



# THE NIH: AN OVERVIEW

A Webinar Presented by Hanover Research

George Washington University

January 15, 2025

# WEBINAR LOGISTICS

## RUNTIME



~55 minutes plus additional time for moderated Q&A

## Q&A



Ask questions at the end of today's presentation.

## RECORDING & SLIDES



All attendees will receive a copy of the recording, including the slides.

# TODAY'S PRESENTER



**MELISSA A. CORNISH**

MANAGING GRANTS CONSULTANT



## TOTAL WINS

**>\$90** MILLION

**3** KIDS, **1** DOG

## AGENCY EXPERTISE



plus, other federal agencies (AHRQ, HRSA) and non-federal foundations

- MSPH (Health Policy)
- Joined Hanover in 2017
- Health policy background
- Health services research, STEM programming, clinical research

### On a personal note...my favorites are:



MY CHILDREN – MOST DAYS 😊



THE COAST — RAIN OR SHINE



TRYING NEW RECIPES



LISTENING TO AUDIO BOOKS



## TODAY'S AGENDA

- ✓ A basic introduction to the NIH
- ✓ Key funding mechanisms and finding funding opportunities
- ✓ Preparing a competitive proposal
- ✓ Proposal review process
- ✓ Resources to leverage

An aerial, grayscale photograph of a city street intersection. The image is overlaid with a semi-transparent white grid and various geometric shapes, including rectangles and lines, which appear to be technical or architectural drawings. The text "A BASIC INTRODUCTION" is centered in the image in a bold, white, sans-serif font. The background shows a street with crosswalks, a car, and some buildings.

# A BASIC INTRODUCTION

# LARGEST FUNDER OF MEDICAL RESEARCH IN U.S.

## NIH BY THE NUMBERS:



~50,000  
COMPETITIVE  
APPLICATIONS



300,000+  
RESEARCHERS



2,500+  
INSTITUTIONS  
GLOBALLY

# NEARLY \$48B INVESTED ANNUALLY IN MEDICAL RESEARCH

MISSION: “To seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and disability.”

- Discoveries, innovative research, and applications
- Scientific human and physical resources
- Knowledge base in medical and associated sciences
- Highest level of scientific integrity, public accountability, and social responsibility in the conduct of science

Source: <https://www.nih.gov/about-nih/what-we-do/mission-goals>

# NIH ORGANIZATION BY INSTITUTE/CENTER/OFFICE (ICO)

27 ICOs

Generally organized by either medical condition (NCI) or body part (NEI).



Source:

[https://oma.od.nih.gov/IC\\_Organization\\_Chart/NIH%20Organizational%20Chart.pdf](https://oma.od.nih.gov/IC_Organization_Chart/NIH%20Organizational%20Chart.pdf)



The background is a dark, moody composition. The lower half shows a close-up of a wooden surface with a prominent, wavy grain pattern. The upper half features a puzzle with several pieces already interlocked, while others are scattered nearby, suggesting a process of assembly or completion. The overall lighting is low, creating a sense of depth and focus on the textures and the central text.


# KEY FUNDING MECHANISMS

# FUNDING MECHANISM TYPES

	Types of Mechanisms	Purpose
	R series	Research
	K series	Career Development
	T & F series	Research Training and Fellowships
	P series	Program Project and Center Grants
	U series	Cooperative Agreements
	Other	Resource Grants, Trans-NIH Programs, etc.

Detailed descriptions: [http://grants.nih.gov/grants/funding/funding\\_program.htm](http://grants.nih.gov/grants/funding/funding_program.htm)

# COMMON RESEARCH (R) AWARDS



R01	R03	R21	R35
Supports a discrete research project	Supports pilot studies, secondary analyses, and other contained projects	Supports exploratory and developmental projects	Supports lab rather than projects
No award limit but typically \$500K per year (direct costs)	Up to \$50K/year (direct costs)	Up to \$275K total (direct costs)	Vary by Institute or stage
3-5 years	1-2 years and non-renewable	1-2 years	Usually up to 5 years, maybe 7
Prelim data expected	Prelim data variable	No prelim data required	NIGMS, NHLBI only

Activity codes: <https://grants.nih.gov/funding/activity-codes>

# EARLY CAREER DESIGNATIONS

Designation	Eligibility	Priority
<p><b>Early Stage Investigator (ESI)</b></p>	<p>A Program Director / Principal Investigator (PD/PI) who has completed their terminal research degree or end of post-graduate clinical training, whichever date is later, within the past 10 years and who has not previously <u>competed successfully</u> as PD/PI for a substantial NIH independent research award.</p> <p>**A list of NIH grants that a PD/PI can hold and still be considered an ESI can be found at <a href="https://grants.nih.gov/policy/early-investigators/list-smaller-grants.htm">https://grants.nih.gov/policy/early-investigators/list-smaller-grants.htm</a></p>	<p>ESI applications with meritorious scores will be prioritized for funding.</p>
<p><b>New Investigator (NI)</b></p>	<p>An investigator who has not previously received substantial, independent funding from NIH.</p>	<p>NIH ICOs fund New Investigators according to the ICOs' programmatic and strategic interests.</p>

Source: <https://grants.nih.gov/policy/early-stage/index.htm>  
<https://grants.nih.gov/grants/esi-status.pdf>

# NOTICES OF FUNDING OPPORTUNITIES (NOFOs)

## PARENT ANNOUNCEMENTS

- Allows applicants to submit an investigator-initiated application for specific activity code (unsolicited research)
- Centrally managed, broadly issued, most NIH ICOs participate
- Usually on-going (every 3 years)

## PROGRAM ANNOUNCEMENTS (PAs)

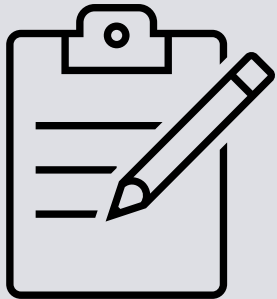
- Issued by one or more ICO to highlight areas of scientific interest
- Encourage applications for a new/on-going program
- PAs have set-aside funds; PARs have special receipt, referral and/or review considerations

## REQUESTS FOR APPLICATIONS (RFAs)

- Issued by one or more ICO to highlight well-defined areas of scientific interest to accomplish specific program objectives
- Uses set-aside funds
- Typically has single due date; ICO usually convenes review panel

Formerly called “FOAs”

# NOTICES OF SPECIAL INTEREST (NOSI)



- Not a type of NOFO – but an expanded opportunity
- Published in the [\*NIH Guide for Grants and Contracts\*](#)
- Statement of scientific priorities that encourages investigators to apply using a particular NOFO
  - Typically a parent NOFO
  - Consists of a topic of concern or area of scientific interest for the sponsoring institute.
- These notices designate existing NOFOs to use for application submission.
- Sample NOSIs – NIEHS:  
<https://www.niehs.nih.gov/funding/grants/announcements/special-interest>

# OPPORTUNITY DATABASE: GRANTS.GOV

[WWW.GRANTS.GOV](http://WWW.GRANTS.GOV)

[Search Tips](#) [Export Results](#)

## BASIC SEARCH CRITERIA:

Keyword(s):

Opportunity Number:

Assistance Listings:

[Search](#)

SORT BY:

Relevance (Descending)

DATE RANGE:

All Available

1 2 3 4 5 6 ... NEXT >

## OPPORTUNITY STATUS:

- Forecasted (7)
- Posted (208)
- Closed (51)
- Archived (3,170)

## FUNDING INSTRUMENT TYPE: —

- All Funding Instruments
- Cooperative Agreement (1)
- Grant (214)

Opportunity Number	Opportunity Title	Agency	Opportunity Status	Posted Date	Close Date
<a href="#">NOT-NR-24-011</a>	Notice of Intent to Publish a Funding Opportunity Announcement for Advancing Health Equity through Interventions to Prevent and Address Housing Instability (R01 Clinical Trial Optional)	HHS-NIH11	Forecasted	09/26/2024	
<a href="#">PAR-25-267</a>	NCCIH Multi-Site Feasibility Clinical Trials of Mind and Body Interventions (R01 Clinical Trial Required)	HHS-NIH11	Posted	11/21/2024	11/17/2026
<a href="#">NOT-NR-25-006</a>	Notice of Intent to Publish a Funding Opportunity Announcement for NINR Areas of Emphasis for Research to Optimize Health for All (R01 Clinical Trial Optional)	HHS-NIH11	Forecasted	11/25/2024	
<a href="#">PAR-25-177</a>	Full-Scale Hybrid Effectiveness-Implementation Trials for Mental Health Interventions (R01 - Clinical Trial Required)	HHS-NIH11	Posted	11/26/2024	10/15/2027
<a href="#">RFA-AT-25-002</a>	Limited Competition: Advancing the Science of Complementary and Integrative Health Approaches to Improve Maternal Health Outcomes (R01 Clinical Trial	HHS-NIH11	Posted	01/08/2025	05/05/2025



# NIH GRANTS & FUNDING

# SPONSOR DATABASE

## [GRANTS.NIH.GOV](https://grants.nih.gov)

### NIH Guide for Grants and Contracts

The NIH Guide for Grants and Contracts is NIH's official publication of notices of grant policies, guidelines, and funding opportunities. We publish daily and issue a [Weekly Table of Contents](#).

[Subscribe](#) to receive updates!

Explore the search features in a [quick video](#).

Find a Fit for Your Research: NIH  
Institutes, Centers, and Offices

[Learn More](#)

Funding Opportunities

Other Notices

[Export Results](#) [Share Results](#) [Save Results](#)

Active Opportunities  Expired Opportunities  Include Notices of Special Interest (NOSIs)

#### Funding Category ⓘ

Select... | v

[Learn more about Funding Categories](#)

#### Funding Organization(s) ⓘ

Select... | v

Issuing Organization Only

#### Keyword ⓘ

Quick Search

Title Only

Advanced Search

[Clear Filters](#)



Funding Opportunities

Other Notices

Export Results

Share Results

Save Results

Active Notices  Expired Notices  Include Notices of Special Interest (NOSIs)

Notice Type

Notice of Special Interest (NOSI) x

Funding Organization(s)

NIH x

Issuing Organization Only

Keyword

climate

Title Only

Advanced Search

Clear Filters

Active Notices

Include NOSIs

Notice of Special Interest (NOSI)

NIH

climate

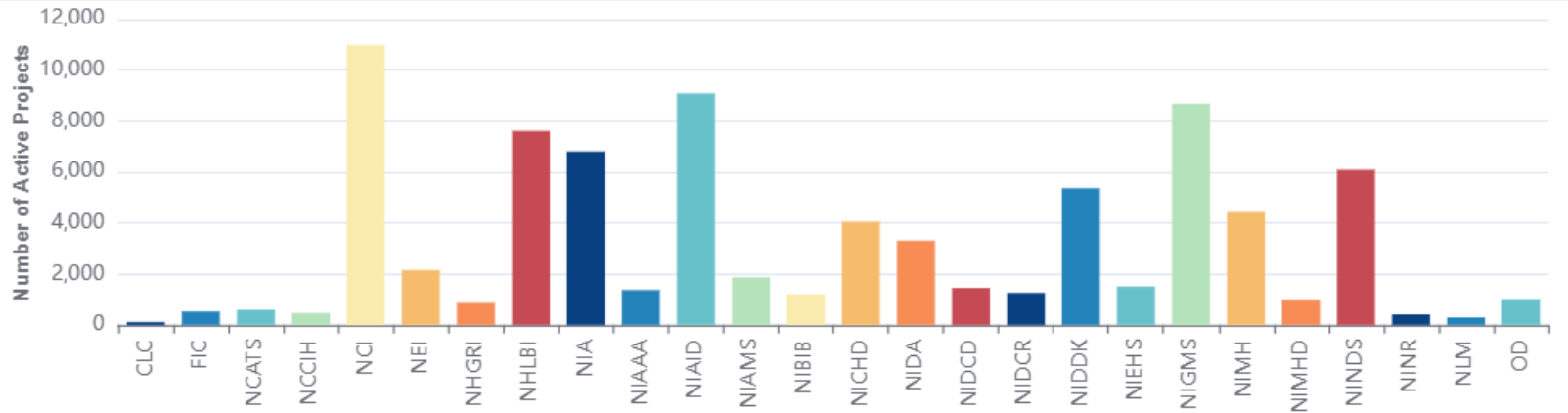
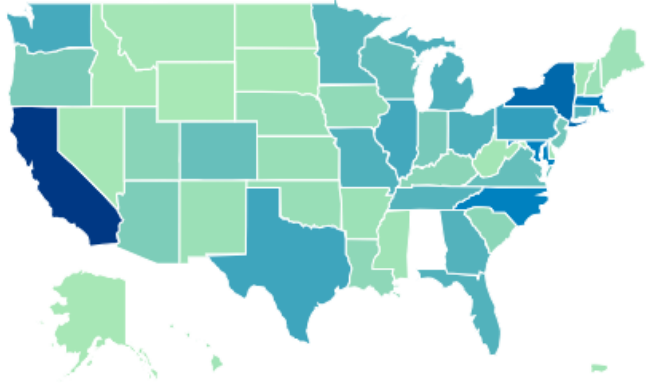
Displaying: 3

Title	Notice Number	Issuing Organization	Participating Organization(s)	Release Date	Expiration Date
Notice of Special Interest (NOSI): <b>Climate</b> Change and Health	<a href="#">NOT-ES-22-006</a>	NIEHS	FIC, NCI, NHGRI, NHLBI, NIA, NIAID, NIAMS, NICHD, NIDCR, NIMH, NIMHD, NINDS, NINR, NLM, ODP	June 1, 2022	May 8, 2025
Notice of Special Interest (NOSI): Implementation Science for <b>Climate</b> Change and Health	<a href="#">NOT-CA-25-003</a>	NCI	NIEHS, NINR, FIC, NCCIH, NHLBI, NIA, NIAID, NIAMS, NICHD, NIMH, NIMHD, ODP	November 14, 2024	January 8, 2028
Notice of Special Interest (NOSI): Innovative Technologies for Research on <b>Climate</b> Change and Human Health	<a href="#">NOT-ES-24-002</a>	NIEHS	NCATS, NCCIH, NEI, NHLBI, NIA, NIAID, NIAMS, NLM	February 15, 2024	April 6, 2025



# PREPARING A COMPETITIVE PROPOSAL

# NIH REPORT AND REPORTER



## Advanced Projects Search

Fiscal Year ?

Active Projects

Current FY is 2025

Principal Investigator (PI) ?

PI Names or Profile IDs, semicolon ";" separated

Organization ?

Enter at least 3 characters to search

Agency/Institute/Center ?

Project Number/Application ID ?

Admin  Funding

Format: 5R01CA012345-04/ 8515397, semicolon ";" separated

Reset

Search

[Looking for additional search fields?](#) Click here to view All Search Fields ↗

## Publications Search

Find publications associated with extramural or intramural funded projects using PubMed IDs (PMID) or PubMed Central IDs (PMC ID).

[Get Started >](#)

## Matchmaker

Find potential Program Officials, ICs, and review panels for your research.

[Get Started >](#)

# USING MATCHMAKER

NIH RePORT > RePORTER

FAQs API EXPORTER (Beta) Sign In

## Matchmaker Results

Top 500 Projects

Export

Search

Projects Program Officials

**Filters**

- Active Projects
- Fiscal Years
- Agencies
- Activity Codes
- Program Officials
- Study Sections

**Institute/Center**

Institute/Center	Projects
NIAID	330
NIGMS	40
NHLBI	30
NIDCR	20
NEI	15
NIAMS	10

**Activity Code**

Activity Code	Projects
R01	170
R21	90
U19	40
ZIA	35
P01	25
R44	15

**Study Section**

Study Section	Projects
BACP	24
CRFS	15
DDR	10
PCMB	9
HIBP	9
VMD	8

T Act Project	Year	Sub	Principal Investigator(s)/ Project Leader(s)	Organization	Fiscal Year	Admin IC	Funding IC	FY Total Cost by IC	Similar Projects	Match
<b>Coxiella burnetii immunobiology, host-pathogen modeling, and countermeasure development</b>										
1ZIAAI001331-02			LONG, CARRIE	NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES	2021	NIAID	NIAID	\$1,027,718	View >	96
<b>Exploiting a cyclic dinucleotide-mediated immune response to reduce the burden of Coxiella burnetii infection</b>										
5R01AI139051-03			GOODMAN, ALAN GABRIEL	WASHINGTON STATE UNIVERSITY	2021	NIAID	NIAID	\$466,870	View >	94
<b>Genetics of Coxiella burnetii</b>										
1ZIAAI000946-18			HEINZEN, ROBERT A	NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES	2021	NIAID	NIAID	\$381,407	View >	90

## When you are ready to begin, prepare thoroughly.

- Read all competition materials, e.g., the NOFO, the NOSI (if applicable), the Application Guide.
- Identify all required application elements. Create a checklist!
- Note required timelines and deadlines.
- Create a grant development plan, including a timeline.
- Start an Aims page draft.
- Create a narrative outline (or “skeleton”).
- Gather required information.
- Reach out to your sponsored programs office to understand their process.

# SAMPLE CHECKLIST

## After reviewing competition parameters, develop a checklist:

- SF 424 Form
- Cover Sheet
- Project Summary/Abstract
- Project Narrative
- PHS 398 Research Plan Form
  - Specific Aims
  - Research Strategy
- Bibliography & References Cited
- Biographical Sketch(es)
- Data Management & Sharing Plan
- Facilities and Other Resources
- Equipment (optional)
- Other Attachments
- Budget
- Budget Justification
- Progress Report Publication List
- Multiple PD/PI Plan (if applicable)
- Consortium/Contractual Arrangements (if applicable)
- Letters of Support
- Resource Sharing Plan
- Authentication of Key Chemical and/or Biological Resources
- Appendix
- Human Subjects and Clinical Trials Information
- Study Records/Delayed Onset
- PHS Assignment Request Form (optional)

# WRITE THE AIMS PAGE & RESEARCH STRATEGY

A. SPECIFIC AIMS - 1 page

## RESEARCH STRATEGY

B. Significance

C. Innovation

D. Approach

6 or 12 pages

Do not add/remove/change the order of these sections.

**Follow the guidelines!**

# KEYS TO SUCCESS

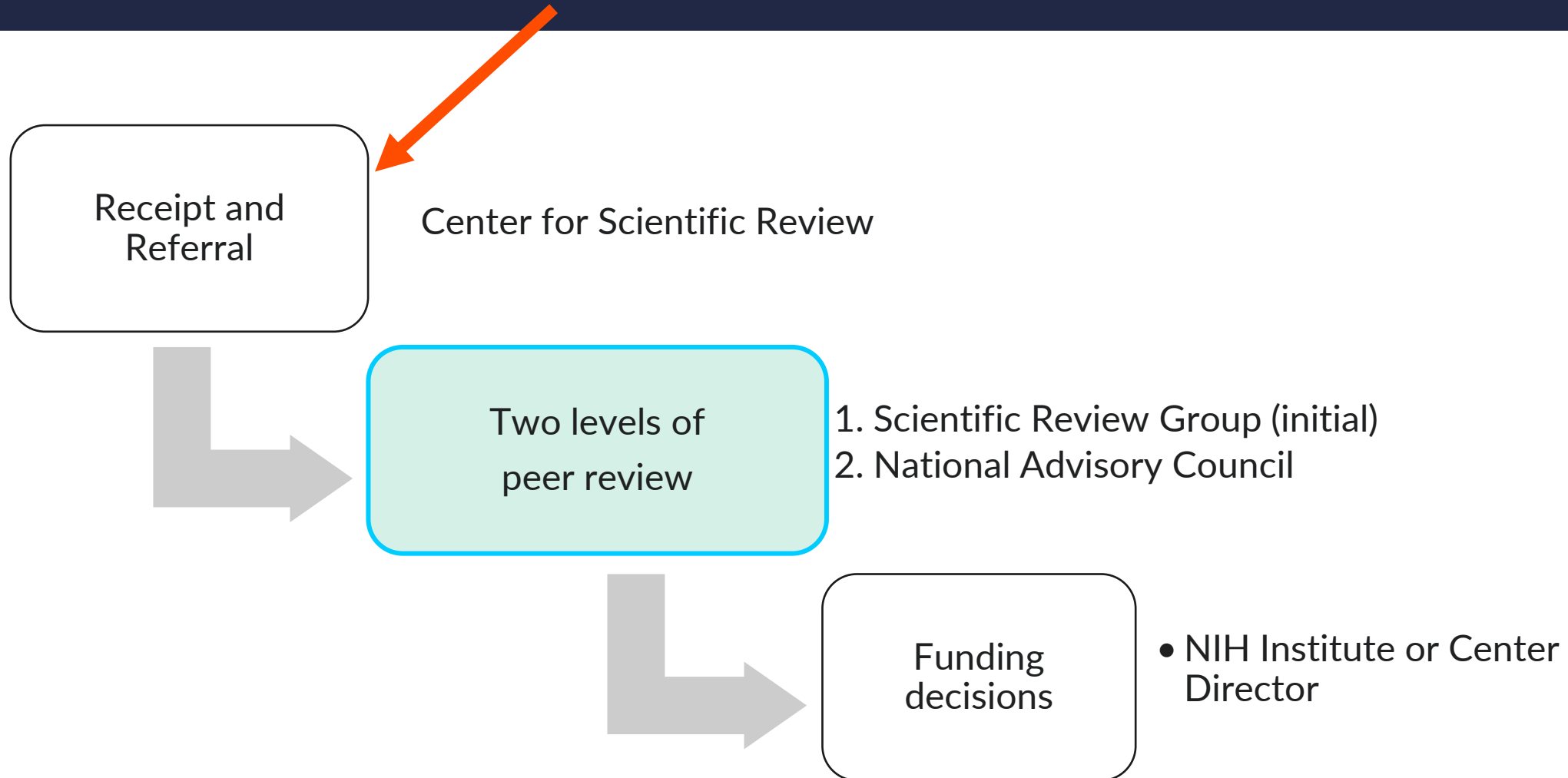
- Talk to a PO about your ideas
- Share an Aims page (if the PO is open to reviewing it)
- Review the additional resources provided throughout this webinar
- Complete a first full draft *at least 6-12* weeks before the deadline
- Get feedback on your draft from others
- Revise, revise, revise
- Submit early, in case you've missed something that can be identified by the sponsor in time for you to correct it
- If your application is not funded, review the summary statement and request a conversation with the PO to discuss it.



An aerial, top-down view of a city street intersection. The image is dark and semi-transparent, serving as a background for the text. The street layout includes crosswalks with white stripes, lane markings, and a central intersection. A car is visible on the right side of the road. The text 'PROPOSAL REVIEW PROCESS' is centered in white, bold, sans-serif font.

# PROPOSAL REVIEW PROCESS

# NIH REVIEW PROCESS: KNOW YOUR AUDIENCE



# CSR ASSISTED REFERRAL TOOL (ART): CHOOSING A STUDY SECTION

## PHS Assignment Request Form

OMB Number: 0925-0001  
Expiration Date: 01/31/2026

Funding Opportunity Number:

Funding Opportunity Title:

### Awarding Component Assignment Suggestions *(optional)*

If you have a suggestion for an awarding component (e.g., NIH Institute/Center) assignment, use the link below to identify the appropriate short abbreviation (e.g., "NCI" for National Cancer Institute) and enter it below in the boxes for "Suggested Awarding Components". All suggestions will be considered; however, not all assignment suggestions can be honored.

Information about Awarding Component can be found here: [https://grants.nih.gov/grants/phs\\_assignment\\_information.htm#AwardingComponents](https://grants.nih.gov/grants/phs_assignment_information.htm#AwardingComponents)

Suggested Awarding Components:

### Study Section Assignment Suggestions *(optional)*

If you have a suggestion for a study section assignment, use the link below to identify a study section(s). Enter the short abbreviation for that study section in the boxes for "Suggested Study Sections." Remove all hyphens, parentheses, and spaces. All suggestions will be considered; however, not all assignment suggestions can be honored.

For example, enter "CAMP" if you wish to suggest assignment to the NIH Cancer Molecular Pathobiology study section, or "ZRG1HDMR" if you wish to suggest assignment to the NIH Healthcare Delivery and Methodologies SBIR/STTR panel for informatics.

Information about Study Sections can be found here: [https://grants.nih.gov/grants/phs\\_assignment\\_information.htm#StudySection](https://grants.nih.gov/grants/phs_assignment_information.htm#StudySection)

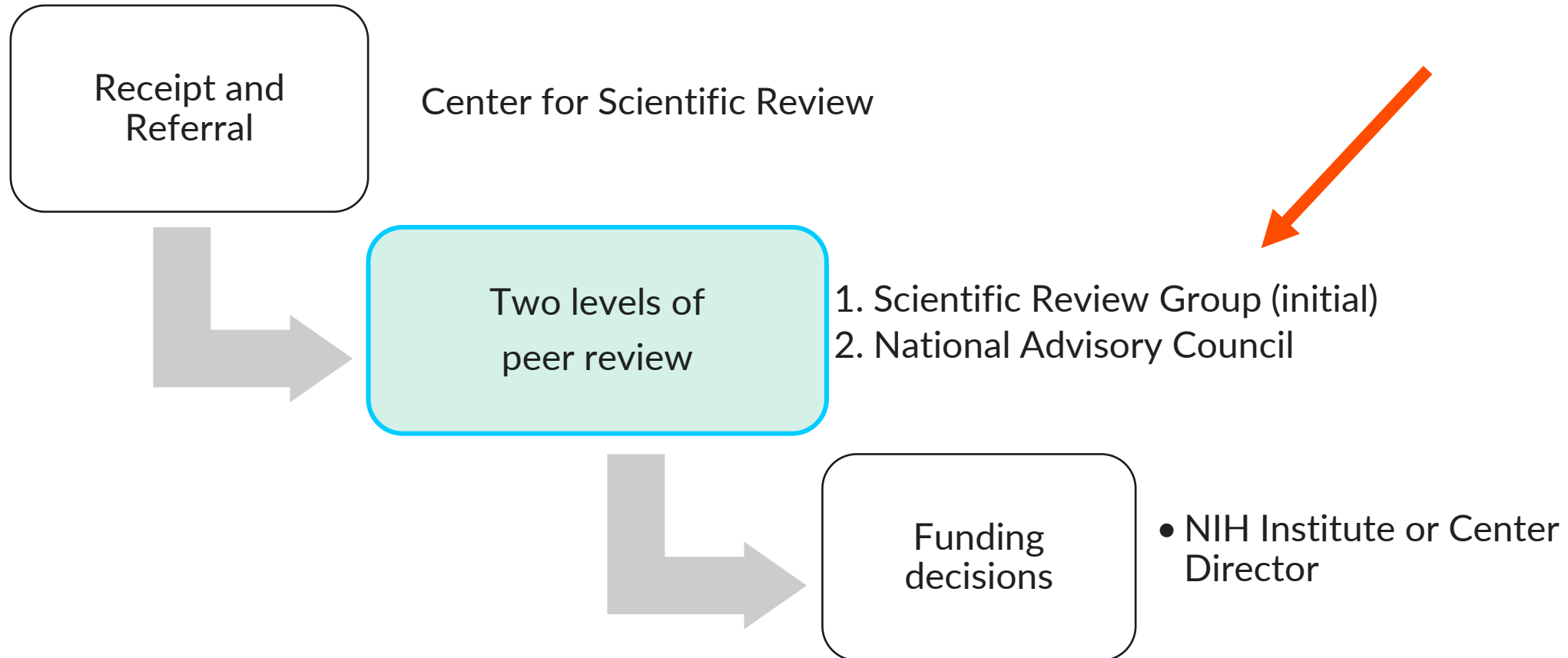
Suggested Study Sections:

Each entry is limited to 20 characters

### Rationale for assignment suggestions *(optional)*

Entry is limited to 1000 characters

# NIH REVIEW PROCESS: KNOW YOUR AUDIENCE



# NIH REVIEW PROCESS: KNOW YOUR AUDIENCE

- **First Level of Review:**

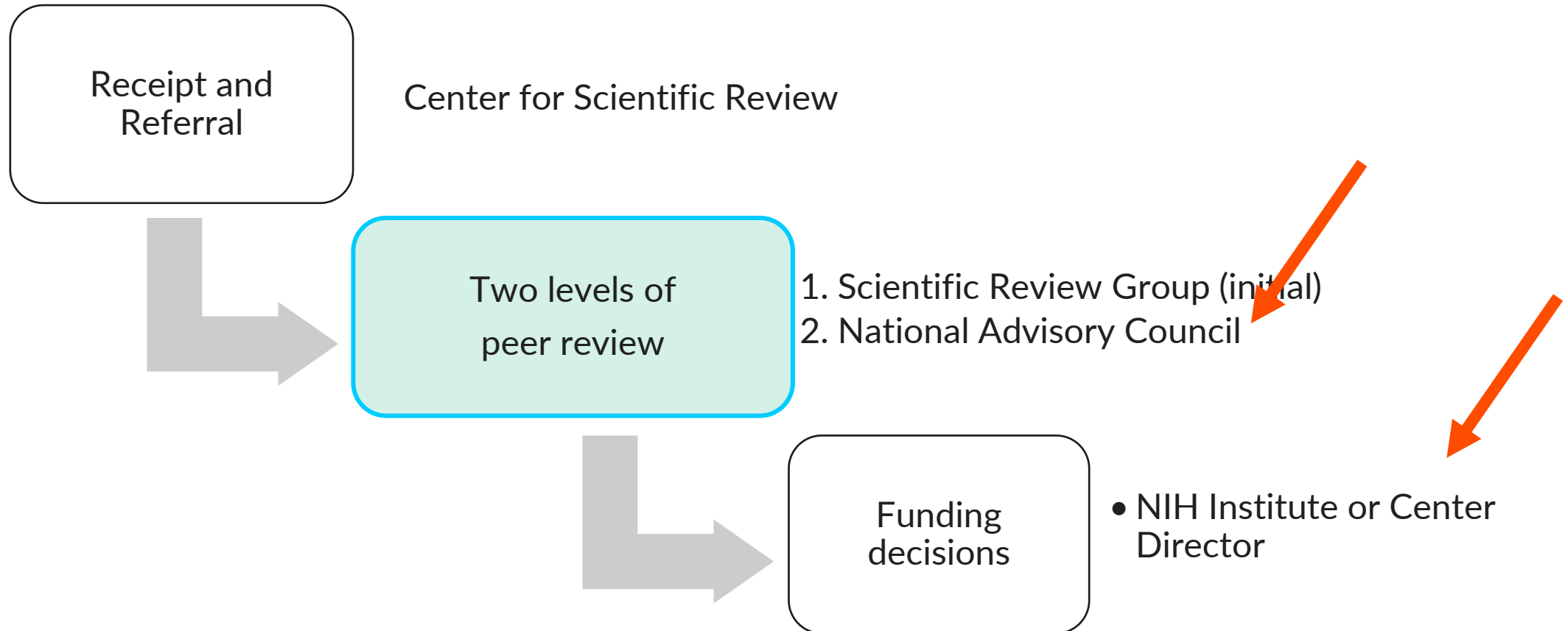
- **Scientific Review Group (SRG)**
- Managed by NIH Scientific Review Officers (SROs)
- Composed primarily of non-federal scientists with relevant expertise
- Can be requested by the PI
- All proposals individually reviewed by [typically] 3-4 reviewers
- Top ~40-50% are typically discussed in the group

Significance – scored  
Investigator(s) – scored  
Innovation – scored  
Approach – scored  
Environment – scored  
  
+ few additional review criteria, e.g., human subjects

## **Second Level of Review: IC Advisory Council/Board**

- Composed of both scientific and public representatives
- Do not strictly fund based on SRG scores

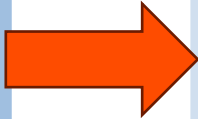
# NIH REVIEW PROCESS: KNOW YOUR AUDIENCE



# SIMPLIFIED REVIEW FRAMEWORK FOR MOST RPGS

## Current

Significance – scored  
Investigator(s) – scored  
Innovation – scored  
Approach – scored  
Environment – scored



## Simplified Framework (for RPGs submitted on or after 1/25/2025)

(all considered in Overall Impact Score)

### Factor 1: Importance of the Research

Significance, Innovation  
Scored 1-9

### Factor 2: Rigor and Feasibility

Approach (*also includes Inclusions for Human Subjects and Clinical Trial Study Timeline*)  
Scored 1-9

### Factor 3: Expertise and Resources

Investigators, Environment  
Evaluated as appropriate or additional expertise / resources needed; gaps require explanation  
No individual score

The background is a dark, moody composition. The top half shows a wooden surface with a prominent grain pattern. Below this, a puzzle is partially assembled, with several pieces missing, creating a jagged, irregular shape. The overall lighting is low, emphasizing the textures of the wood and the interlocking edges of the puzzle pieces.

**MORE RESOURCES TO LEVERAGE**





## OPEN MIKE

*Helping connect you with the NIH perspective, and helping connect us with yours.*

### [A Brief Look Back at 2024, With a Glimpse Into 2025](#)

By Mike Lauer

January 7, 2025

As we start 2025, we are taking a brief look back at 2024 and our efforts to support and inform the extramural biomedical research community on NIH grant policies and initiatives.

[Biomedical Research Workforce](#), [Funding data](#), [Grants policy](#)

Comments



Dr. Michael Lauer is NIH's Deputy Director for Extramural Research, serving as the principal scientific leader and advisor to the NIH Director on the NIH extramural research program.

[Introducing the New NIH Public Access Policy](#)

<https://nexus.od.nih.gov/all/category/open-mike/>

# EARLY CAREER REVIEWER PROGRAM



- Gain reviewer experience
- An opportunity for qualified individuals to get to know the review process by serving as a reviewer
- Enables individuals to become more competitive as applicants themselves

[Early Career Reviewer \(ECR\) Program | NIH Center for Scientific Review](#)

## To apply:

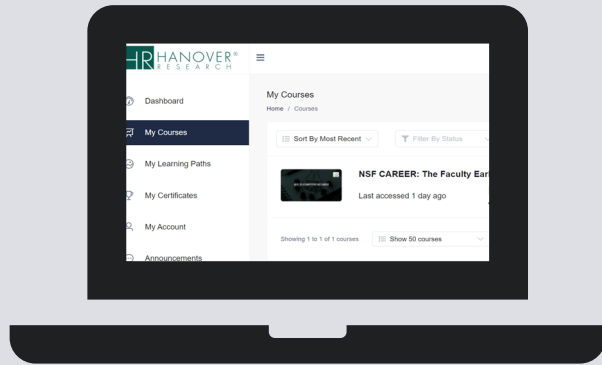
- A full and up-to-date CV is needed (no biosketch)
- A list of terms that describes your areas of scientific expertise
- NIH Commons ID
- Up to 4 CSR study sections that match your expertise
- ECR application
  
- If accepted, then you are invited to stay in the program until your qualifications no longer meet the eligibility criteria
  
- Updates to your qualifications are needed annually.

# A FEW MORE...

- New to the NIH: <https://grants.nih.gov/new-to-nih>
- Data Management and Sharing Policy: <https://sharing.nih.gov/data-management-and-sharing-policy>
- Center for Scientific Review Infographic: [https://public.csr.nih.gov/sites/default/files/2022-06/CSR\\_ResourceInfographic\\_v21.pdf](https://public.csr.nih.gov/sites/default/files/2022-06/CSR_ResourceInfographic_v21.pdf)
- NIH Research Training and Career Development: Research Career Goal toward Becoming a Physician-Scientist: <https://researchtraining.nih.gov/infographics/physician-scientist>
- Changes Coming to NIH Applications and Peer Review in 2025: <https://grants.nih.gov/policy-and-compliance/changes-coming-2025>
- Sample applications: <https://www.niaid.nih.gov/grants-contracts/sample-applications>



# GRANTS LEARNING CENTER



- **Build your own grant-seeking capacity with flexible training for faculty**

## KEY FEATURES

Hanover's **Grants Learning Center** offers on-demand grantsmanship training designed specifically for higher education professionals. Online training, resources, and tools can be accessed at anytime from anywhere.



**Universal** best practices to guide grant seekers from concept development to funder cultivation.



**Self-paced** modules with step-by-step guidance to develop compelling proposals



**Interactive** exercises, videos, and resources to navigate the process



**Insider** guidance for opportunities like NSF CAREER and NIH R-series mechanisms and general grantseeking resources through the 9 Grants Essential courses.

Register at <https://glc.hanoverresearch.com/register>  
Use password: **George**



**Audrey Ngeow**

*Content Director*

4401 Wilson Blvd, Arlington, VA 22203  
[www.hanoverresearch.com](http://www.hanoverresearch.com)



Hanover's **Grant Rant** podcast is available on Apple's iTunes for a variety of grant-seeking topics.

**E:** [angeow@hanoverresearch.com](mailto:angeow@hanoverresearch.com)

**P:** 202-793-8706