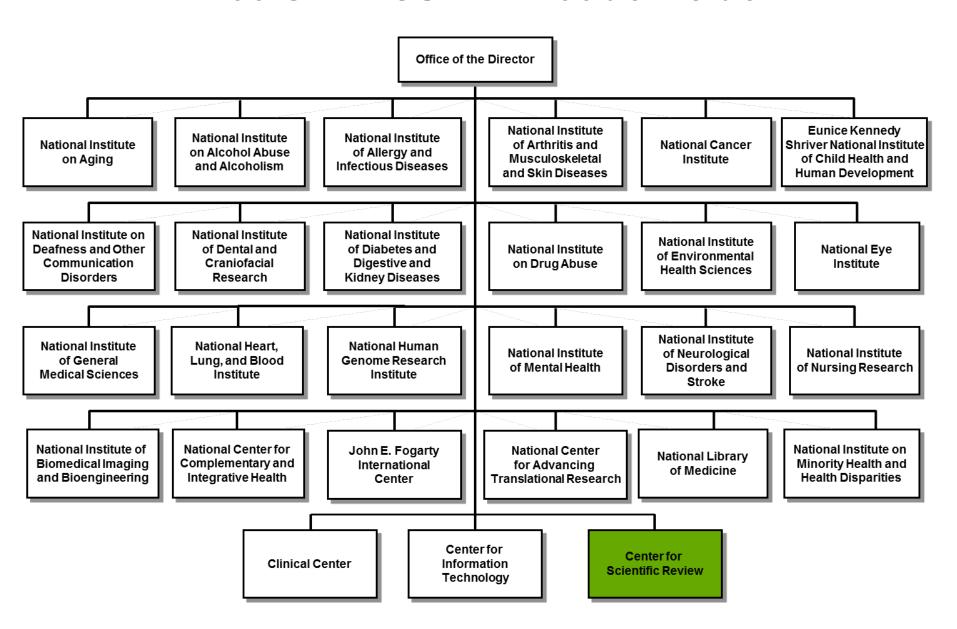


## **NIH Center for Scientific Review**

David E. Pollio, PhD MSW Scientific Review Officer Center for Scientific Review

April 9, 2024

## What is NIH CSR? What do we do?



## **CSR's Mission**



To ensure that NIH grant applications receive fair, independent, expert, and timely scientific reviews - free from inappropriate influences - so NIH can fund the most promising research.

Achieved through the invaluable contributions of over 19,000 volunteer reviewers every year, in over 1200 review meetings!



# What does CSR do with applications?

- Receives all NIH grant applications
- Assigns applications to one or more NIH Institute or Center for potential funding
- Assigns applications to CSR or NIH Institute review groups
- Conducts initial scientific merit review of most NIH research applications



Data for calendar year 2020; See NIH Data Book for more information: https://report.nih.gov/nihdatabook/category/12



## Two Levels of Peer Review

Evaluation of scientific/technical Merit

Scientific Review Group (Study Section)

Non-federal scientists & experts

Funding decision based on IC priorities

Council Review NIH Institute/Center

Appointed members of scientific community and public representatives

https://grants.nih.gov/grants/peerreview22713webv2.pdf

# Scientific Review Officers (SRO)

- Analyze the content of each application and check for completeness.
- Document and manage conflicts of interest.
- Recruit qualified reviewers to SRGs based on scientific and technical qualifications and other considerations.
- Assign applications to reviewers for critique preparation and assignment of individual criterion scores.
- Attend and oversee administrative and regulatory aspects of peer review meetings.
- Prepare summary statements for all applications reviewed.

https://public.csr.nih.gov/ForReviewers/MeetingOverview/RoleofSRO



## **Grants Process Overview**



#### **GET STARTED**

#### Learn the Basics

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.

#### Plan Your Approach

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



#### APPLY FOR GRANT FUNDING

#### Prepare to Apply

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]

## Write Application

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

#### Submit

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

#### Receipt & Referral

Applications compliant with NIH policies are assigned to an NIH Institute or Center and to a scientific review group for evaluation of scientific and technical merit.

[MONTH 1 AFTER SUBMISSION]

#### Peer Review

Applications undergo a rigorous two-stage review. The first level is carried out primarily by non-federal scientists, while the second is performed by Advisory Councils or Boards.

[MONTHS 2-8 AFTER SUBMISSION]



## PRE-AWARD & AWARD PROCESS

#### Pre-Award & Award Process

Applicants who have scored well submit "just-in-time" information. Final administrative reviews are conducted and Notice of Award documents are sent to successful applicants.

[MONTHS 7-10 AFTER SUBMISSION]

#### Post-Award Monitoring & Reporting

NIH monitors grants carefully. Active monitoring includes reports and correspondence from the grantee, audit reports, site visits, and other information.

[DURATION OF AWARD]

# **Preparation**

- Clearly state rationale and design of proposed investigation
- Present an organized, lucid write-up
- Clear organization-headers
- Readable and well-designed figures & tables
- Read and follow instructions
- Adequate resolution, font
- Minimize abbreviations and acronyms
- Complete & current references, numbers, labels, forms
- Proofread no typos



## **Realistic Goals**

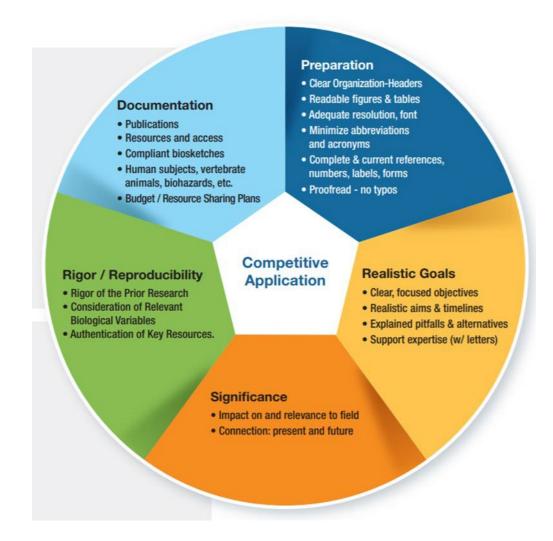
- Clear, focused objectives
- Realistic aims & timelines
- Explained pitfalls & alternatives
- Support expertise (w/letters)

# **Significance**

- Impact on and relevance to field
- Connection: present and future



# What Makes a Competitive Application?





# **Selected Lessons from Study Section Chairs**



- Know your audience and pitch your application to it
- Don't assume too much
- Seek guidance from NIH staff (Program Officers and Scientific Review Officers
- The key word is persistence





#### Insider's Guide to Peer Review for Applicants



#### NIH Center for Scientific Review

To help new and established applicants submit better applications, CSR asked current and recent study section chairs to share their personal insights on producing a highly competitive NIH grant application. They responded with great enthusiasm.

Don't jump too fast into writing your application: Since the most critical parts are the summary and specific aims sections, write a one-page summary page with specific aims first and share it with someone who is experienced, has their own funding or-ideally—someone who has served on a study section. If you can't wow them, start again and use the time you saved to come up with some fresh ideas.

Propose something significant: It is a real turn-off to read an application that is basically a re-hash of a previous project with a new issue. The same goes for "me too" research. Identify an area of current controversy or importance within your field. Make it something that would interest more people than you and your coworkers. Will it be important to clinicians or other investigators? Are you dealing with key questions or controversies in the field?



Good ideas don't always sell themselves: Tell me why it's important up front in the background section, and i'll be ready to roll. Tell me what's known and what isn't known and how, after you complete your studies, you'll move the field forward or answer important questions. A lot of people really are unaware of how absolutely important it is to tell the reviewer from the beginning why it's worth doing. If you're seeking an incremental advance over what's known, it's essential to justify it.

# **Insider's Guide to Peer Review for Applicants**

**Advice from CSR Study Section Chairs** 

https://public.csr.nih.gov/ForReviewers/MeetingOverview/ InsidersGuideReviewers



# CSR's Division of Receipt and Referral

## Determines if your application is

- On time
- Formatted correctly
- Complete
- Compliant with NIH policy

## Assigns your application to

- Institute(s) or Center for funding consideration
- Review group

Resources: <u>CSR – Submission and Assignment</u>

Email: <a href="mailto:csrdrr@mail.nih.gov">csrdrr@mail.nih.gov</a>





## **How to Find a Study Section**







#### **Review Branches**

Review activities of the Center for Scientific Review (CSR) are organized into Review Branches (RBs). Each RB represents a cluster of study sections around a general scientific area. Applications generally are assigned first to an RB, and then to a specific study section within that RB for evaluation of scientific merit.

#### Chartered Study Sections

Reviews most investigator-initiated research applications (R01, R03, R21, R15, and Ks). Chartered study sections are those with both regular and temporary members.

## Small Business Innovation Research and Technology Transfer Research Study Sections

Recurring special emphasis panels (SEPs) review Small Business Innovation Research (SBIR) and Technology Transfer Research applications (STTR). They include only temporary members, recruited based on expertise needed for each meeting.

## Fellowship Study Sections

Recurring special emphasis panels (SEPs) review individual fellowship grant applications - F30, F31, F32, F33. Temporary members are recruited based on expertise needed for each meeting.

## All Other CSR Study Sections (Special Emphasis Panel)

Other one-time or recurring Special Emphasis Panels (SEPs) are held to review applications on special topics and members conflict applications. They include only temporary members, recruited based on expertise needed for each meeting.

## HIV/AIDS Research

HIV/AIDS-related grant applications are reviewed on an expedited cycle.

https://public.csr.nih.gov/StudySections

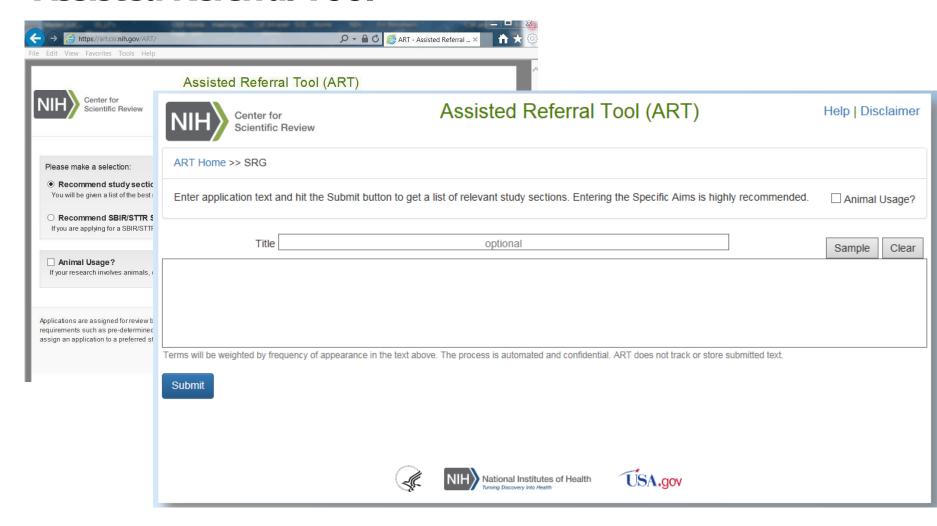


# **Tools & Resources about Study Section Assignments**

- Assisted Referral Tool (ART)
- Study Section Descriptions/Guidelines (roster and meeting dates)
- Assignment Request Form



## **Assisted Referral Tool**



https://public.csr.nih.gov/ForApplicants/ArtHome



# **Assignment Request Form (ARF)**

## Use the ARF to:

- Make assignment suggestions (study section and institute)
- Identify potential conflicts of interest
- List areas of expertise needed to evaluate the application

You should never suggest specific reviewers

https://grants.nih.gov/grants/how-to-apply-application-guide/forms-f/general/g.600-phs-assignment-request-form.htm



# Assignment Request Form (ARF) – Con't

## PHS Assignment Request Form Expiration Date: 2/28/2023 **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 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 Suggested Study Sections: Each entry is limited to 20 characters Rationale for assignment suggestions (optional) Entry is limited to 1000 characters



OMB Number: 0925-0001

## **Review Committees**



- Each CSR standing study section (review group) has ~12-22 regular members plus temporary reviewers from the scientific community ~30-35 total
- Special Emphasis Panels (recurring and Non-recurring) vary in size depending on number of applications
- About 70-100 applications are reviewed by each study section in 1-2 day meetings
- Each application is assigned to at least 3 reviewers
- Follow the review criteria indicated in the Section V of the Funding Opportunity Announcement that your application is submitted through

# At the Meeting: Application Discussion

- Top half of applications (from reviews) are discussed
- Any member in conflict with an application leaves the room
- Reviewer 1 introduces the application and presents critique
- Reviewers 2 and 3 highlight new issues and areas that significantly impact scores
- All members without a conflict are invited to join the discussion and then vote on the final overall impact score



# **After the Meeting**

- Scores are listed within two business days of the meeting
  - Scored versus Not Discussed
- Summary Statements are released within 30 days of the meeting
- Funding Council Meetings
- Questions should be addressed to:
  - SRO about the review process
  - PO about next steps

FAQS FOR Applicants: <a href="https://public.csr.nih.gov/FAQs/ApplicantsFAQs">https://public.csr.nih.gov/FAQs/ApplicantsFAQs</a>





# **Becoming a Peer Reviewer**

- We are always searching for peer reviewers for a variety of committees and roles
- Service to the research community—and you can learn by participating!
- If you are interested, identify the SRG in which you have interest and/or expertise:

https://public.csr.nih.gov/StudySections

- Contact the appropriate SRO (We are always on the lookout for new reviewers!)
- Although we strongly prefer individuals with a history of success in receiving NIH funding, it is not required for all committees (e.g., Early Career Reviewers, Small Business Initiated Research SBIR)







# **Early Career Reviewer Program Goals**

- Educate qualified scientists to become future reviewers
- Expose investigators to the peer review experience to help make them more competitive as applicants
- Enrich the existing pool of NIH reviewers







# What will you do as an ECR?

- Assigned 2 applications as 3<sup>rd</sup> reviewer
- Write full critiques for assigned applications
- Participate in one study section meeting



## **Qualifications for the Early Career Reviewer Program**

## Employment

 You have at least 1 year of experience as a fulltime faculty member (assistant professor) or a researcher in a similar role.

## **Grant & Review History**

- You have not served on an NIH study section aside from being a mail reviewer.
- You have not held an R01 or equivalent grant as a PI/PD. But you have submitted an NIH grant application and received a summary statement.

## Research

- You have evidence of an active, independent research program such as publications, presentations, institutional research support, patents, or experience supervising student projects.
- You have at least 2 senior-authored research publication in a peer-reviewed journal.

Enroll! Instructions at <a href="https://www.csr.nih.gov/ECR">www.csr.nih.gov/ECR</a>



Thank you

**Questions?** 

Contact: <a href="mailto:david.pollio@nih.gov">david.pollio@nih.gov</a>

