Goals for today's 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
NIH’s mission is 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.
The Path of a Successful Application

National Institutes of Health

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

Study Section
Reviews for Scientific Merit

Institute
Evaluates for Relevance to Research Priorities

Advisory Council or Board
Recommends Action

Institute Director
Takes Final Action
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
- 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)
Help Your Application Get to the Right Study Section

Find a Study Section

Applications are reviewed in Study Sections (Scientific Review Group, SRG). Integrated Review Groups (IRGs) are clusters of Study Sections based on scientific discipline.

Enter Search Keywords

http://www.csr.nih.gov/
Help Your Application Find the Right Review Home

CSR Assisted Referral Tool (ART)  

https://art.csr.nih.gov/ART/selection.jsp

NIH RePORTER  

http://projectreporter.nih.gov/reporter.cfm
Tell CSR Your Assignment Preferences

Assignment Request Form

Request Institute assignment(s)

Requests review group assignment

Identify conflicts of interests

Suggest expertise

Never Request Specific Reviewers
Cover Letter

You can use a cover letter to:

• Explain why your application is late
• 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!)
CSR Study Sections: The Meeting

• Each CSR standing Study Section has ~12-22 regular members plus temporary reviewers from the scientific community.

• About 70 applications are usually reviewed by each study section in 1-2 day meetings.
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.
At the Meeting

Order of Review

- The average of the preliminary Overall Impact score from the assigned reviewers determines the review order
- Discussions start with the application with the best average preliminary Overall Impact score.
- Discussions focus on the best applications

Clustering of Review

- New Investigator R01 applications are clustered
- Clinical applications & other mechanisms may be clustered (n ≥ 20)
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.
Four Rigor and Transparency Review Elements
Research Project Grant Applications

Can Affect Your Overall Impact Score!

<table>
<thead>
<tr>
<th>Rigor and Transparency Element</th>
<th>What’s added to the review criteria?</th>
<th>Where in the application?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Scientific Premise</td>
<td>Is there a strong scientific premise or foundation for the project?</td>
<td>Research Strategy (Significance)</td>
</tr>
<tr>
<td>2. Scientific Rigor</td>
<td>Are there strategies to ensure a robust and unbiased approach?</td>
<td>Research Strategy (Approach)</td>
</tr>
</tbody>
</table>
# Four Rigor and Transparency Review Elements

Projects with Vertebrate Animals and/or Human Subjects

Can Affect Your Overall Impact Score!

<table>
<thead>
<tr>
<th>Rigor and Transparency Element</th>
<th>Where in the application?</th>
<th>What’s added to the review criteria?</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Consideration of Relevant Biological Variables, Such as Sex</td>
<td>Research Strategy (Approach)</td>
<td>Are adequate plans to address relevant biological variables, such as sex, included for studies in vertebrate animals or human subjects?</td>
</tr>
</tbody>
</table>
Scoring

9-point score scale is used to provide:
• Criterion Scores for each of the 5 core review criteria
• Overall Impact/Priority Score based on but not a sum of the core criterion scores plus additional 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.
Where Do We Find Reviewers?

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