

Insights for Investigators Series

Understanding NIH Study Sections
March 10, 2014



The Insights for Investigators Series consists of four panels/seminars and an online Toolkit.

SPRING 2014 SCHEDULE:

- Diversifying Your Funding Portfolio 1/10
- Understanding NIH Study Sections 3/10
- Developing Collaborations in Science 4/8
- Grant Writing Tips & Strategies for NIH 5/12



See IFI web page for details:

http://www.brighamandwomens.org/medical professionals/career/cfdd/oprc/ifi.aspx



This seminar provides participants with an overview of how NIH Study Sections operate and how reviewers consider grants through the lens of the review criteria. Panelists will share their experiences of serving on study sections, provide participants with insight on how and why one might serve on a study section, and tips to improve their own grant reviews through greater understanding of the process.

Making the Right Moves- Addendum http://www.hhmi.org/sites/default/files/Educational%20Materials/Lab%20Management/studysection.pdf

NIH CSR Video: NIH Peer Review Revealed http://www.youtube.com/watch?v=fBDxl6l4dOA

How to Be a Member of an R01 NIH Study Section

Addendum to

Making the Right Moves:
A Practical Guide to Scientific Management
for Postdocs and New Faculty





Introduction to NIH Study Sections

- What is a Study Section?
- Who serves on Study Sections?
- What happens at Study Section meetings?
- Why should I serve on a Study Section?

Panel Discussion



Today's Faculty Panelists:

Robert Fuhlbrigge, MD PhD
Olivia Okereke, MD
Guillermo García-Cardeña, PhD
Stacey Missmer, ScD



What is a Study Section?

http://public.csr.nih.gov/StudySections/Pages/default.aspx

- Peer review panels organized by the Center for Scientific Review (CSR) evaluate ~70% of research grant applications to NIH
- Study Section = Scientific Review Group (SRG)
- Integrated Review Groups (IRGs) = clusters of SRGs organized around a general scientific area (25 clusters of 4-12 SRG each)
 - AIDS and Related Research IRG [AARR]
 - AIDS Clinical Studies and Epidemiology Study Section [ACE]
 - AIDS Discovery and Development of Therapeutics Study Section [ADDT]
 - AIDS Immunology and Pathogenesis Study Section [AIP]
 - AIDS Molecular and Cellular Biology Study Section [AMCB]
- Each SRG managed by a Scientific Review Officer (SRO)
 - M.D. or Ph.D. with a scientific background close to the study section's area of expertise.



Who serves on Study Sections and what do they do?

http://public.csr.nih.gov/StudySections/Pages/default.aspx

- Scientific Review Officer (SRO)
 - M.D. or Ph.D. with a scientific background close to the study section's area of expertise.
 - Recruit SRG members and manage review process
- Scientists with demonstrated expertise (authors, speakers, grant recipients)
 - 12 to 40 members per SRG (>20,000 people involved per year)
 - Standing appointments- 4 years, 3 cycles/yr
 - Ad hoc appointments (special expertise for grants under review)
- Standing SRG panels
 - Investigator Initiated Awards- R01, R03, R15, R21
 - Career Development Awards- K01, K02, K08, K22, K99/R00
- Special Emphasis Panels
- Fellowship Study Sections
- SBIR/STTR
 - Small business innovation research
 - Small business technology transfer



What happens before a Study Section meeting:

Panels review 60 to 100 applications per meeting (~80,000 applications/yr)

- SRO assigns reviewers about 6 weeks before meeting
 - 5-12 applications per member per cycle
 - 3 reviewers per application- Primary, Secondary, Reader
- Primary and Secondary Reviewers write detailed critiques addressing Core Criteria

Significance

Investigators

Innovation

Approach

Environment

Preliminary scores and critiques submitted 1 week in advance



What happens at a Study Section meeting:

Introduction

- Orientation (discussion of general business)
- Provisional approval of streamlined list of applications (triage)
- Discussion of remaining applications (typically top third)

Discussion of remaining applications:

- Reviewers with a conflict of interest are excused
- Assigned reviewers present strengths, weaknesses, and their preliminary scores
- Members discuss scientific and technical merit
- Range of scores is expressed (every member scores every application)
- Requirements for gender, minority, and children, human subjects and animals are reviewed
- Recommended budget changes are discussed

After each meeting:

- Primary and Secondary Reviewers amend their critiques
- SRO documents the results in a summary statement

CENTER FOR



Faculty Development & Diversity

Sharing strategies. Supporting careers.

Overall Impact:

The likelihood for a project to exert a <u>sustained</u>, <u>powerful</u> 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, animal welfare, inclusion plans, and biohazards

e.g. Applications are addressing a problem of high importance/interest in the field. May have some or no weaknesses.

e.g. Applications may be addressing a problem of <u>high</u> importance in the field, but weaknesses in the criteria bring down the overall impact to medium.

e.g. Applications may be addressing a problem of moderate importance in the field, with some or no weaknesses e.g. 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.

e.g. Applications may be addressing a problem of <u>low</u> or <u>no</u> importance in the field, with some or no weaknesses.

5 is a good medium-impact application, and the entire scale (1-9) should always be considered.



Pick the right Study Section:

- Review IRG/ SRG descriptions (CSR manages >200 review committees)
 http://public.csr.nih.gov/StudySections/IntegratedReviewGroups/Pages/default.aspx
- Talk to the SRO (or multiple SROs)- if there isn't an SRG that fits your research, you might want to rethink your approach, seek support outside NIH.
- Know your audience
 - Review the SRG Roster
 - Identify potential supporters and target their interests
 - Identify members with known conflicts and notify the SRO
 - Request required expertise (ad hoc members) in your cover letter



Why should I serve on a Study Section?

- Community service- Responsibility as a Scientist to provide peer review
- Learn about your field- Exposure to latest research
- Broaden your horizons- Hear/ discuss science from different perspectives
- Improve your own success rate- Know exactly what reviewers want to see
- Advance your career- Networking, CV buffing
- Enhance mentoring- better prepare your mentees



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