

Strategies for Success with NIH Funding



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National Institutes of Health
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NIAID

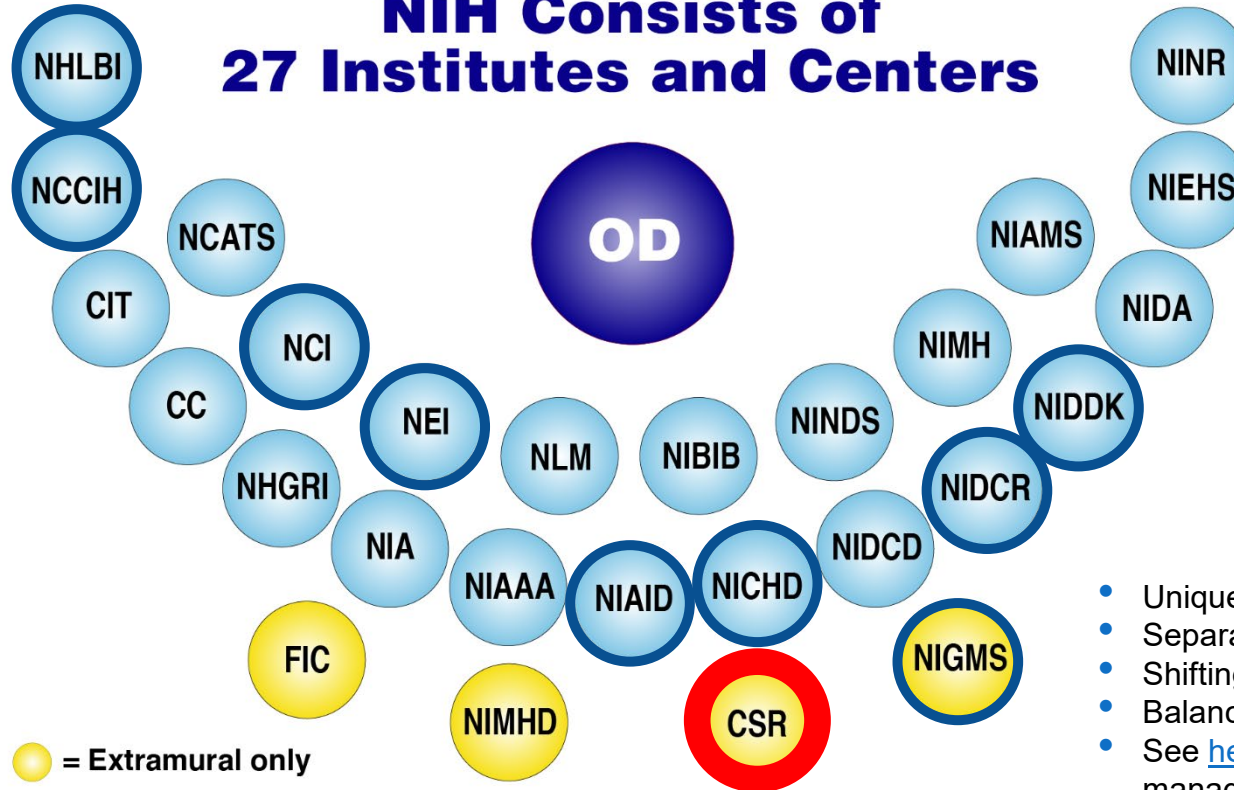
NIH 101

Demystifying the NIH grant process

- Introduction to NIH
- Finding a fit for your research
- How to improve your NIH application
- Free support for your research

NIH Organization

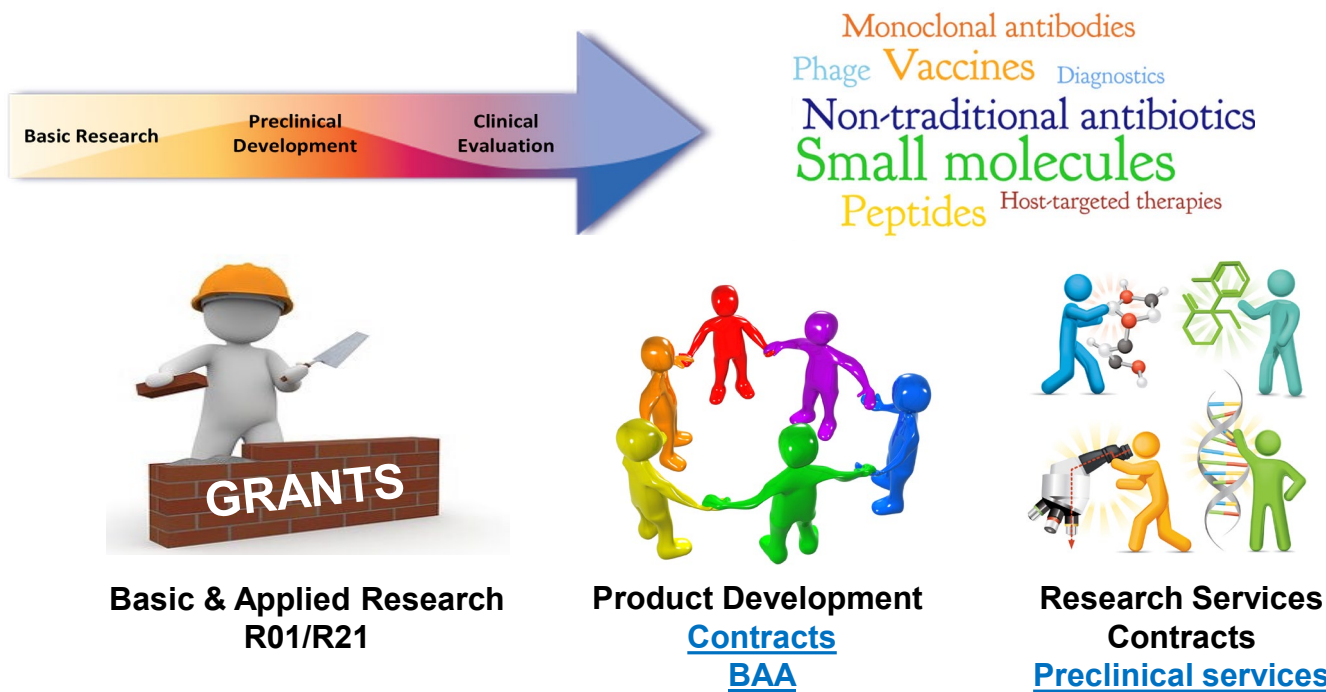
NIH Consists of 27 Institutes and Centers



 = Extramural only

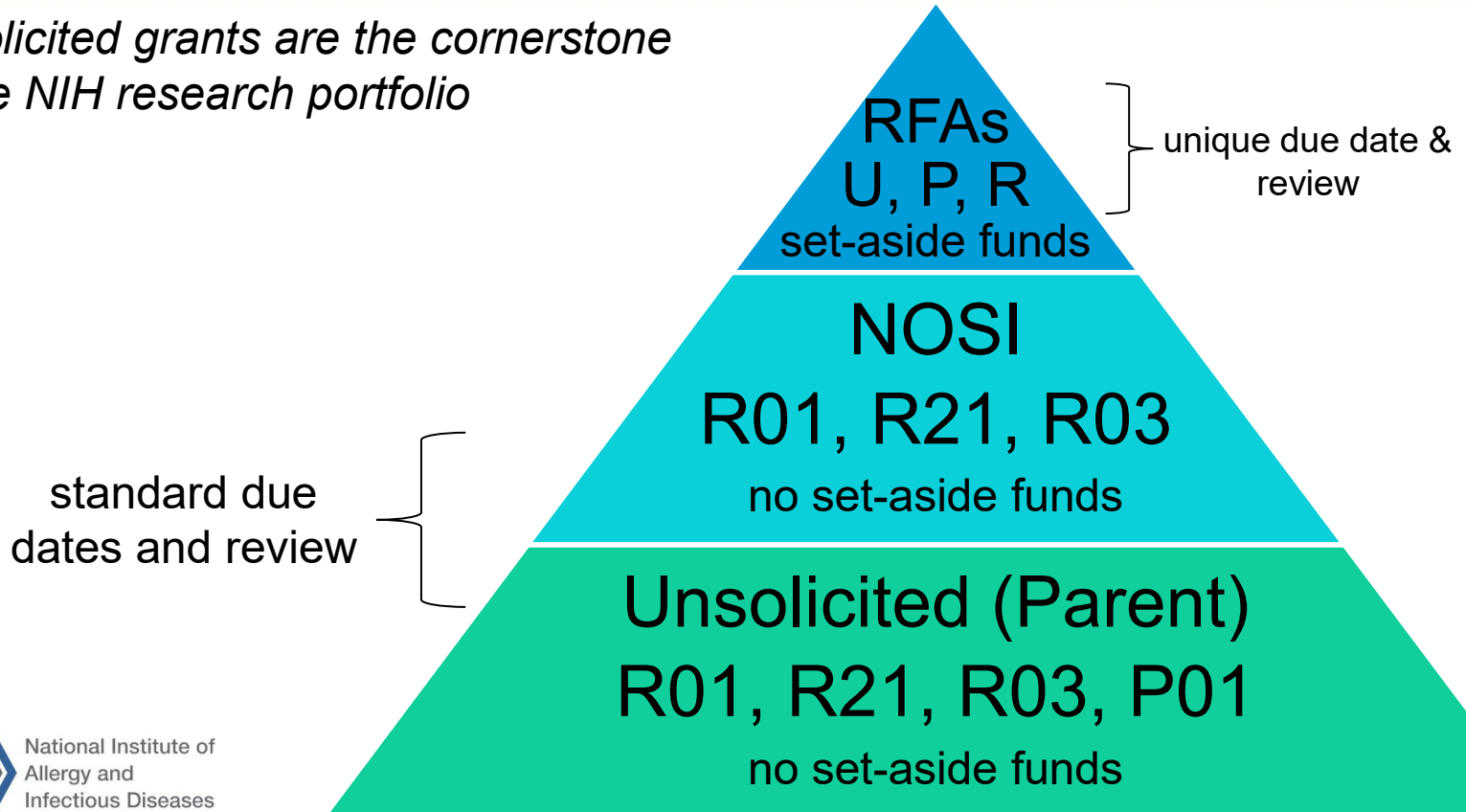
- Unique missions
- Separate budgets
- Shifting priorities
- Balance portfolios differently
- See [here](#) for NIAID financial management plan

Funding and resources available from NIAID



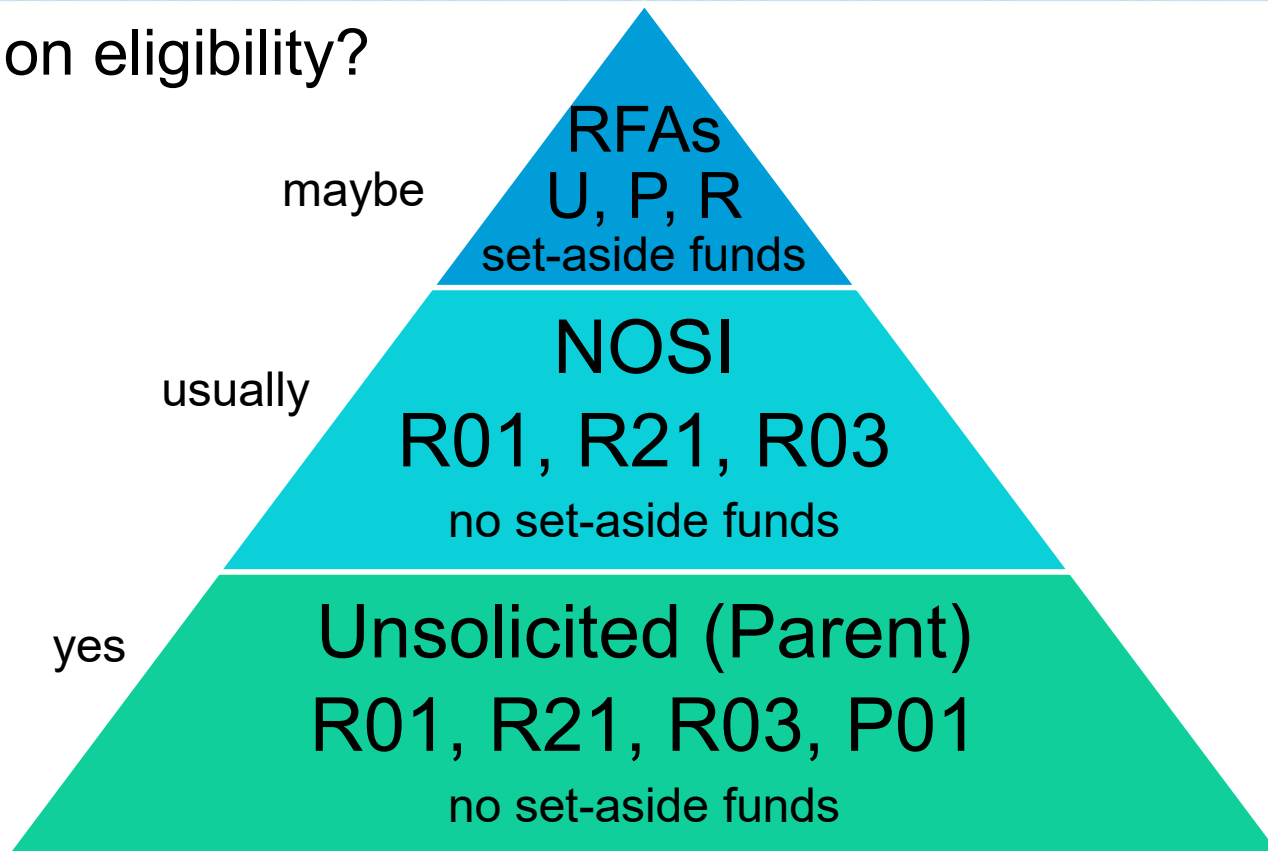
Types of NIH funding mechanisms

Unsolicited grants are the cornerstone of the NIH research portfolio



Types of NIH funding mechanisms

Foreign institution eligibility?



Types of NIH funding mechanisms

R01

Most commonly used grant program

- Utilized by all Institutes, special consideration for New Investigators
- Up to 5 years; \$500K direct costs/year; renewable
- [PA-20-185](#) (no IICT), [PA-20-183](#) (clinical trial required)

R21

Exploratory/Developmental award

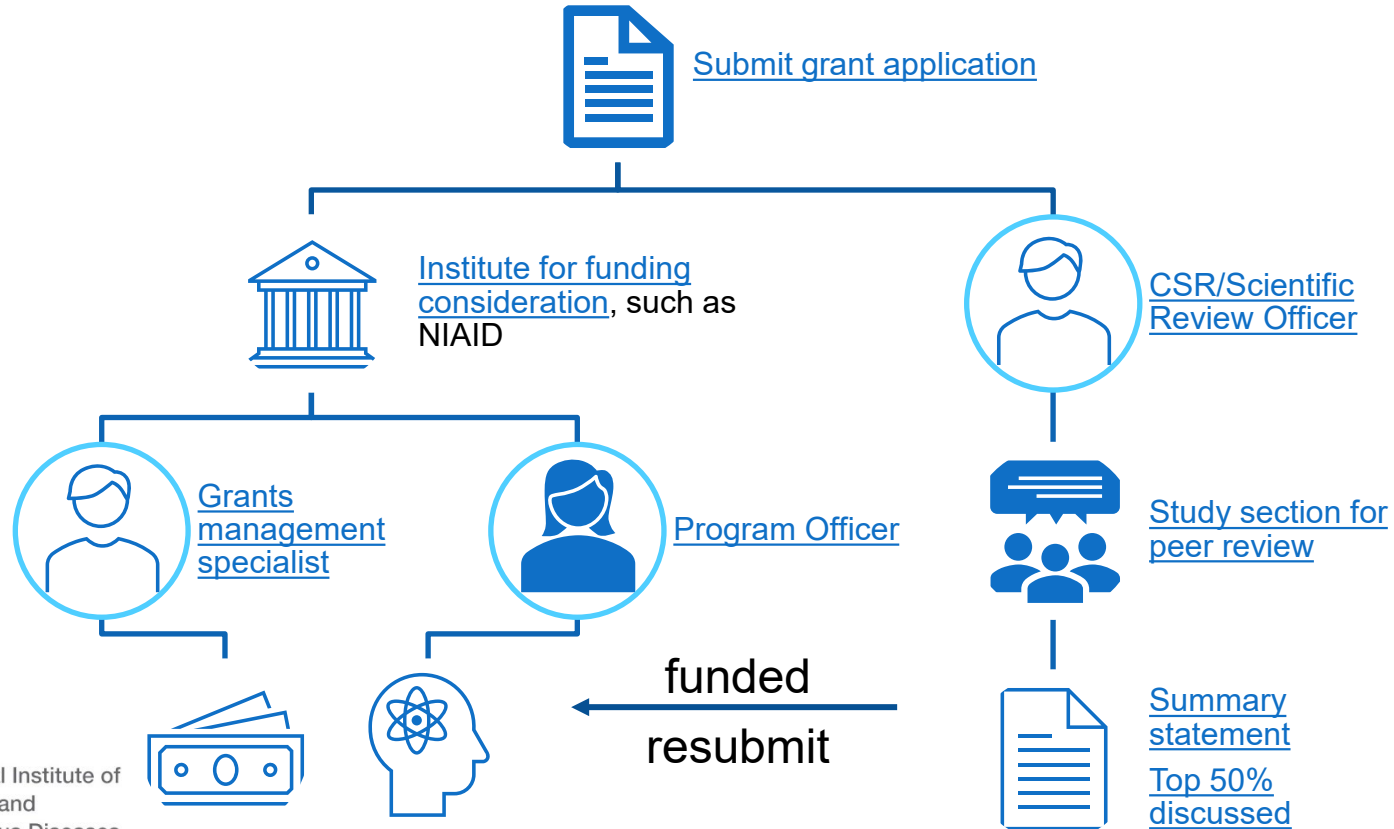
- Support for early stages of project
- 2 years; \$275K total direct costs; not renewable
- [PA-20-195](#), ...look carefully in Part 1 of NOFO

R03

Small grant program

- Pilot, feasibility studies, collection of data, secondary analysis
- 2 years; \$50K per year⁷; not renewable
- Utilized by most Institutes, [PA-20-200](#)

Flow chart of NIH grant application



NIH grant applications...finding a fit

The screenshot shows the NIH RePORT website homepage. At the top, there is a navigation bar with links for Research, Organizations, Workforce, Funding, Reports, Links and Data, About, Contact, and FAQ. The main header features the NIH logo and the text 'RePORT Research Portfolio Online Reporting Tools'. Below this is a 'RePORTER Quick Search' section with a search input field and a 'Search' button. A note below the search field says 'Enter just about anything to search: text, PI names, project numbers, fiscal year, agency, etc.'. There are five main navigation buttons: 'RePORTER' (with a magnifying glass icon), 'Matchmaker' (with a network icon), 'Awards by Location' (with a globe icon), 'Categorical Spending' (with a dollar sign icon), and 'NIH Data Book' (with a pie chart icon). Below the navigation buttons, there is a 'Welcome to Research Portfolio Online Reporting Tools (RePORT)' section. To the right of this is a 'Spotlight' section titled 'NIH COVID-19 Research' with a sub-header 'Explore NIH's comprehensive summary of ongoing COVID-19 research, including funding, clinical trials, and more.'

- [Research Portfolio Online Reporting Tools \(RePORT\)](#)
- [NIH Grants and Funding](#)
- [Sign up for NIH funding news](#)
- [Cleared Council Concepts](#)

Example of Approved Council Concepts

Table of Contents

Fiscal Year (FY) 2024 Division of Microbiology and Infectious Diseases (DMID) Concepts

- [Notice of Special Interest \(NOSI\) – Advancing Biomedical Research in Pulmonary Non-Tuberculous Mycobacterial \(NTM\) Infections](#)
- [Notice of Special Interest \(NOSI\) – Promoting Research and Development of Vaccines Against Enteric Viruses](#)
- [Notice of Special Interest \(NOSI\) – Understanding Immune Evasion in Tickborne Diseases](#)
- [Notice of Special Interest \(NOSI\) – Understanding Mucosal Immunity Against Enteric Eukaryotic Pathogens to Advance Discovery of New Interventions](#)
- [Notice of Special Interest \(NOSI\) – Using Targeted Degradation of Protein and Non-Protein Targets for the Development of Novel Anti-Infectives](#)

FY 2025 DMID Concepts

- [Research Tools for Difficult to Culture Eukaryotic Pathogens](#)
- [Centers for Research in Emerging Infectious Diseases \(CREID\) Network](#)
- [Centers for Research in Emerging Infectious Diseases \(CREID\) Network Coordination Center](#)

NIH grant applications...getting started

ABOUT GRANTS

- Grants Process Overview**
- Get Started
- How to Apply
- Application Referral and Review
- Pre-Award and Post-Award Processes
- Forms Library
- Information For

Grants Process Overview

Learn about the steps required for an application to proceed from planning and submission through to award and closeout. Drill down to learn more about each step in the process for guidance that can maximize your understanding of the grants process and help you submit a successful grant application.

VIDEO: Fundamentals of the NIH Grants Process
Grants Process Overview (PDF, 908 KB)

Get Started

Learn the Basics | **Plan Your Approach**

Learn how NIH approaches grant funding and how your research fits into our research portfolio. Make sure to explore the different types of grant programs offered at NIH, along with the eligibility requirements.

Find and understand funding opportunities, ensure your research is original, understand your organization's internal procedures, and prepare to write a competitive application.

Apply for Grant Funding

Prepare to Apply | **Write Application** | **Submit**

Ensure all registrations are in place, get familiar with requirements, and choose which of the available submission options you will use.
[> 6-8 Weeks Before Submission]

Obtain and complete application forms following provided instructions. Find information on developing your budget and formatting attachments.

Submit your application to NIH. Track and view your application to verify receipt and to confirm that the assembled document correctly reflects your submission.
[Submit early!]

Application Referral & Review

- [NIH web resources](#)
- [NIAID web resources](#)
- [Sample applications](#)
- [Unsolicited research](#)
- [Individual Fellowships](#)
- [Career transition awards](#)

Preparing an NIH grant application



- **Learn NIH institutes' priorities & goals**
- **Know the literature and the gaps you're filling**
- **Propose your best ideas with passion and commitment**
- **Be familiar with the NIH application and review process**
- **Learn what reviewers look for in applications**
- **Be familiar with the criteria that affect Overall Impact**

Know how to decode the “NOFO”

Part 1. Overview Information

Participating Organization(s)	National Institutes of Health (NIH)
Components of Participating Organizations	National Institute of Allergy and Infectious Diseases (NIAID)
Funding Opportunity Title	Novel approaches to understand and diagnose coccidioidomycosis (Vaccines and Therapeutics) (Vaccines and Therapeutics Allowed)
Activity Code	R01 Research Project Grant
Announcement Type	New
Related Notices	<ul style="list-style-type: none">December 19, 2018 - Notice of Changes to PA-19-082
Funding Opportunity Announcement (FOA) Number	PA-19-082

Table of Contents

Part 1. Overview Information

Key Dates

Part 2. Full Text of Announcement

Section I. Funding Opportunity Description

Section II. Award Information

Section III. Eligibility Information

Section IV. Application and Submission Information

Section V. Application Review Information

Section VI. Award Administration Information

Section VII. Agency Contacts

Section VIII. Other Information

[Tour an annotated FOA](#)

International applications



- Many NIH funding mechanisms allow foreign applicants

- Check Section III of NOFO for eligibility



- Foreign justification is required and discussed after application is scored

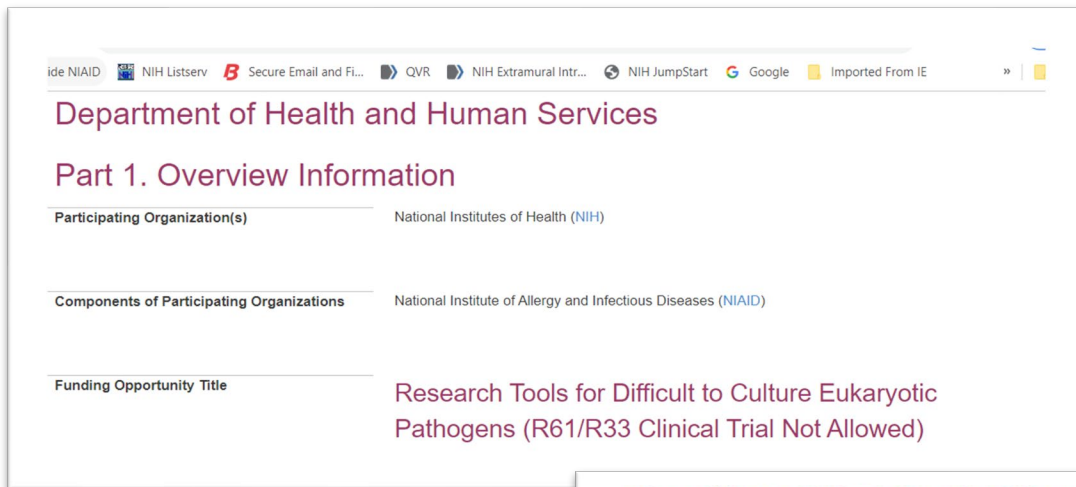
- US collaborators are not required



- Collaborative team should support the science proposed



International Eligibility



The screenshot shows a web browser window with the following content:

- Browser tabs: NIH Listserv, Secure Email and Fl..., QVR, NIH Extramural Intr..., NIH JumpStart, Google, Imported From IE
- Page Title: Department of Health and Human Services
- Section: Part 1. Overview Information
- Participating Organization(s): National Institutes of Health (NIH)
- Components of Participating Organizations: National Institute of Allergy and Infectious Diseases (NIAID)
- Funding Opportunity Title: Research Tools for Difficult to Culture Eukaryotic Pathogens (R61/R33 Clinical Trial Not Allowed)

Section III. Eligibility Information

Foreign Institutions

Non-domestic (non-U.S.) Entities (Foreign Institutions) **are** eligible to apply.

Non-domestic (non-U.S.) components of U.S. Organizations **are** eligible to apply.

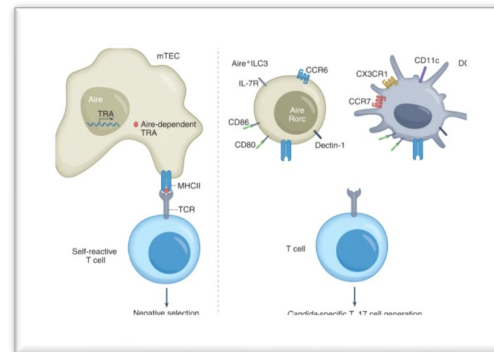
Foreign components, as *defined in the NIH Grants Policy Statement*, **are** allowed.

Required Registrations

Preparing an NIH application

Specific Aims: put your best foot forward

- Include objective and/or hypothesis
- If application is not hypothesis-driven, explain why the work is important
- Describe the gap your application will fill
- Aims should be inter-related without being too co-dependent
- Be realistic: do not propose too much for the time available



Preparing an application

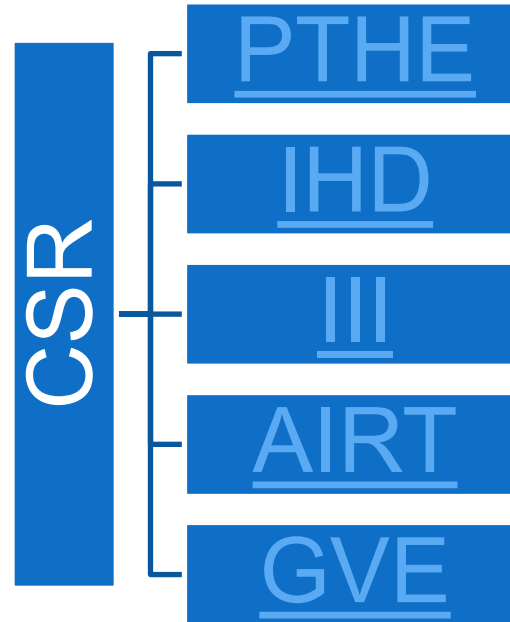
Facilitate the Review

- Have clear organization and headers
- Make it visually appealing and readable
- Figures, tables, diagrams, flow-charts of adequate resolution
- Cross-reference, label, number everything
- Watch out for typographical errors
- Tips and tricks at [Center for Scientific Review \(CSR\)](#)

Preparing an application

Study Sections:

- most applications reviewed at CSR
- applications assigned based on area of science
- RFAs are generally reviewed by sponsoring institute
- [Tools](#) to find a study section
- Use [PHS assignment request form](#)



Frequent reviewer comments

What are some common obstacles encountered in study section?

Too
ambitious

Prioritization

Alternative
approaches

Fishing
expedition

Not
responsive

Understand the review process

Overall Impact and the Five Review Criteria

- **Assessment of the likelihood for the project to exert a sustained, powerful influence on the research field(s) involved**
- ***Likelihood* (i.e., probability) is primarily derived from the investigator(s), approach and environment criteria**
- ***Sustained powerful influence* is primarily derived from the significance and innovation criteria**

For due dates on/after Jan 2025 Simplified Peer Review Framework

- **3 factors will be considered, 2 will be scored and will include approach, significance, innovation**

Understand the NIH fiscal year

Activity Codes	Program Description	Cycle I Due Date	Cycle II Due Date	Cycle III Due Date
R01 <i>new</i>	Research Grants	February 5	June 5	October 5
R03, R21, R33, R21/R33, R34, R36, U34, UH2, UH3, UH2/UH3 <i>new</i>	Other Research Grants and Cooperative Agreements	February 16	June 16	October 16
R01 <i>renewal, resubmission, revision</i>	Research Grants	March 5	July 5	November 5
R03, R21, R33, R21/R33, R34, R36, U34, UH2, UH3, UH2/UH3 <i>renewal, resubmission, revision</i>	Other Research Grants and Cooperative Agreements	March 16	July 16	November 16

Understand the NIH fiscal year

Submission to funding timeline

Review cycle	NIAID Council	Submission to funding timeline												Fiscal Year											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep			
cycle I	September	Due dates				Review					possible payment														
cycle II	January				Due dates					Review				possible payment											
cycle III	June									Due dates				Review			possible payment								

- Maximum time ~1.5 years
- Minimum time ~6 months
- Multiple submissions are usually required
- Some Institutes [post paylines](#)

Communicating with program officers

Do program officers welcome communications from applicants?

YES!

- determine if research fits the Institute's mission
- find out about possible funding opportunities
- inquire about end of year opportunities
- discuss review and decode summary statement

Communicating with program officers

Summary statements and the 7 stages of grief

be open to constructive criticism

be prepared to go through summary statement point by point

Shock*

• Initial paralysis at hearing the bad news.

Denial

• Trying to avoid the inevitable.

Anger

• Frustrated outpouring of bottled-up emotion.

Bargaining

• Seeking in vain for a way out.

Depression

• Final realization of the inevitable.

Testing*

• Seeking realistic solutions.

Acceptance

• Finally finding the way forward.

Additional support for researchers



www.niaid.nih.gov/research/resources

www.niaid.nih.gov/research/therapeutic-development-services

Resources for Researchers

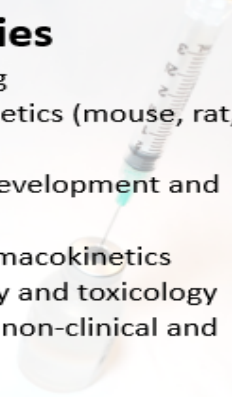
Synthesis & Manufacturing

- Medicinal chemistry synthesis
- Small molecule manufacturing
- Vaccine manufacturing
- Biopharmaceutical manufacturing (for products containing monoclonal antibodies, recombinant proteins, peptides, and nucleic acids)
- Diagnostics reagent production or procurement



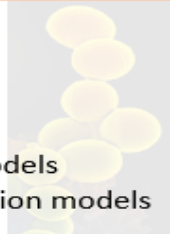
Non-clinical Studies

- *In vitro* ADMET profiling
- Screening pharmacokinetics (mouse, rat, hamster)
- Bioanalytical method development and qualification
- Non-GLP and GLP pharmacokinetics
- Non-GLP and GLP safety and toxicology
- Assay development for non-clinical and clinical samples
- Immunogenicity



Efficacy Studies

- *In vitro* MIC
- Hollow fiber infection models
- Validated animal infection models
- Developing new animal infection models



Documentation and planning support

- Product development plan production
- Support for regulatory activities and documentation



Interested in PCS? Email: erin.zeituni@nih.gov, erica.raterman@nih.gov Interested in more information on PCS and contacts? See: <https://www.niaid.nih.gov/about/dmid-preclinical-clinical-services-contacts>

Additional support for researchers

b | e | i RESOURCES

SUPPORTING INFECTIOUS DISEASE RESEARCH



FungiDB

Release 61
15 Dec 2022

Fungal & Oomycete Informatics Resources



NT
CF

NIH
TETRAMER
CORE
FACILITY

Vaccine Adjuvant Compendium



IMMPORT
Shared Data

Your site for searching and downloading
shared data



IMMUNE EPITOPE DATABASE
AND ANALYSIS RESOURCE

Thank You



Contact Information:

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