
- Research Training Project Strategy-6 pages
  - Scientific Foundation and Rationale
  - Approach

#### Sponsor(s) Commitment – 6 pages total

- Mentoring Approach and Candidate Mentoring Plan
- Prior Training and Mentoring
- Commitment to the Candidate's Research Training Plan
- Research Training Environment
- Candidate's potential

Introduction  1. Introduction to Application (for Resubmission Applications)	
Candidate Section  2. *Goals, Preparedness, and Potential	
Research Training Plan	
3. *Training Activities and Timeline 4. *Research Training Project Specific Aims 5. *Research Training Project Strategy 6. *Progress Report Publication List (for Renewal Applications) 7. *Training in the Responsible Conduct of Research	
Commitment to Candidate, Mentoring, and Training Environment	
8. *Sponsor(s) Commitment 9. Letters of Support from Collaborators, Contributors, and Consultants	
Description of Candidate's     Contribution to Program Goals	



#### A. Overall Training Goals

Candidates should describe the goals for the proposed research training plan and the long-term goals for a career in biomedical research workforce. Relate the fellowship goals to the long-term career goals. Candidates should describe their motivation for pursuing a career in the biomedical research workforce

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#### **B.** Candidate's Preparedness

This section provides information regarding the educational, scientific, and professional experiences that prepare the candidate for the proposed research training plan. Note: <u>information listed in the candidate's biosketch may be expanded upon, but not simply duplicated, in this section</u>. The candidate should address the following:

How relevant activities and experiences contributed to the candidate's scientific development and preparation for the current research training plan. Examples may include coursework, research experiences, conference attendance, internships, and employment.

Any additional activities and experiences that demonstrate an interest and commitment to a career in the biomedical research workforce. Examples may include seeking out opportunities for research skill development or engaging in leadership, service, teaching, or outreach activities.



#### C. Candidate's Self-Assessment

The purpose of this self-assessment is to provide an opportunity for the candidate to define their <u>current characteristics</u> (such as relevant skills, abilities, traits or attitudes) and <u>areas to develop</u> that are likely to contribute most significantly to success in the proposed research training plan and career path. For example, the candidate may include but is not limited to describing technical (techniques or technical methods, quantitative/computational approaches), operational (practices that promote rigorous and reproducible science, research safety, animal, or human welfare) or professional (management, leadership, communication, teamwork) skills.

The candidate should describe:

Two to four current characteristics that are likely to contribute to achieving the research training.

Two to four specific areas of development during the fellowship to attain the stated research training and career goals.



#### **D. Scientific Perspective**

This section is intended to provide information about the candidate's potential to think about and express ideas within a scientific field. In this section, candidates should explain the following:

Why this field of science is important and the ways the chosen research training project will advance the field.

A broader, unresolved scientific question in the chosen scientific field, the importance of the problem, and the ways biomedical research might advance the scientific field.

#### **Training Activities and Timeline (3 pages)**

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The research training plan activities should be individually tailored and well-integrated. The planned activities should address the candidate's goals and identified areas for development. The application should describe the collaborative process between the candidate and the sponsor(s) in the development, writing, review, and editing of the research training plan, including the research training project aims and strategy.

-Describe, by year, the planned activities (coursework, professional development, research training project, mentoring, clinical activities, etc.) during the proposed award. Note that the Research Training Project Strategy will be detailed in a separate section described below. Estimate the percentage of time to be devoted to each activity. The percentage should total 100 for each year.

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#### Training Activities and Timeline (3 pages)



- -Explain how the training activities will develop the areas defined in the selfassessment section and help to meet the fellowship goals.
- -Provide <u>specific</u> examples of how the proposed research training will facilitate the transition to the next career stage.
- -Describe why the Sponsor(s), collaborators, and research training environment are appropriate for the proposed research training plan. Candidates should expand upon, but not duplicate information found in the Facilities and Other Resources section or in the Sponsor(s) section describing the Research Training Environment.
- -The research training is expected to broaden the candidate's perspective, opportunities, and networks.

Detailed timelines of research training activities involving animals, human subjects, or clinical trials are requested in other sections of the fellowship application and should not be included here.



Candidates should relate the proposed research training project to their career goals and explain the relationship between the candidate's research training project and the sponsor's ongoing research program.

The Research Training Project section is expected to be tailored to the experience level of the candidate and to allow for the development of the necessary skills for further career advancement. The research training project should be achievable within the requested funding period.

Although the fellowship research training project may fall within the larger funded research program of the sponsor(s), the research training project strategy must be written in the candidate's own words

Candidates are expected to write the application, including the research training project section. However, the sponsor should review drafts and provide constructive feedback to the candidate throughout the application process.

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#### Specific aims and objectives (1 page)

State concisely the broader goals of the proposed research training project (for example, to test a stated hypothesis, create a novel design, solve a specific problem, challenge an existing paradigm or clinical practice, address a barrier to progress in the field, or develop new technology).

- List succinctly the specific objectives or aims of the research training project to be completed by the candidate during the funding period. Summarize the expected outcome(s). Include the potential impact that the results of the proposed research training project will have on the research field(s) involved.



- The Research Training Project should include the following:
  - Methods, approaches, and techniques for each aim and objective.
  - Discussion of possible challenges and how they will be managed.
  - Alternative approaches that might be tried if the initial approaches do not work.
- Candidates should propose a rigorous research training project based on a strong scientific foundation. Fellowship applications do not require preliminary data or extensive experimental detail; however, candidates should provide sufficient scientific and technical details for reviewers to understand and assess the merits of the scientific foundation and research training project.



#### USE OF THESE SUBHEADINGS IS REQUIRED. 6 pages total

#### 1. Scientific Foundation and Rationale

#### 2. Approach

Strategy, methodology, analyses.

Experimental design and methods proposed and how they will achieve robust and unbiased results. Unless in the Resource Sharing Plan attachment, include how the data will be collected, analyzed, and interpreted.

Discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aims.

If the project is in the early stages, describe any strategy to establish feasibility, and address the management of any high-risk aspects of the proposed work.

Explain how relevant biological variables, such as sex, are factored into research designs and analyses for studies in vertebrate animals and humans.

## Other Key documents you will need

- Project Summary 30 lines abstract
- Project Narrative 3 sentence overview
- Your NIH Bio (5 pages max)
- RCR training description (1 page) *boiler plate*
- Vertebrate Animals Section if relevant, ask your PI
- Select Agents Plan if relevant, ask your PI
- Bibliography & References Cited
- Resource Sharing Plan ask your PI
- Authentication of key biological/chemical resources ask your PI
- Facilities & Resources ask your PI
- Equipment ask your PI
- Letters of Support from Collaborators, Contributors, and Consultants –
   can strengthen your application, <u>ask early and make it easy</u>

#### **Recommendation Letters**

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At least three, but no more than five, reference letters are required unless otherwise specified in the funding opportunity. NIH provides a detailed instruction template. Letters are submitted directly through the eRA Commons Submit Reference Letter link. In two pages or less (PDF format), describe the qualities and potential of the fellowship candidate for the research training. Referees should consider including examples of personal characteristics, areas for development and an overall assessment of preparedness and likelihood of success.

- •Referees must provide the following information with their reference letter:
  - Pl's (fellow/candidate's) eRA Commons username.
  - Pl's first and last name as they appear on the Pl's eRA Commons account.
  - Number of the funding opportunity (e.g., PA-23-272) to which you are applying.

## Important things to bear in mind



- Sponsor Documents are key: Your sponsor(s) must write their part carefully. This part can make or break your fellowship! Given new guidelines encourage them to start early and read the instructions carefully
- Line up reference writers early, don't be shy to ask if they can write a "strong" letter, and keep reminding them to submit your letter. Send them the information they need (the link to submit, your eRA commons username, the correct FOA)
- Sections such as responsible conduct of research training, vertebrate animals, and data sharing plan are formulaic but critical. Your mentor and other fellows can provide examples of these sections.

#### **Evaluation Criteria**



- Candidate's Preparedness and Potential
- Research Training Plan
- Commitment to Candidate

These are newly revised from 5 criteria to 3 for applications on or after Jan. 25, 2025.

#### **Review Criterion #1**



#### Candidate's & Potential

- Discuss the candidate's preparedness for the proposed **Preparedness** research training plan. Consider the context, for example, the candidate's stage of training and the opportunities available.
  - Assess whether the candidate and sponsor statements as well as the referee letters provide convincing evidence that the candidate possesses qualities (such as scientific understanding, creativity, curiosity, resourcefulness, and drive) that will improve the likelihood of a successful research training outcome.
  - Consider the candidate's potential to benefit from the fellowship research training plan and to transition to the next career stage in the biomedical research workforce.

#### **Review Criterion # 2**



## Research Training Plan

- •Assess the rigor and feasibility of the research training project and how completion of the project will contribute to the development of the candidate as a research scientist.
- •Evaluate the goals of the overall research training plan and the extent to which the plan will facilitate the attainment of the goals.
- •Discuss whether the research training plan identifies areas of needed development and contains appropriate, realistic activities and milestones to address those needs.
- •Consider whether the sponsor(s), scientific environment, facilities, and resources are adequate and appropriate for the proposed research training plan.

### **Review Criterion #3**



## Commitment to Candidate

- •Assess whether the sponsor(s) presents a strong mentoring plan appropriate to the needs and goals of the candidate.
- •Evaluate the extent to which the sponsor(s) and organizational commitment is appropriate, sufficient, and in alignment with the candidate's research training plan.
- •Consider whether the level of commitment provided will contribute to the successful completion of the proposed plan and allow the candidate to advance to a productive career in the biomedical research workforce.

## Thinking about the Project

• Is it an important question?

• Is it feasible?

Is there a high probability of success?

Is it conducive to training?

• Can it be linked to public health? This can be indirect

## **Successful Applications**

- Sponsor has strong publication record (students and self)
- Training plan is comprehensive and well-related to the project and your future goals
- The sponsor documents are strong encourage your sponsor to review the requirements and start early
- Writing has been reviewed by others and feedback is implemented
- Applicant has demonstrable potential and strong letters

### **Tips for Success**

Start early

 Write for a cross-section of readers (scientists may be from another field)

Follow the instructions

Assess final documents for readability and organization

## **Tips for Success**



- Ask for feedback and implement it
- Keep everyone in the loop
  - Sponsor
  - Letter writers
  - Grant administrator
- Stand out for excellence, not errors
- Be sure the link to public health is very clear, especially for basic science projects

### What if my fellowship is awarded?



- Let the following people know right away
  - Your sponsor/advisor (they will have also received notice)
  - Your graduate program administrator and OGPA
  - The PI's departmental research administrator

## What if my fellowship is awarded?



## You will have up to six months to begin the fellowship

- Activation notice start dates (the date when the fellowship starts) for the award <u>must</u> be at the beginning of any given quarter.
  - ×January 1
  - ×April 1
  - ×July 1
  - ×October 1\*

Form Approved Through 01/31/2026 Department of Health and Human Services Public Health Service Ruth L. Kirschstein National Research Service Award Individual Fellowship Activation Notice FELLOWSHIP NUMBER: F31AB000000

DATE FELLOW ENTERED ON DUTY (Month, day, year): 1-1-202

- 1. All fellows must complete this form for the first year of their fellowship, indicating their start date under the fellowship and other requested information.
- 2. Send the signed original of the completed form to the awarding agency using the address provided in the Notice of Award. This should be submitted immediately after the fellow enters on duty. Keep a copy; one will not be returned. This form must be completed online, printed, and then signed for submission to PHS.
- 3. An appropriate statement regarding degrees (certified by degree-granting institution) MUST be attached if such
- For Ruth L. Kirschstein National Research Service Award fellows in their first 12 months of postdoctoral support, a signed payback agreement MUST accompany this form.
- 5. No funds may be disbursed until the fellow enters on duty and the proper forms are submitted to PHS.
- 6. As a condition of this activation, all NRSA fellows agree to complete and submit a Termination Notice (PHS 416-7) immediately upon completion of support.

## Questions

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