# K-R0 Club How Do Study Sections Work?









#### NIH Center for Scientific Review

- Applications reviewed by Scientific Review Groups (SRG's)
- Integrated Review Groups (IRG's)
  - Clusters of SRG's around a scientific area
  - Assignment may be made to an IRG that then will make assignment to one of its SRG's.
- Standing (Chartered) Study Sections
  - Both permanent and temporary members
  - Review most investigator-initiated applications (R01, R03, R21, R15, and K's)

## NIH Study Sections

- SBIR/STTR Study Sections
  - Review Small Business Innovation Research (SBIR) and Technology Transfer Research (STTR) applications
  - Only Temporary Members
- Special Emphasis Panel
  - One-time or recurring panels to review applications on special topics and member conflict applications (only temporary members)
  - Only Temporary Members

## Study Section Members

- Chair
- Mix of senior and junior reviewers, usually NIH-funded investigators
- Permanent members
- Temporary members
- Scientific Review Officer (SRO)
- Grants Technical Assistant

- Face-to-face
- Videoconference
- Teleconference
- Internet-assisted meeting
- Usually three cycles per year for Chartered Study Sections

#### Reviewer Assignments

- Usually based on expertise
- Primary, secondary and tertiary reviewers
- Always consider that your grant may be reviewed by someone outside your area and write accordingly
- Access over NIH Commons Internet Assisted Review (IAR) site
- Must post reviews one week before meeting to allow reviewers to see each other's reviews and to generate a streamlined list

#### Reviewer Assignments

- Keep in mind
  - Reviewers are busy people
  - May have to review 8-10 grants, mix of primary, secondary and tertiary reviewer roles
  - Do not make your grant a chore to read!
  - Avoid
    - Redundant/monotonous text (Break it up!)
    - Figures too small
    - Try to emphasize the novel, innovative and high impact aspects of your proposal

- Run by Chair assisted by SRO
- Introductions
- Explanation of process
- Reading of streamlined list (bottom 50% preliminary impact scores)
  - Any streamlined application may be saved for discussion by one member of the panel
  - Streamlined applicants receive unedited critiques
- Discussion generally limited to 10 min/grant
  - Close scores-Less discussion
  - Wide scores-More discussion

- Preliminary scores from all three reviewers
- Primary reviewer concisely summarizes proposal
- Primary reviewer summarizes their critique, focusing on strengths and weaknesses
- Secondary and tertiary reviewer add any additional points
- Open discussion focused on points of disagreement

- Chair calls for final round of scores from reviewers
- All panel members record their scores
- Anyone scoring outside the reviewers' range must speak up with a reason.
- Additional considerations not part of scoring
  - Budget and Period of Support
  - Responsible Conduct of Research
  - Select Agents (potential to pose a severe threat to public health and safety)
  - Resource Sharing Plans (Experimental Data\*, Model Organisms,
     Genomic Data)
    - \*Only if annual direct costs > \$500K in any one year
  - Authentication of Key Biological and/or Chemical Resources

## **Review Template**

A score of 5 is a good, medium-impact application. The entire scale (1-9) should always be considered.

Overall Impact or Criterion Strength	Score	Descriptor
High	1	Exceptional
	2	Outstanding
	3	Excellent
Medium	4	Very Good
	5	Good
	6	Satisfactory
	7	Fair
Low	8	Marginal
	9	Poor
Other Designa	tions for Final	Outcome
AB	Abstention	
CF	Conflict of Interest	
	Deferred	
DF	Deferred	
DF ND	Not Discu	ssed

Impact	Score	Descriptor	Guidance on Strengths/ Weaknesses	
High	1	Exceptional	Exceptionally strong with essentially no weaknesses	
	2	Outstanding	Extremely strong with negligible weaknesses	
	3	Excellent	Very strong with only some minor weaknesses	
Medium	4	Very Good	Strong but with numerous minor weaknesses	
	5	Good	Strong but with at least one moderate weakness	
	6	Satisfactory	Some strengths but also some moderate weaknesses	
Low	7	Fair	Some strengths but with at least one major weakness	
	8	Marginal	A few strengths and a few major weaknesses	
	9	Poor	Very few strengths and numerous major weaknesses	

#### Remember

- Criterion scores are given to every section of the grant, including the candidate, career development plan, research plan, mentors and environment and institutional support.
- However, strong scores in all categories are not needed for the application to be judged to likely have a major impact.
- Mostly high criterion ratings may be given, but the overall impact score is lower because one critically important criterion is not highly rated.

#### Remember

- Most reviewers try to provide constructive feedback to applicants, especially if a revision is needed. Pay attention to the reviews!
- Nevertheless, a thick skin is helpful.
- Make every effort to become known to reviewers via national meetings, workshops, committees and other venues to allow connection of a face with a name and some familiarity with your work.
- Later in your career, make every effort to serve on a NIH Study Section.

#### **NIH STUDY SECTION VIDEO**

https://youtu.be/lzBhKeR6VIE