



# The NIH F31/F32 NRSA Mentored Research Training

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Professor of Biology &  
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# Navigating the NIH Programs

Activity Code F31, F32 : Ruth L. Kirschstein National Research Service Award (NRSA)

## Notice of Funding Opportunity (NOFO)

- Program Announcement (PA); Program Announcement (PAR)
- Request for Application (RFA)

## Understand Staff Roles

Program Officer (PO): Provide scientific guidance to investigators pre- and post-award. Many Institutes have Research Training PO.

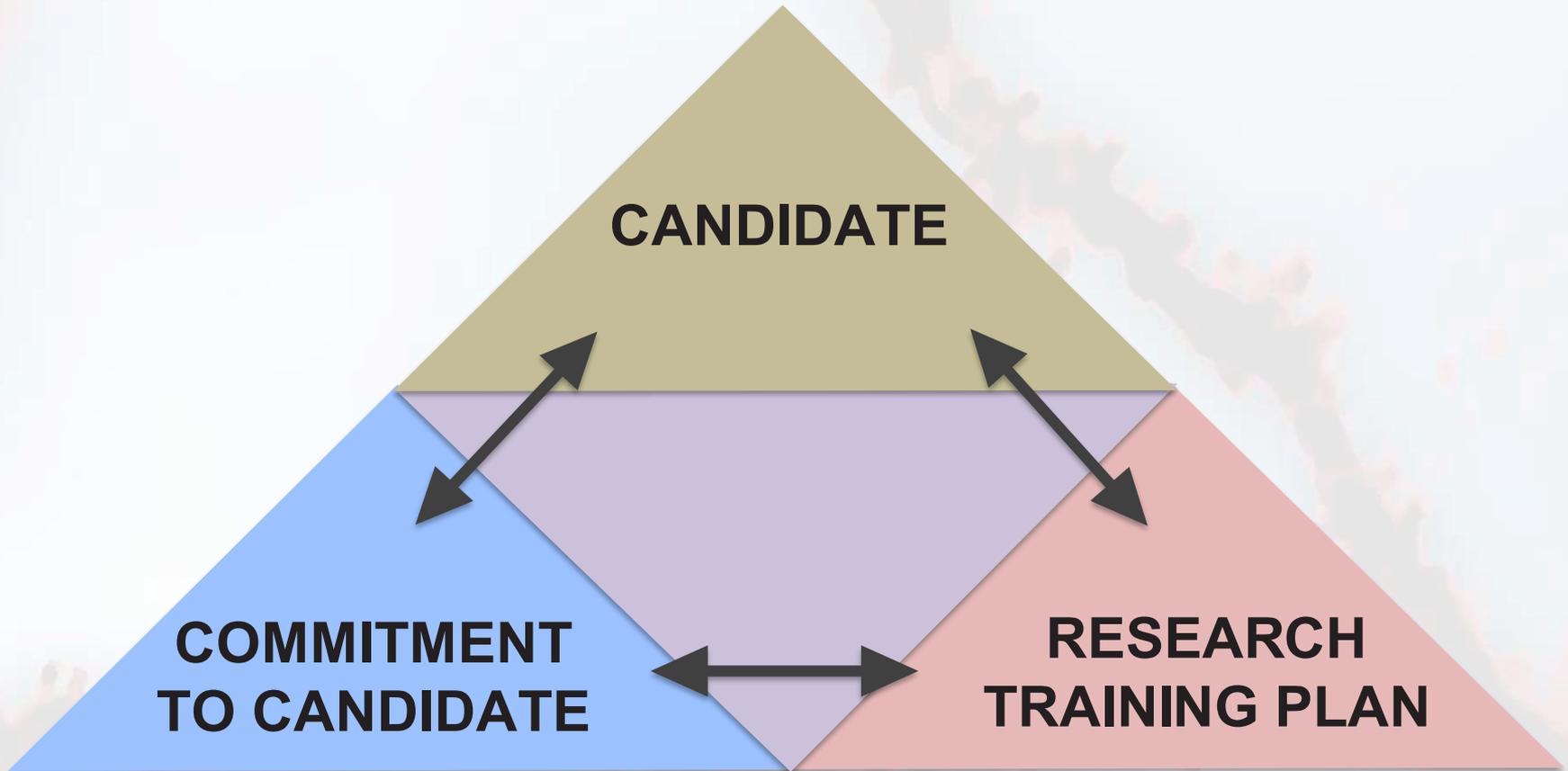
Scientific Review Officer (SRO): Review of applications; discuss the review assignment, send additional materials, discuss any review concerns.

# Funding Opportunity Purpose

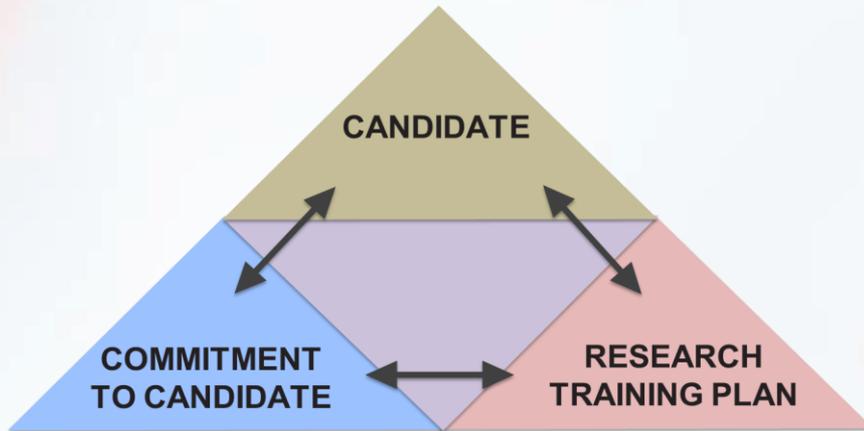
## Fellowships (F31, F32): Mentored research training

- Obtain individualized, mentored research training from appropriate faculty sponsors.
- While conducting biomedical research in scientific health-related fields relevant to the missions of the participating NIH Institutes and Centers.
- The proposed mentored research training must address
  - the candidate's identified research training and career goals
  - enhance the candidate's potential to successfully transition to the next phase of their biomedical research career.
- The proposed mentored research training must reflect the candidate's dissertation research project (F31).

# Funding Opportunity Purpose



# Funding Opportunity Purpose



## Candidate Section

2. Candidate's Goals, Preparedness, and Potential\*

## Research Training Plan

3. Training Activities and Timelines\*
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
10. Descriptions of Candidate's Contribution to Program Goals (no longer required)

# Eligibility F31 & F32

- **F32 Recipient must hold a research or clinical doctoral degree** (Ph.D., M.D., D.O., D.C., D.D.S., D.V.M., O.D., D.P.M., Sc.D., Eng.D., Dr.P.H., D.N.S., N.D., Pharm.D., D.S.W., Psy.D. or equivalent from an accredited domestic or foreign institution) by the beginning date of the proposed award.
- **F31 The candidate must be currently enrolled in a PhD or equivalent research degree program** (e.g., EngD, DNSc, DrPH, DSW, PharmD, ScD) in the biomedical, behavioral, or clinical sciences at a domestic or foreign institution.
- **“By the time of award, the individual must be a citizen or a non-citizen national of the United States or have been lawfully admitted for permanent residence.”**

# Stipend

(New table expected May 2026)

Career Level	12 months	1 month
Predoc	28,788	2,399
Postdoc 0	62,232	5,186
Postdoc 1	62,652	5,221
Postdoc 2	63,120	5,260
Postdoc 3	65,640	5,470
Postdoc 4	67,824	5,652
Postdoc 5	70,344	5,862
Postdoc 6	72,960	6,080
Postdoc 7 or more	75,564	6,297

- Childcare costs—an NRSA fellow or trainee may receive \$3,000 per budget period to defray childcare costs from a licensed provider.
- Trainee travel, including attendance at vital scientific meetings. The NIAID cap is \$1,000 for each trainee.
- Training-related expenses (e.g., administrative support, health insurance, and research supplies) for each trainee:
  - Predoctoral—\$4,750
  - Postdoctoral—\$12,400 per

# Is This Mechanism Right for Me?

- Read the “Program Announcement”
  - F31 Individual Predoctoral Fellowship
    - <https://grants.nih.gov/grants/guide/pa-files/PA-25-422.html>
  - F32 Individual Postdoctoral Fellowship
    - <https://grants.nih.gov/grants/guide/pa-files/PA-25-423.html>  
Posted: June 13, 2025
  - These are long, tedious documents. Plan ahead.

# How do I know to which Institute/study section to target my application?

- Reach out to Scientific Program Contact
  - <https://grants.nih.gov/grants/guide/contacts/PA-25-422.html>
  - <https://grants.nih.gov/grants/guide/contacts/PA-25-423.html>

## [National Eye Institute](#)

### **Scientific Program Contact:**

Neeraj Agarwal, Ph.D.

Phone: (301) 435-8155

Email: [agarwalnee@nei.nih.gov](mailto:agarwalnee@nei.nih.gov)

Ed Clayton, PhD

Phone: (301) 480-9350

Email: [ed.clayton@nih.gov](mailto:ed.clayton@nih.gov)

### **Grants Management Contact:**

Roland Jay Colbert, MSW

Phone: 301-451-4714

Email: [Jay.Colbert@nih.gov](mailto:Jay.Colbert@nih.gov)

### **NEI Specific Information:**

The mission of the National Eye Institute (NEI) is to eliminate vision loss and improve quality of life through vision research. Applications considered for funding by the NEI must fall within the areas of emphasis detailed in the [NEI Strategic Plan](#) .

# How do I know to which Institute/study section to target my application?

- Reach out to Scientific Program Contact
  - <https://grants.nih.gov/grants/guide/contacts/PA-25-422.html>
  - <https://grants.nih.gov/grants/guide/contacts/PA-25-423.html>

## [National Cancer Institute](#)

### **Scientific Program Contacts:**

Corinne Boulanger-Espeut, Ph.D., MBA

Email: [boulangc@mail.nih.gov](mailto:boulangc@mail.nih.gov)

Hana Odeh, Ph.D.

Email: [hana.odeh@nih.gov](mailto:hana.odeh@nih.gov)

Anu Puri, Ph.D.

Email: [anu.puri@nih.gov](mailto:anu.puri@nih.gov)

### **Grants Management Contact:**

Laura Gray, MPH

Email: [laura.gray@nih.gov](mailto:laura.gray@nih.gov)

### **NCI Specific Information:**

NCI requires a clear cancer focus in the research training plan. Since the fellowship award does not support research costs, NCI gives funding priority to applications clearly indicating funds are available to support the candidate's research training plan throughout the duration of the award.

Visit the [NCI F31 website](#)  for additional NCI-specific information/requirements.

# How do I know to which Institute/study section to target my application?

## Fellowships: Chemistry, Biochemistry and Biophysics A – F04A



**Dr. Prema Iyer**

Scientific Review Officer

✉ [prema.iyer@nih.gov](mailto:prema.iyer@nih.gov)

📞 301-480-1821

The F04A panel reviews fellowship applications dealing with the chemistry of small molecules or peptides, chemical transformation and development of metabolic inhibitors. This includes the synthesis and biosynthesis as well as SAR studies of novel or natural products that have potential for treatment of disease.

### Review Dates

- › [List of Reviewers on 12/18/2025](#)
- › [List of Reviewers on 07/17/2025](#)
- › [List of Reviewers on 05/01/2025](#)

# Is My Research a Good Fit?

- Explore NIH Reporter

<https://reporter.nih.gov/advanced-search>

The screenshot displays the NIH RePORTER website. At the top, there is a navigation bar with the NIH logo, 'RePORT' and 'RePORTER' text, and links for 'FAQs', 'API', 'ExPORTER', and a 'Sign In' button. Below the navigation bar, the main content area is divided into several sections:

- Quick Search:** A search box labeled 'Search RePORTER' with a 'Search' button. Below it, a note says: 'Enter just about anything in the RePORTER Quick Search box above (text, PI names, project numbers, fiscal year, agency) or launch the Advanced Search to precisely configure searches using separate search fields.' An 'Advanced Search' button is located below the search box.
- Welcome to the NIH RePORTER:** A text box stating: 'Each award supported by NIH promotes efforts to seek fundamental knowledge about the nature and behavior of living systems and/or the application of that knowledge to enhance health, lengthen life, and reduce illness and disability.' A 'Guided Tour' button is positioned below this text.
- Active Funding by State:** A section with a map of the United States. The text reads: 'Select a state to view projects'. The map shows various states highlighted in different shades of green and blue.
- Active Projects by Institute/Center:** A bar chart showing the number of active projects for various NIH institutes and centers. The y-axis is labeled 'Number of Active Projects' and ranges from 0 to 10,000. The x-axis lists the following institutes/centers: CLC, FIC, NCATS, NCCH, NCI, NEI, NHGRI, NHLBI, NIA, NIAAA, NIAID, NIAMS, NIBIB, NICHD, NIDA, NIDCD, NIDCR, NIDDK, NIEHS, NIGMS, NIMH, NIMHD, NINDS, NINR, NLM, and OD. The NCI bar is the tallest, reaching approximately 9,500 projects.

# Is My Research a Good Fit?

- Explore NIH Reporter

<https://reporter.nih.gov/advanced-search>

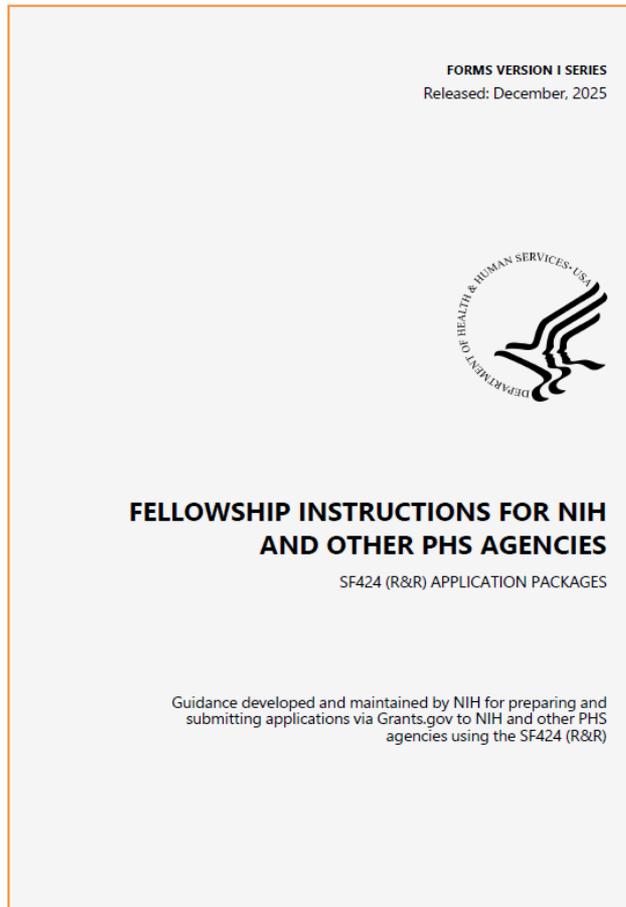
The screenshot displays the NIH Reporter interface. At the top, the navigation bar includes the NIH logo, 'RePORT', 'RePORTER', and links for 'FAQs', 'API', 'ExPORTER', and a 'Sign In' button. Below the navigation, the page title is 'Search Results > Project Details', with a 'Share' button on the right. A 'Back to Search Results' button is located on the left. The main content area features the project title 'Genetics of the photoreceptor cell specification' and a table with the following information:

Project Number	Contact PI/Project Leader	Awardee Organization
1F31EY020106-01	ALVAREZ-DELFIN, KAREN	

Below the table, the 'Description' section is expanded, showing an 'Abstract Text' box. The abstract text reads: 'DESCRIPTION (provided by applicant): The lot-of-rods (lorp25bbtl) mutant was isolated in a genetic screen of mutagenized zebrafish for changes in rod patterning in the larval retina. lorp25bbtl mutants display an increase in the number of rods and a reduction in the number of UV cones, likely due to a cell fate change. This phenotype is the opposite of that exhibited by the Nri knockout mice, which demonstrate an increase in the number of short-wavelength-sensitive cones (S cones) and a reduced number of rods. Initial characterization of the mutant shows that lorp25bbtl is a hypomorphic allele of the transcription factor tbx2b, and acts cell-autonomously in photoreceptor fate determination. This application proposes molecular studies to uncover the specific functions of tbx2b in photoreceptor development. The following topics will be addressed: 1. Is tbx2b a direct transcriptional regulator of photoreceptor genes? To answer this question a reporter gene assay in cultured cells will be performed to evaluate transcriptional modulation by tbx2b in conjunction with other retinal transcription factors in various photoreceptor promoters. 2. Taking advantage of the UV-cone depleted phenotype in lorp25bbtl and to identify UV-cone specific genes, a microarray experiment comparing the gene expression profile of lorp25bbtl and WT adult retinas will be performed. Public Health Relevance: Heritable diseases are among the leading causes of blindness in developed countries. In the United States, an estimated 80 million people suffer potentially blinding eye disease and 1.3 million people are legally blind (National Center for Health Statistics, 1996). Given the importance of visual system diseases, the direct benefits of identifying genes in zebrafish that may be involved in human disease like photoreceptor development or retinal dystrophies are obvious. Previous characterization of the lorp25bbtl mutant suggested a genetic pathway that directly contrasts that affected in the human Enhanced-S-cone Syndrome. I believe that studying tbx2b, the gene affected in lorp25bbtl, and its role in retinal development will help to dissect the developmental pathway affected in this human syndrome and ultimately will increase our understanding of retinal development and physiology.'

The left sidebar contains a navigation menu with the following items: 'Description', 'Details', 'Sub-Projects', 'Publications', 'Patents', 'Outcomes', 'Clinical Studies', 'News and More', 'History', and 'Similar Projects'.

# Follow NIH Application Policies and Requirements



- Get Registered NIH Commons
- Speak with Grants Officials in Department and at FSU
- Various standard info in forms
- Biosketch (in specified format)
- Background and Goals For Training (6 page limit)
- Research Strategy
- Sponsor Section
- Letters of Recommendations (3-5)

<https://grants.nih.gov/grants-process/plan-to-apply/follow-nih-application-policies-and-requirements>  
<https://grants.nih.gov/grants-process/write-application/how-to-apply-application-guide>

# Follow NIH Application Policies and Requirements

[For all Fellowship \(F\) Applications](#)

[Including F05, F30, F31, F32, F33, F37, F38, F99/K00](#)

Section of Application	Page Limits*
<b>Project Summary/Abstract</b>	30 lines of text
<b>Project Narrative</b>	Three sentences
<b>Introduction to Resubmission or Revision Application</b> (when applicable)	1 page
<b>Applicant's Background and Goals for Fellowship Training</b> (FORMS-H)	6 pages
<b>Candidate's Goals, Preparedness, and Potential</b> (FORMS-I and later)	3 pages
<b>Training Activities and Timelines</b> (FORMS-I and later)	3 pages
<b>Specific Aims</b> (FORMS-H)	1 page
<b>Research Training Project Specific Aims</b> (FORMS-I and later)	1 page
<b>Research Strategy</b> (FORMS-H)	6 pages
<b>Research Training Project Strategy</b> (FORMS-I and later)	6 pages
<b>Respective Contributions</b> (FORMS-H)	1 page
<b>Selection of Sponsor and Institution</b> (FORMS-H)	1 page
<b>Training in the Responsible Conduct of Research</b>	1 page
<b>Sponsor and Co-Sponsor Statements</b> (FORMS-H)	6 pages
<b>Sponsor(s) Commitment</b> (FORMS-I)	6 pages
<b>Letters of Support from Collaborators, Contributors, and Consultants</b>	6 pages
<b>Description of Institutional Environment and Commitment to Training</b> (FORMS-H)	2 pages
Note: This page limit includes the Additional Educational Information required for F30 and F31 applications.	
<b>Applications for Concurrent Support</b> (when applicable)	1 page
<b>Biographical Sketch (legacy)</b>	5 pages
<b>Biographical Sketch Common Form &amp; Biographical Sketch Supplement</b>	No hard limit; length controlled through SciENCv

# Sample Applications and Documents

## Sample: Forms-H Fellowship Biosketches

OMB No. 925-0001 and 925-0002 (Rev. 10/2005) Approved Through 03/08/2023

**BIOGRAPHICAL SKETCH**  
Provide the following information for the Secretary, assessor and other significant contributors.  
Follow the format for each section. DO NOT EXCEED FIVE PAGES.

NAME: Silvestre-Gonzalez, Lailan

**ORCID COMMONS LINK:** (credential, e.g., agency login) [SilvestreL](#)

POSITION TITLE: Graduate Student Research Assistant

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing. Include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Start Date MM/YYYY	Completion Date MM/YYYY	FIELD OF STUDY
Purdue University	BA	08/2014	05/2018	Biological Chemistry
UC San Diego	PHD	08/2018	05/2023 (Expected)	Molecular Biology

**A. Personal Statement**

I first became interested in human health and disease in high school when I was awarded an NIH Diversity Supplement to work as a research technician for two summers in Dr. Indra Creative's lab at the University of Hawaii. I continued to pursue this interest as an undergraduate at Purdue University, where I conducted research with Dr. Daniel Richardson on the mechanisms of action of a new class of small molecules for cancer treatment. This resulted in a co-authored publication, as well as an invitation to present a poster at the annual Oncological meeting in Denver, Colorado. By the end of my undergraduate career, I knew that I wanted to pursue a long-term career in research. For my graduate training at UC San Diego, I have moved into the fields of genetics and biochemistry by studying the signaling and motility mechanisms of cancer cells, under the mentorship of Dr. Nand Green. Dr. Green is an internationally recognized leader in the field of cancer genetics and has an extensive record for training postdoctoral and postdoctoral fellows. Along with giving me new conceptual and technical training, the proposed training plan outlines a comprehensive set of career development activities and workshops. I will have opportunities to engage in public speaking, conduct literature analysis, consider biomedical ethics, and learn about varied career options. For my initial project, I am currently developing a novel protocol for the identification of transcription complexes involved in cancer signaling pathways, which I hope to submit as a first author publication in the next few months. As a native Hawaiian, I am the first in my family to graduate from college, and I am excited to continue making great strides with my education. Overall, I believe that my current research setting in conjunction with my proposed training plan will provide a solid foundation for my long-term goal to become an academic researcher.

1. Nimesh P.V. Silvestre-Gonzalez L, Richardson, D. Gen Y: A novel small molecule with cytotoxic abilities targeting colon cancer cells. Cellular and Molecular Biology. 2016 June; 7(20):13672-78.

**B. Positions, Scientific Appointments, and Honors**

**Positions and Scientific Appointments**

2019 – 2020     Robertson Fellowship for Outstanding Graduate Students, Genetics Department, UC San Diego

2018 – Present     Graduate Research Assistant, UC San Diego

2016 – 2018     Lab Technician, University of Hawaii

2014 – Present     Member, Association for Women in Science

[Predoctoral Fellowship biosketch sample \(DOCX, 44 KB\)](#)

OMB No. 925-0001 and 925-0002 (Rev. 10/2005) Approved Through 03/08/2023

**BIOGRAPHICAL SKETCH**  
Provide the following information for the Secretary, assessor and other significant contributors.  
Follow the format for each section. DO NOT EXCEED FIVE PAGES.

NAME: Hayes, Susan

**ORCID COMMONS LINK:** (credential, e.g., agency login) [HayesS](#)

POSITION TITLE: Postdoctoral Fellow

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing. Include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Start Date MM/YYYY	Completion Date MM/YYYY	FIELD OF STUDY
Wake Forest University	BS	08/2006	05/2013	Engineering
Georgetown University	PHD	08/2013	05/2019	Molecular Biology
Michigan State University	Postdoctoral Fellow	09/2019	Present	Bioinformatics/Immunology

**A. Personal Statement**

My academic training and research experience have provided me with an excellent background in multiple biological disciplines including molecular biology, microbiology, biochemistry, and genetics. As an undergraduate, I conducted research with Dr. Xavier Factor on the mechanisms of action of a new class of antibiotics. As a predoctoral student with Dr. Tamir Gazit, my research focused on the regulation of transcription in yeast, and I gained expertise in the isolation and biochemical characterization of transcription complexes. I developed a novel protocol for the purification of components of large transcription complexes. I was first author of the initial description of the Mediator Complex. A subsequent first author publication challenged a key paradigm of transcription elongation and was a featured article in a major journal. During my undergraduate and graduate careers, I received several academic and teaching awards. For my postdoctoral training, I will continue to build on my previous training in transcriptional control by moving into a mammalian system that will allow me to address additional questions regarding the regulation of differentiation and development. My sponsor Dr. IM Creative is an internationally recognized leader in the transcription/translation field and has an extensive record of training postdoctoral fellows. The proposed research will provide me with new conceptual and technical training in developmental biology and whole genome analysis. In addition, the proposed training plan outlines a set of career development activities and workshops – e.g. grant writing, public speaking, lab management, and mentoring students – designed to enhance my ability to become an independent investigator. My choice of sponsor, research project, and training will give me a solid foundation to reach my goal of studying developmental diseases in humans. During my second postdoctoral year in Dr. Creative's lab, my father had a severe stroke that eventually ended his life. I was out of the lab for six months dealing with my father's incapacitating illness and end-of-life issues. This hiatus in training reduced my scientific productivity. I am confident this proposed research project and training plan will enhance my scientific portfolio and will help regenerate my scientific productivity. My long-term research goals involve becoming an independent researcher and developing a comprehensive understanding of key developmental pathways and how alterations in gene expression contribute to human disease.

1. Hayes S, Schneider K, Chen M, ~~Agudal T~~, Rapid ~~gag~~ and characterization of a novel transcription complex in *Saccharomyces cerevisiae* and its role in transcription elongation. Journal of Cell Biology. 2016; 126:770.

[Postdoctoral Fellowship biosketch sample \(DOCX, 42 KB\)](#)

# Sample Applications and Documents

OMB No. 0925-0001 and 0925-0002 (Rev. 12/2020 Approved Through 02/28/2023)

## BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. DO NOT EXCEED FIVE PAGES.

NAME: Hayes, Susan

eRA COMMONS USER NAME (credential, e.g., agency login): HayesS

POSITION TITLE: Postdoctoral Fellow

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Start Date MM/YYYY	Completion Date MM/YYYY	FIELD OF STUDY
Wake Forest University	BS	08/2009	05/2013	Engineering
Georgetown University	PHD	08/2013	05/2019	Molecular Biology
Michigan State University	Postdoctoral Fellow	09/2019	Present	Bioinformatics/Immunology

### A. Personal Statement

My academic training and research experience have provided me with an excellent background in multiple biological disciplines including molecular biology, microbiology, biochemistry, and genetics. As an undergraduate, I conducted research with Dr. Xavier Factor on the mechanisms of action of a new class of antibiotics. As a predoctoral student with Dr. Tanti Auguri, my research focused on the regulation of transcription in yeast, and I gained expertise in the isolation and biochemical characterization of transcription complexes. I developed a novel protocol for the purification of components of large transcription complexes. I was first author of the initial description of the Most Novel Complex. A subsequent first author publication challenged a key paradigm of transcription elongation and was a featured article in a major journal. During my undergraduate and graduate careers, I received several academic and teaching awards. For my postdoctoral training, I will continue to build on my previous training in transcriptional controls by moving into a mammalian system that will allow me to address additional questions regarding the regulation of differentiation and development. My sponsor Dr. I.M. Creative is an internationally recognized leader in the transcription/chromatin field and has an extensive record of training postdoctoral fellows. The proposed research will provide me with new conceptual and technical training in developmental biology and whole genome analysis. In addition, the proposed training plan outlines a set of career development activities and workshops – e.g. grant writing, public speaking, lab management, and mentoring students – designed to enhance my ability to become an independent investigator. My choice of sponsor, research project, and training will give me a solid foundation to reach my goal of studying developmental diseases in humans. During my second postdoctoral year in Dr. Creative's lab, my father had a severe stroke that eventually ended his life. I was out of the lab for six months dealing with my father's incapacitating illness and end-of-life issues. This hiatus in training reduced my scientific productivity. I am confident this proposed research project and training plan will enhance my scientific portfolio and will help recuperate my scientific productivity. My long-term research goals involve becoming an independent researcher and developing a comprehensive understanding of key developmental pathways and how alterations in gene expression contribute to human disease.

- Hayes S, Schneider K, Chen M, Auguri T. Rapid isolation and characterization of a novel transcription complex in *Saccharomyces cerevisiae* and its role in transcription elongation. *Journal of Cell Biology*. 2016; 128:770.

- Hayes S, Auguri T. A tandem affinity purification tag approach allows for isolation of interacting proteins in *Saccharomyces cerevisiae*. *Proceedings of the National Academy of Sciences of the United States of America*. 2019; 98:151.
- Yao M, Dionne CF, Hayes S, Murray GC. Up-regulation of *Drosophila* innate immunity genes in response to stress. *Science (New York, N.Y.)*. 2020; 304:1754.
- Hayes S, Cascaloo Q, Murray GC. Structural analysis of *Drosophila* Rtc. *Nature*. Forthcoming 2021.

### B. Positions, Scientific Appointments, and Honors

#### Positions and Scientific Appointments

2019 – Present Postdoctoral Researcher, Michigan State University  
 2015 – 2018 Predoctoral Fellowship for Minorities, Ford Foundation  
 2013 – 2019 Graduate Research Assistant, Georgetown University  
 2012 – Present Member, National Society for Bioinformatics and Biotechnology  
 2010 – Present Member, Association for Women in Science  
 2010 – 2012 Engineer, The IBeam Group Program  
 2009 – Present Member, Sigma Xi

#### Honors

2013 B.S. awarded with high honors, Wake Forest University  
 2013 Paula F. Laufenberg Award for best senior project in the Department of Engineering, Wake Forest University  
 2013 STAR award for public service in engineering, The IBeam Group  
 2010 – 2011 Scholarship, National Merit Scholarship Program  
 2009 – 2011 Scholarship, Daughters of Hawaii Society

### C. Contributions to Science

- Early Career:** My early career contributions were focused on applying my knowledge of structural engineering to improving the design and integrity of tensile structures. More specifically, I worked with a team of engineers at the IBeam Group to develop concrete with a higher tensile strength that could be utilized in large structures such as suspension bridges. My particular role in the project was to identify candidate polymers, determine the ultimate tensile strength of these polymers, and make recommendations as to which polymer would afford concrete the most structural integrity under various stresses.
  - Hayes S, Janessa AJ. Redesigning the Golden Gate bridge. *National Undergraduate Symposium on Science and Engineering*; 2011; Baltimore, MD.
  - Lorentson C, Hayes S, Sauer N, Mehta S. Use of high-tensile concrete in cantilevered structures. *J Applied Engineering*. 2012; 63:413.
- Graduate Career:** My graduate research contributions focused on transcriptional gene regulation in *Saccharomyces cerevisiae*. Results from my research were highly relevant as they provided new details into the workings of complex biological systems and allowed for further extrapolations into the development of certain diseases and their progression. I originally developed a novel protocol for the purification of components of large protein complexes. A subsequent publication, in which I isolated and characterized a long sought-after transcription complex, challenged a key paradigm of transcription elongation and was a featured article in a major journal.
  - Hayes S, Schneider K, Chen M, Auguri T. Rapid isolation and characterization of the most novel transcription complex in *Saccharomyces cerevisiae* and its role in transcription elongation. *CSHL Meeting on Mechanisms of Eukaryotic Transcription*; 2015 August; Cold Spring Harbor, NY.
  - Hayes S, Schneider K, Chen M, Auguri T. Rapid isolation and characterization of a novel transcription complex in *Saccharomyces cerevisiae* and its role in transcription elongation. *Journal of Cell Biology*. 2016; 128:770.

# Recommendation Letters

- Who to ask:
  - People you **know** will write strong letters
  - People who you say will collaborate
  - People for whom it would be weird if you didn't ask them for a letter (e.g, for postdoc, should probably have Ph.D. advisor)
  - Need to ask well in advance plan to share parts of research plan or specific aims page.

\*Your sponsor(s) cannot be a letter writer

# Sponsor(s) and Co-Sponsor(s)

- A lot of info is required; give plenty of time
  - Biosketch (form pages but Sponsor must make it about past training experience)
  - Sponsor/co-sponsor Statement (6 page limit):
    - Research support available (some institutes)
    - Training history; may want a co- if junior faculty.
    - Training plan, environment, facilities
      - Make sure it is not “generic”; prove individual attention and good sponsor-student relationship
      - Make sure it lines up with your stated goals
    - Number of current trainees
    - Qualifications and Potential of Trainee: Goals should parallel Trainee’s Goals.

# Prepare a Timeline for Submission

- Check Dates

## Due Dates

The Key Dates section of funding opportunities lists specific due dates. Many opportunities indicate [Standard Due Dates](#) apply.

Standard Application Due Dates (when applicable)			Review and Award Cycles		
New	Renewal, Resubmission, Revision as Allowed	AIDS and AIDS Related Grant Applications	Scientific Merit Review	Advisory Council Review	Earliest Start Date
April 8	April 8	May 7	June - July	August or October	September or December
August 8	August 8	September 7	October - November	January	April
December 8	December 8	January 7	February - March	May	July

- Work Backwards to Create Realistic Goals
- Seek Advice early on written proposal

# Evaluating NIH Fellowship Applications: Reviewer Guidance

The goal of fellowship review is to provide expert advice to the NIH regarding the likelihood that the fellowship will enhance the candidate's potential for, and commitment to, a productive independent scientific research career in a health-related field, in order to inform funding decisions. Fellowship review has two important outputs:

1. The written evaluation (*for all applications*)
2. The impact score, and, if applicable, the percentile (*for discussed applications only*)

## Who is the audience for your critique?

The primary audience for your critique is the funding NIH Institute/Center's Advisory Council and staff. An important secondary audience is the other reviewers who will be reading your critique to understand what drove your assessment of overall impact. While the candidate will also read your critique, this should not diminish your candor, nor lead you to make recommendations for improving the application. However, reviewers should be mindful that the individual fellowship is intended to help develop the next generation of research scientists; hurtful or discouraging language is always inappropriate.

## General guidance for writing effective critiques:

- Remember that a fellowship award is a training award and NOT a research award. Judge the application for its ability to make a strong impact on the candidate's research training and scientific career development.

## Review criteria:

### SCORED REVIEW CRITERION 1: CANDIDATE'S PREPAREDNESS AND POTENTIAL

- Evaluate the candidate's preparedness for the proposed 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.

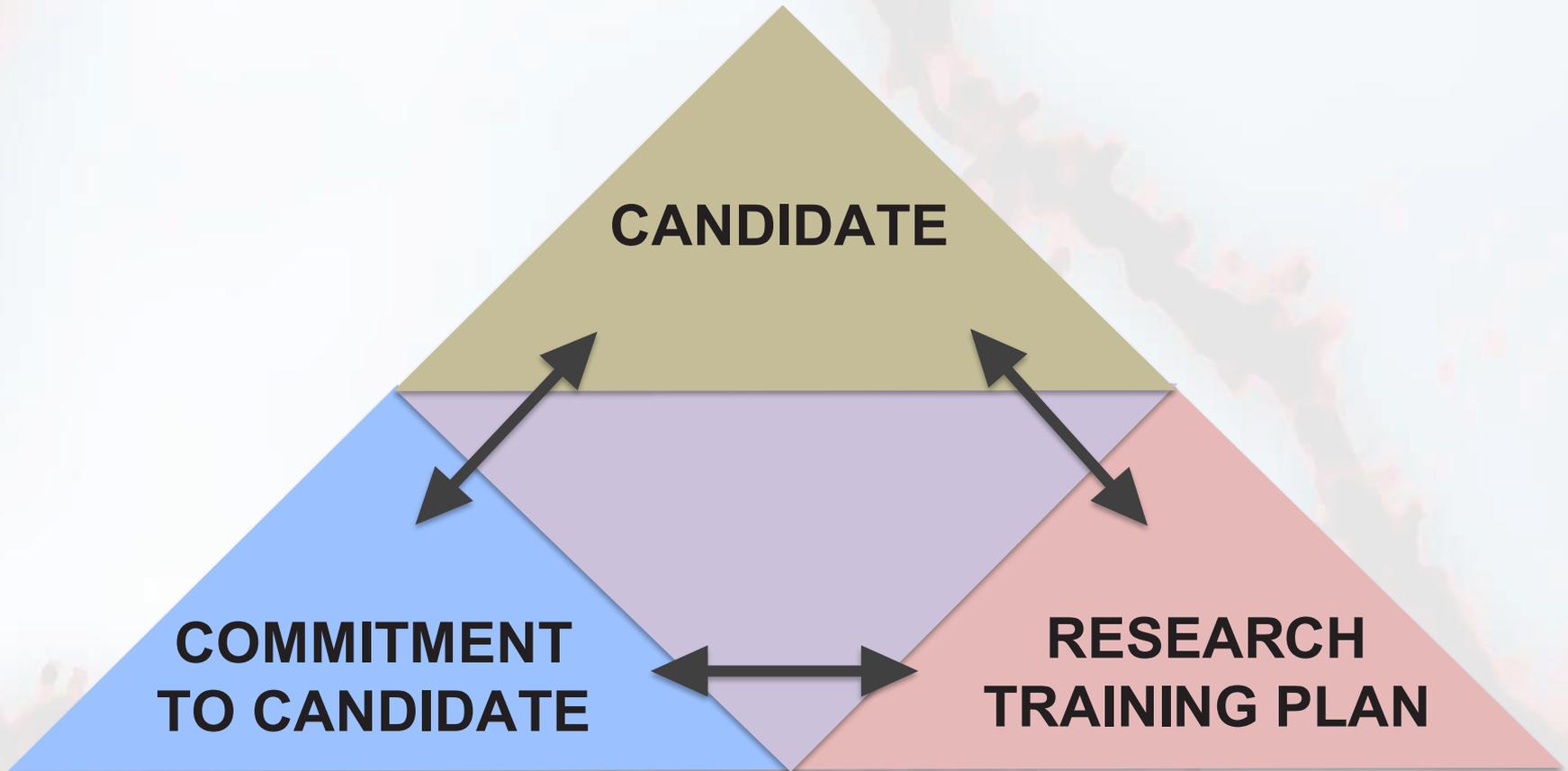
### SCORED REVIEW CRITERION 2: RESEARCH TRAINING PLAN

- 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.
- Assess 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.

### SCORED 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.

# Funding Opportunity Purpose



### **Guidance on overall impact assessment:**

- Emphasize the candidate's potential for a productive career, the candidate's need for the proposed training, and the degree to which the research project and training plan, the sponsor(s), and the environment will satisfy those needs.
- Explain how you balanced or weighted the criteria listed below (scored review criteria and additional review criteria) to arrive at your overall impact score.

### **Review criteria:**

#### **SCORED REVIEW CRITERION 1: CANDIDATE'S PREPAREDNESS AND POTENTIAL**

- Evaluate the candidate's preparedness for the proposed 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.

#### **SCORED 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.
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