



# Peer Review at NIH

**American Association for Cancer Research (AACR)  
Webinar Presentation  
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# Review and Funding of NIH Grant Applications



## Center for Scientific Review

*Division of Receipt and Referral*

Assigns to Institute(s) and Review Group

2 weeks

## Level I Review: Study Section

Recruits and Assigns Reviewers

2-4 weeks

Reviews for Scientific Merit

4-6 weeks

Meets

1-2 days

Releases Score

~3 days

Produces Summary Statement

~ 30 days

## Level II Review: Institute or Center

Evaluates Relevance to Research Priorities

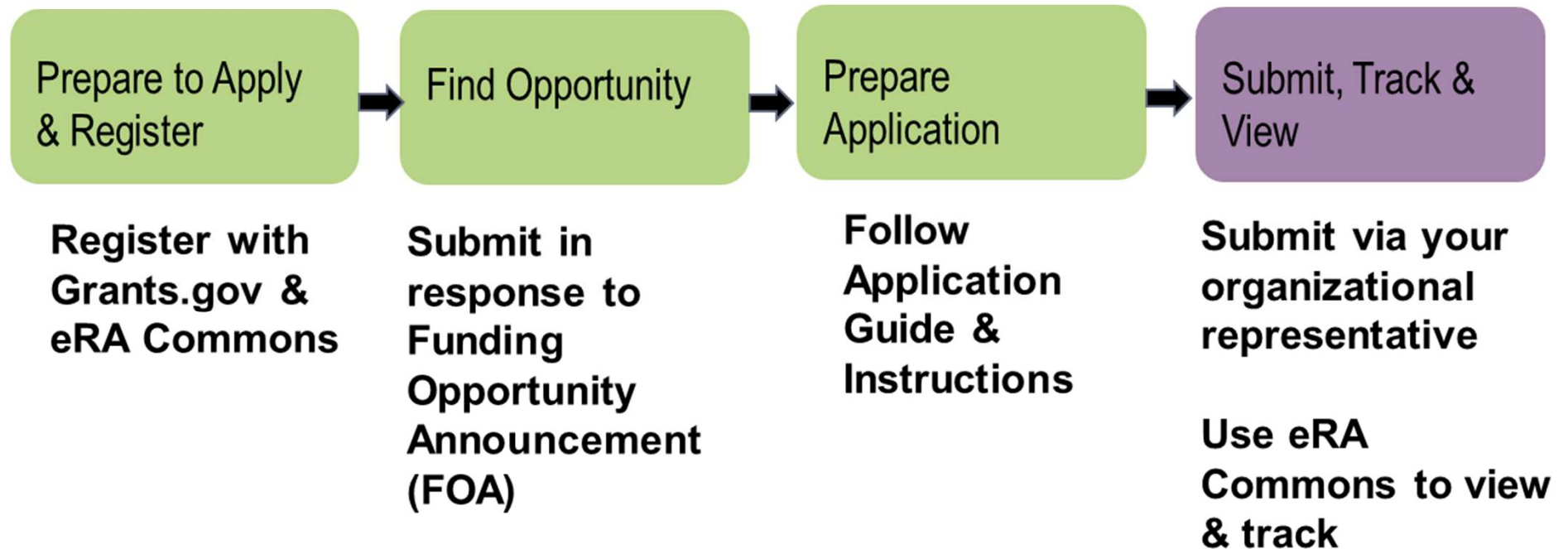
2-4

Council Recommends Action

Months

Decision

# Application Process (Overview)



**Insider's Guide to Peer Review for Applicants:**  
<http://www.csr.nih.gov/applicantresources/insider>

# How NOT to Submit a Late Application

## Start Early!

- Application must be accepted **TWICE**: Grants.gov and NIH

## Check eRA Commons for your submitted application

(e-mails are sent but can be caught in SPAM filters)

- High volume at deadlines slows processing/validation time
- On time application = submitted error-free by 5 PM local time on due date
- **Errors** cause rejection – **Warnings** are error-free and accepted
- No error correction window that extends deadline

# Keep Track of Your Application

- AORs submit applications
- PD/PIs responsible for accuracy of submission
- Do not wait for e-mails; proactively check eRA Commons
- If you cannot see your application in eRA Commons, neither can we!

Remember

It is your career and your livelihood on the line

Do not make any assumptions!

# Assignment to CSR Study Sections

## Within an IRG, applications are assigned to:

### Standing Study Sections

- When subject matter of application matches the referral guidelines for the study section or

### Special Emphasis Panels (SEPs)

- When the subject matter does not fit into any study section—recurring or for one time conflicts or initiatives.
- When assignment of an application to the most appropriate study section creates a conflict of interest
- When certain types of grants are sought (e.g., fellowships, SBIRs, AREAS)

# Assignment Request Form (ARF)

The ARF replaces many functions of the cover letter.

Use it to:

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

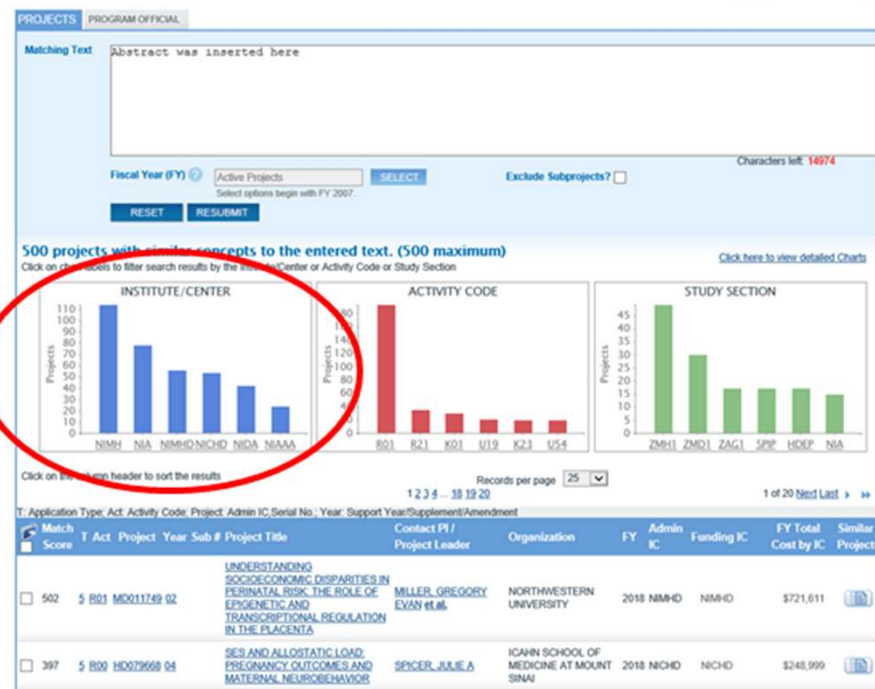
You should never suggest specific reviewers

# Help Your Application Get to the Right Institute

## Matchmaker Results

Matchmaker New Query

Export All Projects



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



# Help Your Application Get to the Right Study Section

The screenshot shows the NIH Center for Scientific Review website. At the top left is the NIH logo and the text "Center for Scientific Review". To the right is a search bar with the placeholder text "What are you searching for?". Below the logo and search bar is a navigation menu with links: "For Applicants", "For Reviewers", "News & Policy", "Study Sections", "Review Panels & Dates", and "About CSR". The main content area features a large banner image of three people in a meeting. Overlaid on the banner is a dark box with the text "Find a Good Study Section" and "New tool to help applicants find a CSR study section." Below this text is a "Learn More" button. At the bottom of the banner is a blue bar with the text "Find a Study Section" on the left, a search input field with the placeholder "Enter Keyword or Title" and a magnifying glass icon, and a button on the right that says "- or - Use our Guided Study Section Selector >".

Key Word **Search**

Assisted Referral Tool  
**Search**

<http://www.csr.nih.gov>

# 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!)

# Before the Study Section Meeting



Each application is assigned by the Scientific Review Officer (SRO) 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
- Comment on appropriateness of your budget
- A written critique

# At the Meeting

## 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.
- Any member in conflict with an application leaves the room and is not involved in the decision to discuss or not discuss this application.

## Clustering of Review

- New Investigator R01 & some types of applications are often reviewed together

## Order of Review

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



# Reviewing Rigor and Transparency

## Research Project Grant Applications

Rigor and Transparency Element	Which applications?	Where in the application?	Which Criteria?	What's added to the review criteria?	Affect overall impact score?
Rigor of Prior Research	All	Research Strategy	Significance	Is the prior research that serves as the key support for the proposed project rigorous?	Yes
		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	Yes
Scientific Rigor	All	Research Strategy (Approach)	Approach	Are there strategies to ensure a robust and unbiased approach?	Yes
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?	Yes
Authentication of Key Biological and/or Chemical Resources	Project involving key biological and/or chemical resources	New Attachment	Additional review considerations	Comment on plans for identifying and ensuring validity of resources.	No

# Scoring Overall Impact

## Overall Impact:

The likelihood for a project to exert a sustained, powerful influence on research field(s) involved

Overall Impact	High	Medium	Low
Score	1 2 3	4 5 6	7 8 9

## Evaluating Overall Impact:

Consider the 5 criteria: significance, investigator, innovation, approach, environment (weighted based on reviewer's judgment) and other score influences, e.g. human subjects

1-3 Applications are addressing a problem of high importance/interest in the field. May have some or no technical weaknesses.

4-6 Applications may be addressing a problem of high importance in the field, but weaknesses in the criteria bring down the overall impact to medium.

These Applications may be addressing a problem of moderate importance in the field, with some or no technical weaknesses

7-9 Applications may be addressing a problem of moderate/high importance in the field, but weaknesses in the criteria bring down the overall impact to low.

These Applications may be addressing a problem of low or no importance in the field, with some or no technical weaknesses.

5 is a good medium-impact application

# What Reviewers Look for in Applications

- Significance and impact
- Exciting ideas
- Clarity
- Ideas they can understand -- Don't assume too much
- Realistic aims and timelines -- Don't be overly ambitious
- Brevity with things that everybody knows
- Noted limitations of the study
- A clean, well-written application

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

<http://www.csr.nih.gov/applicantresources/insider>

# Common Problems in Applications

- Lack of a strong scientific foundation
- Lack of new or original ideas
- Absence of an acceptable scientific rationale
- Lack of experience in the essential methodology
- Questionable reasoning in experimental approach
- Uncritical approach
- Diffuse, superficial, or unfocused research plan
- Lack of sufficient experimental detail
- Lack of knowledge of published relevant work
- Unrealistically large amount of work
- Uncertainty concerning future directions



# Your Summary Statement

- Scores for each review criterion
- Critiques from assigned reviewers
- Administrative notes if any



If your application is discussed, you also will receive:

- An overall impact/priority score and percentile ranking
- A summary of review discussion prepared by the SRO

## Questions?

Your program officer has the prime responsibility to answer questions about your review and preparing a new application.

# 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](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

# Jumpstart Your Career: CSR Early Career Reviewer Program

- Work side-by-side with some of the most accomplished researchers in your field
- Learn how reviewers evaluate and score applications
- Develop research-evaluation and critique-writing skills
- Serve the scientific community by helping NIH identify the most promising grant applications



[www.csr.nih.gov/ecr](http://www.csr.nih.gov/ecr)

# What is the NIH Guide Notice?

This is how NIH communicates changes in policy, such as changes to submission deadlines, changes to requirements for grants, etc.

Subscribe so that you are in the know!

**NIH GRANTS & FUNDING**  
NIH Central Resource for Grants and Funding Information

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HOME ABOUT GRANTS FUNDING **POLICY & COMPLIANCE** NEWS & EVENTS ABOUT OER

Home » Policy & Compliance » Notices of NIH Policy Changes

**POLICY & COMPLIANCE**

NIH Grants Policy Statement  
**Notices of Policy Changes**  
Compliance & Oversight  
Policy Topics  
Anti-Sexual Harassment  
Animal Welfare  
Application Submission Policies  
Communicating and Acknowledging Federal Funding  
Clinical Trial Requirements  
Early Stage and Early Established Investigator Policies

### Notices of NIH Policy Changes

Policy notices published in the NIH Guide for Grants and Contracts supersede information in the NIH Grants Policy Statement. Compliance with these policy updates become a term and condition of award. NIH incorporates these notices into the annual update of the NIH Grants Policy Statement. Below is a listing of selected policy notices.

**Search the NIH Guide for Grants and Contracts for all notices.**  
**Subscribe to receive notices each week.**

**Previous Years:**  
[2015] [2014] [2013] [2012] [2011] [2010] [2009] [2008] [2007] [2006] [2005] [2004] [2003] [2002] [2001] [2000] [1999] [1998] [1997] [1996] [1995] [1994] [1993]

**August 2020**

August 28	Notice of Correction to Eligibility in NIH Funding Opportunity Announcements
August 28	Reminder: NIH Natural Disaster Policy – Hurricane Isaias, Derecho
August 12	Extending the Special Exception to the NIH/AHRQ/NIOSH Post-Submission Material Policy During the COVID-19 Pandemic
August 11	Temporary Extension of Eligibility for the NIH K99/R00 Pathway to Independence Award During the COVID-19 Pandemic

<https://grants.nih.gov/policy/notices.htm>

# Who Can Answer Your Questions?

## Before You Submit Your Application

- A Program Officer at an NIH Institute or Center
- Scientific Review Officer

## After You Submit

- Your Scientific Review Officer

## After Your Review

- Your Assigned Program Officer

GrantsInfo: [GrantsInfo@od.nih.gov](mailto:GrantsInfo@od.nih.gov) – 301 945-7573

## Reporting Bias in Peer Review

With ~1.5k meetings, ~65k apps, ~18k reviewers, ~200k critiques, mistakes will occur

For issues related to respectful interactions, bias or anything else that could affect the fairness of the review process, contact your SRO or the CSR Associate Director of Diversity & Workforce Development at [G.Fosu\\_AssocDir@csr.nih.gov](mailto:G.Fosu_AssocDir@csr.nih.gov).



Gabriel Fosu, Ph.D.

- On every outgoing staff email
- On CSR's web page
- On every study section page

### Existing CSR policy regarding a potentially flawed/biased review

Assessment by CSR management – is it a flawed review?

- Yes - CSR re-reviews the application in the same council round.
- No – CSR refers PI to program officer for guidance on council appeal process

# 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>



# Top 10 NIH Peer Review Q&As



Top 100 NIH Peer Review Q&As  
[www.csr.nih.gov/faq](http://www.csr.nih.gov/faq)