Inside a National Science Foundation (NSF) Review Panel

Marc Rigas & Elizabeth Rockey Seidle
Strategic Interdisciplinary Research Office (SIRO)
Penn State University
University Park, PA 16802 USA
Goal

• Goal: To gain an appreciation of how proposals are evaluated at the NSF

• Learning outcomes
  – Understanding of peer review as a subjective, human endeavor
  – Knowledge of how the ratings and rankings on panel reviews are generated
  – Experience what it is like to be a panel reviewer
Agenda: Mock review panel

- Introduction to reviewers (very similar to NSF panel introduction)
- Conduct review of “mini-proposals” (abstracts)
- Debrief on aspects of the panel
- Thoughts from NSF panel reviewers
Welcome to our panel for the “New Hope” Program (Panel ID: NHP-34)
Conflicts of Interest

• Examples of conflicts:
  • Proposer(s) is close friend, relative, or business partner.
  • You have/had a student or advisor relationship.
  • You are a current employee, you were previously (12 mos.) or you will have possible future employment at the institution.
  • You received payment (e.g., honorarium) from institution or individual.
  • You were a collaborator on a project or book, article, or paper within the last 48 months.
  • You were a co-editor of a journal, compendium, or conference proceedings within the last 24 months. [Note: If you are co-listed on an Editorial Board but you have not interacted, you do not have a COI]

• What everyone must do:
  • Turn in Conflict-of-Interest forms.
  • Declare actual and perceived conflicts.
  • If you have a conflict, leave room during discussion of proposal.
Confidentiality

- Process and results are confidential!
- Do not disclose identities of your fellow reviewers.
- Do not disclose identities of people associated with proposals (PI, Co-PIs, Consultants, etc.)
- Do not discuss results or recommendations with other people.
- Do not use names of other reviewers in your review or Panel Summary (if you are the Scribe).
- Proposals contain sensitive information and are not in the public domain -- do not copy, distribute or quote from them.
- You can indicate (e.g., on a resume) that you served NSF on a review panel – just don’t identify which panel(s).

[also, please be cautious in elevators and other places outside the panel room about discussing panel business.]
NSF Proposal Review

The NSF GPG says you should consider:

• what the proposers want to do
• why they want to do it
• how they plan to do it
• how they will know if they succeed
• what benefits could accrue if the project is successful.

“These issues apply both to the technical aspects of the proposal and the way in which the project may make broader contributions.”
Proposal Review Criteria

- Criterion 1:
  What is the *intellectual merit* and quality of the proposed activity?

- Criterion 2:
  What are the *broader impacts* of the proposed activity?

“Proposers must fully address both criteria.”
Review Elements

• These apply to both Intellectual Merit and Broader Impacts:

• 1. What is the potential for the proposed activity to:
   – a. Advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and
   – b. Benefit society or advance desired societal outcomes (Broader Impacts)?

• 2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?

• 3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?

• 4. How well qualified is the individual, team, or organization to conduct the proposed activities?

• 5. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?
Program Specific Criteria

• We would discuss specifics of our program here...
Panel Outputs

• **Individual Reviews in FastLane for each proposal**
  
  • OK to modify reviews, including change of rating.
  • Ensure individual reviews for each proposal are on electronic panel system and are “correct”.
  • Be sure any modifications to reviews are recorded in FastLane! These MUST be made BEFORE leaving your panel.

• **Panel summary for each proposal**
  
  – Initially framed by one reviewer who serves as scribe using the provided template.
  – Should reflect discussion (not just restate individual reviews).
  – Includes short, clear comments to help unsuccessful PIs improve their proposals in the next competition.
  – Add “Justification for Recommendation” heading at the end of the summary and write an informative, concise justification (1-2 sentences).
  – Should be written in 3rd-person and proof-read by all assigned panelists.
Panel Outputs (cont.)

- Panelist ratings: E, V, G, F, P
  - Avoid being overly harsh (“I never give an E”) or overly generous.
  - Be discriminative. Use the entire spectrum P .. E, as appropriate
  - Be decisive. Avoid “fence-sitting” ratings. (V/G)

- Panel recommendations:
  - Highly Competitive (HC): Solid proposal, deserves funding.
  - Competitive (C): Good proposal, but some portions unconvincing.
  - Low Competitive (LC): PI is encouraged to revise and resubmit
  - Not Competitive (NC): PI is discouraged from resubmitting

- Panel recommendation is based on insights gained during discussion, and reflects conclusion of all panelists (not just those who entered individual reviews).

- Funding a project with F or P rating and declining one with E rating requires explanation by PD.
Panel Format

• Introduction
• Discussion of all proposals (and initial bin placement HC/C/LC/NC)
• Preparation of panel summaries (break or first night)
• Rediscussion of top proposals or undecided proposals
• Acceptance of all panel summaries
Our panel Placement Board

<table>
<thead>
<tr>
<th>Highly Competitive (HC)</th>
<th>Competitive (C)</th>
<th>Low Competitive (LC)</th>
<th>Not Competitive (NC)</th>
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Proposal tile (PI)

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THANK YOU!

Elizabeth Seidle  
Email: ear5131@psu.edu  
Call: 814.863.9475

Marc Rigas  
Email: rigasm@psu.edu  
Call: 814.863.0050