U.S. Department of Health & Human Services

NIH Center for Scientific Review

NIH Review: Life as an Established Investigator and Reviewer

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NCI Division of Cancer Biology
19th Annual New Grantee Workshop

February 5, 2020

Goals for todays talk

- To learn the basics of the NIH Peer Review Process
- To gain insight into preparing your own applications
- To learn how you can participate in the NIH Peer Review Process

Peer Review and Funding of NIH Grant Applications

National Institutes of Health

Center for Scientific Review
Assigns to NIH Institute and Peer Review Group

Study Section
Reviews for Scientific Merit

first level of review

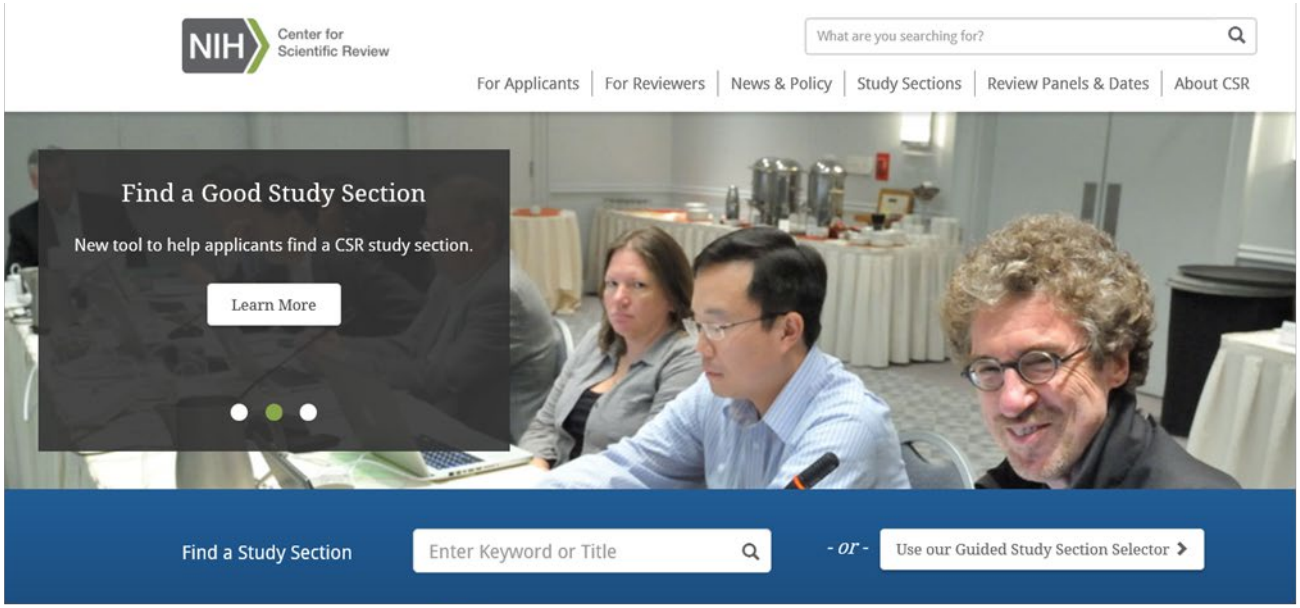
Institute
Evaluates for Relevance to Research Priorities

Advisory Council or Board
Recommends Action

second level of review

Institute Director
Takes Final Action

Help Your Application Get to the Right Study Section



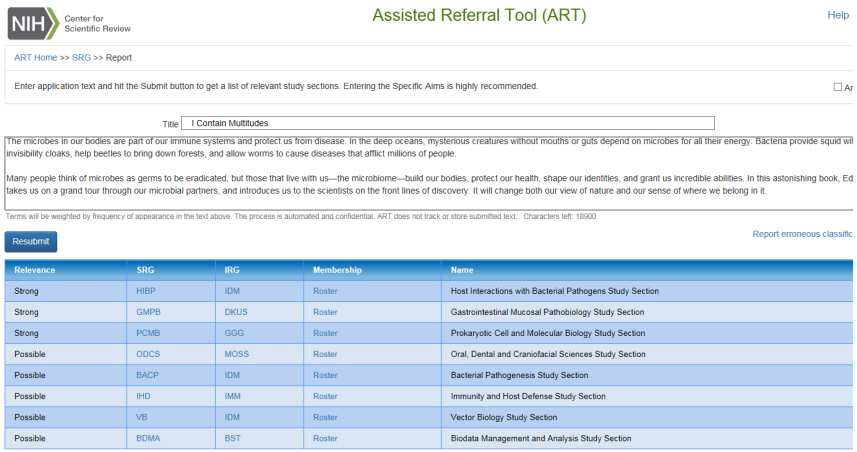
Key Word **Search**

Assisted Referral Tool **Search**

http://www.csr.nih.gov

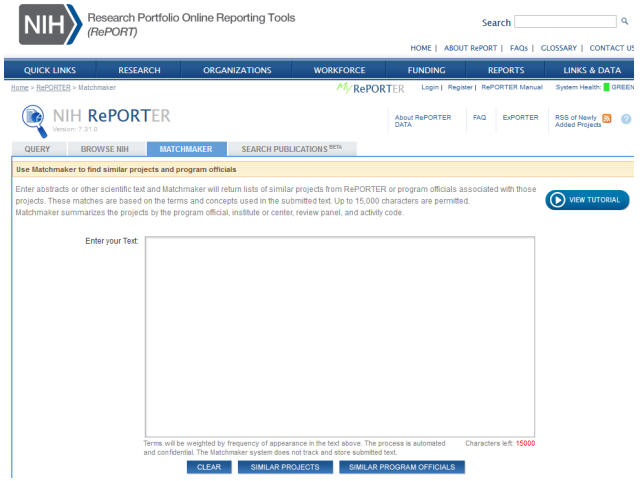
Help Your Application Find the Right Review Home

CSR Assisted Referral Tool (ART)



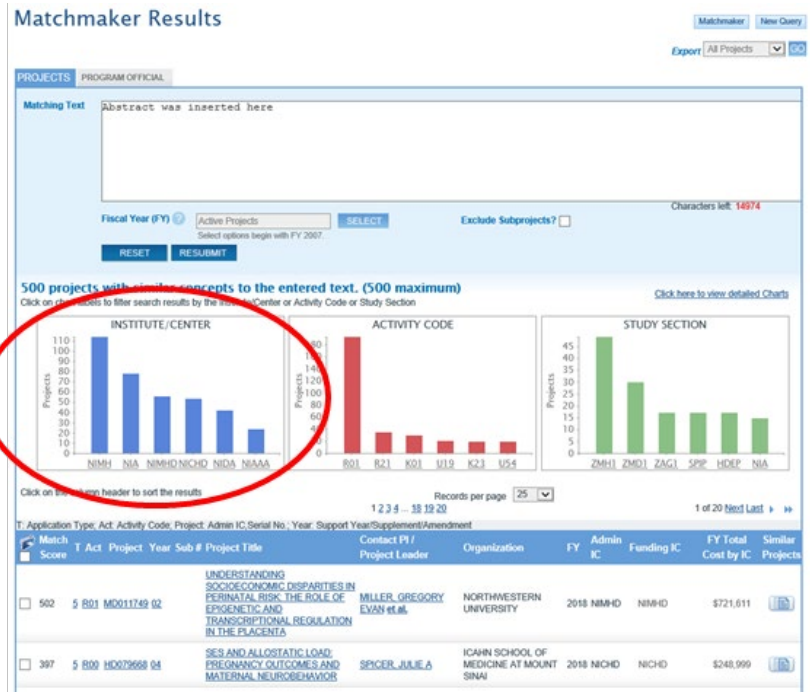
https://art.csr.nih.gov/

NIH RePORTER



http://projectreporter.nih.gov/reporter.cfm

Help Your Application Get to the Right Institute



- Copy abstract/Aims
- Matchmaker Search returns:
  - List of Institutes
  - List of funded grants
  - Link to Program Officials

Cover Letter

You can use a cover letter to:

- Explain why your application is late (NOT-OD-15-039)
- Provide notice of plans to submit a video
- Identify your project as generating large-scale genomic data
- Provide pre-approvals ($500k, conference grants)

You should NOT use a cover letter to:

- Make assignment requests (use the ARF!)
- Suggest specific reviewers (***never*** do this!)

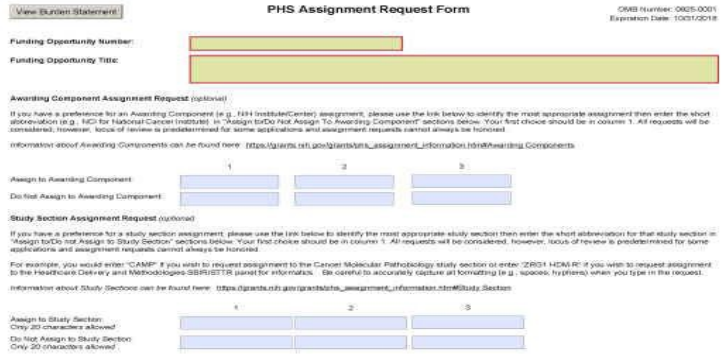
Tell CSR Your Assignment Preferences

Assignment Request Form

Request Institute assignment(s)

-**Make sure they participate in your FOA!!!**

Request review group assignment


PHS Assignment Request Form

View Burden Statement

OMB Number: 0925-0001
Expiration Date: 10/31/2018

Funding Opportunity Number:

Funding Opportunity Title:

Awarding Component Assignment Request (optional)

If you have a preference for an Awarding Component (e.g., NIH Institute/Center) assignment, please use the link below to identify the most appropriate assignment then enter the short abbreviation (e.g., NCI for National Cancer Institute) in "Assign to/Do Not Assign To Awarding Component" sections below. Your first choice should be in column 1. All requests will be considered, however, locus of review is predetermined for some applications and assignment requests cannot always be honored.

Information about Awarding Components can be found here: https://grants.nih.gov/grants/peris_assignment_information.html#Awarding Components

	1	2	3
Assign to Awarding Component			
Do Not Assign to Awarding Component			

Study Section Assignment Request (optional)

If you have a preference for a study section assignment, please use the link below to identify the most appropriate study section then enter the short abbreviation for that study section in "Assign to/Do not Assign to Study Section" sections below. Your first choice should be in column 1. All requests will be considered, however, locus of review is predetermined for some applications and assignment requests cannot always be honored.

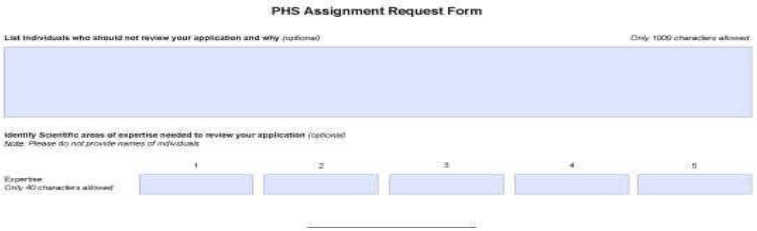
For example, you would enter "CAMP" if you wish to request assignment to the Cancer Molecular Pathobiology study section or enter "ZRG1 HDM-R" if you wish to request assignment to the Healthcare Delivery and Methodologies-SBIR/STTR panel for informatics. Be careful to accurately capture all formatting (e.g., spaces, hyphens) when you type in the request.

Information about Study Sections can be found here: https://grants.nih.gov/grants/peris_assignment_information.html#Study Section

	1	2	3
Assign to Study Section Only 20 characters allowed			
Do Not Assign to Study Section Only 20 characters allowed			

Identify conflicts of interests

Suggest expertise


PHS Assignment Request Form

List individuals who should not review your application and why (optional)

Only 1000 characters allowed

Identify Scientific areas of expertise needed to review your application (optional)

Note: Please do not provide names of individuals

	1	2	3	4	5
Expertise Only 40 characters allowed					

Never Request Specific Reviewers

Reviewer Conflicts of Interest (COI)

What Constitutes a Reviewer COI?

- Institutional
- Family member/close friend
- Collaborator
- Longstanding scientific disagreement
- Personal bias
- Appearance of conflict

http://grants.nih.gov/grants/peer/peer_coi.htm

Confidentiality in Review

- Review materials and proceedings of review meetings represent privileged information for reviewers and NIH staff.
- At the end of each meeting, reviewers must destroy or return all review-related material.
- Reviewers should not discuss review proceedings with anyone except the SRO.
- Questions concerning review proceedings should be referred to the SRO.
- Applicants should never communicate directly with any members of the study section about an application.

Peer Review Integrity Issues

- For concerns or questions about possible violations of peer review integrity contact:
  - your Scientific Review Officer
  - CSR Review Integrity Officer at: csrrio@mail.nih.gov
  - NIH Review Policy Officer at: reviewpolicyofficer@mail.nih.gov

Before the Study Section Meeting

- Each application is assigned to 3 or more reviewers 5-6 weeks in advance
- Reviewers assess each application by providing:
  - Preliminary Overall Impact score
  - Criterion Scores for each of the 5 Core Review Criteria
  - A written critique

At the Meeting

Clustering of Review

- New Investigator R01 applications are clustered
- Applications are clustered based on activity code (i.e., R21, R03, R15, etc.)
- Clinical applications & other mechanisms may be clustered (n ≥ 20)

Order of Review

- Applications to be discussed are reviewed in random order within each cluster.

Not Discussed Applications

- About half the applications will be discussed
- Applications unanimously judged by the review committee to be in the lower half are not discussed

At the Meeting: Application Discussion

Not Discussed Applications

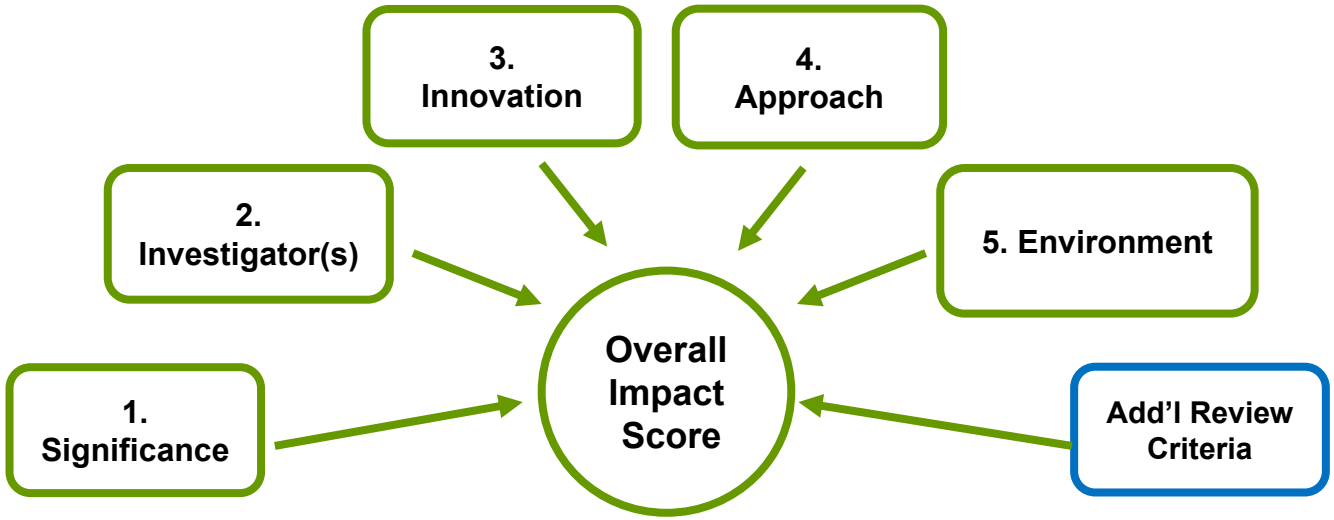
- About half the applications will be discussed
- Applications unanimously judged by the review committee to be in the lower half are not discussed
- The panel will discuss any application a reviewer wants to discuss
- Not discussed applications will only have assigned criterion scores

Discussed Applications

- 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

Evaluating R-Type Grant Applications -- Main Review Criteria

Overall Impact / Score (Priority Score) is the likelihood for the project to exert a sustained, powerful influence on the research field, in consideration of the **5 Scored Review Criteria** and **Additional Review Criteria**, if relevant.



Reviewing Rigor and Transparency
Research Project Grant Applications

Can Affect Overall Impact Score!

Rigor and Transparency Element	Which applications?	Where in the application?	Which Criteria?	What's added to the review criteria?
Rigor of Prior Research	All	Research Strategy	Significance	Is the prior research that serves as the key support for the proposed project rigorous?
		Research Strategy (Approach)	Approach	Have the investigators included plans to address weaknesses in the rigor of prior research that serves as the key support for the proposed project
Scientific Rigor	All	Research Strategy (Approach)	Approach	Are there strategies to ensure a robust and unbiased approach?
Consideration of Relevant Biological Variables, Such as Sex	Projects with vertebrate animals and/or human subjects	Research Strategy (Approach)	Approach	Are adequate plans to address relevant biological variables, such as sex, included for studies in vertebrate animals or human subjects?

Scoring

9-point score scale is used to provide:

- Criterion Scores for each of the 5 core review criteria
- The Overall Impact/Priority Score is based on the criterion scores plus additional criteria, but:
  - equal weight does not need to be given to each criteria (i.e. the overall score is not an average of the scored criteria).

All applications receive scores:

- Not discussed applications will receive only initial criterion scores from the three assigned reviewers.
- Discussed applications also receive an averaged overall impact score from eligible (i.e., without conflicts of interest) panel members.

Other Considerations that Do Not Affect Overall Impact Scores

- **Resource Sharing Plans**
  - Data
  - Model Organisms
  - Genomic Data (Human and nonhuman)
- **Authentication of Key Biological/Chemical Resources**
- **Foreign Organizations**
- **Select Agents**
- **Budget**

NIH's Resubmission Policy

After an unsuccessful new (A0) application or an unsuccessful resubmission (A1) application, you may submit a new (A0) application with the same idea as long as your summary statement has been issued.

The NIH will not accept:

- An A0 or A1 application that overlaps a funded application
- Simultaneous submissions of overlapping applications
- An A0 or A1 application before NIH issues the summary statement of an earlier, overlapping application.

Resubmission FAQs

http://grants.nih.gov/grants/policy/resubmission_q&a.htm

Your New Application Must Be Written as New

Your new (A0) application should not contain information that might bias the review or provide a competitive advantage:

You Cannot Refer to a Previous Review

- No mention of previous score
- No mention of previous reviewer comments
- No mention of how the A0 is responsive to previous review
- No marks in text to indicate changes

You Cannot Submit Elements of a Renewal

- No Progress Report
- No Progress Report Publication List

What Makes a Good Reviewer?

- Scientific expertise (funding, publications, etc.)
- Fair and objective
  - Ability to appreciate areas of science outside their immediate area of expertise
- Good communication skills
  - Articulate your views succinctly
  - Engage in productive discussions
  - Participate in discussion of applications beyond your assignments
  - Ability to help focus/facilitate the discussion
- Ability to remain engaged
  - Ensure fairness and consistency of the scoring throughout the meeting
- Ability to work collegially in a group setting

Where Do We Find Reviewers?

- Successful applicants
- Recommendations from reviewers and NIH staff
- NIH RePORTER (http://projectreporter.nih.gov/reporter.cfm)
- Internet
- Scientific conferences
- Scientific society recommendations
- Volunteers

Become a Reviewer

- **Contact a CSR Scientific Review Officer:** Send them your CV
- **Let Us Try to Find a Good Review Group for You:** Send your CV to csrvolunteer@mail.nih.gov

www.csr.nih.gov/review4CSR

NIH Peer Review Information on the Web

National Institutes of Health: http://www.nih.gov

- **Office of Extramural Research**
  http://www.nih.gov/grants/oer.htm
- **Grants Policy**
  http://www.nih.gov/grants/policy/policy.htm
- **Electronic Submission**
  http://era.nih.gov/ElectronicReceipt

Center for Scientific Review: http://www.csr.nih.gov

- **Resources for Applicants**
  http://www.csr.nih.gov/ResourcesforApplicants
- **CSR Study Section Descriptions**
  http://public.csr.nih.gov/StudySections
- **CSR Rosters and Meeting Dates**
  http://public.csr.nih.gov/RosterAndMeetings