Panel Review Briefing
Mock Panel, ECIW

Thank you for serving! This panel review is a critical component of the NSF review process. We greatly appreciate your efforts, input, and support of our mission.

Mock Panel Agenda

- **SESSION ONE**:
  - ***abridged*** *rules and operation of NSF review panels* (10 min)
  - *panel discussions and proposal ranking* (20 min)

- **BREAK**:
  - scribes draft panel summaries and upload to Proposal Evaluation System (PES).
  - panelists review and comment on summaries

- **SESSION TWO**:
  - *review and refine panel summaries* (10 min)
  - *finalize rankings and determine priorities (high/med/low)*
  - *adjourned*

Important Reminders: Ethics, Legal, Health & Safety

- Conflicts of interest: Any matter in which a member of the public may question your impartiality because of your relationship with certain individuals or entities involved in the matter (e.g., institutions, individuals, and family/household).
- Confidentiality: Participation on NSF Panels is confidential. Proposals contain sensitive information and are not in the public domain. Panel results are confidential.
- Hatch Act:
    - You may not engage in political activities while on NSF time. This includes sharing partisan political information during the panel:
        - Via social media or emails
        - Discussions on phone or in-person with NSF staff or panelists
    - You may not wear or display during a panel (on video or in person) anything with partisan political implications.
- Harassment policy: NSF is committed to fostering an atmosphere of frank, open, and respectful communication in the proposal review process so that all reviewers can participate fully and expects all review panel participants to comport themselves in a responsible and accountable manner while employed by NSF as panel reviewers.
- etc…

Panelists are Federal employees while serving and are subject to Federal rules and regulations on ethics, lobbying, and the integrity of the review process

Merit Review Criteria, Proposal Components, & Solicitation-Specific Considerations

Intellectual Merit

Importance of proposed activity:

Should this be done?

- to advance knowledge and understanding
- within the field and across fields
- creative, original, or potentially transformative research
- significance of expected contributions

How well conceived and organized is the proposed activity?

Can this be done?

- Soundness and feasibility of approach, evaluation, research plan
- How qualified is the team to conduct the proposed research
- Data Management Plan
- Mentoring Plan
- Access to necessary resources, equipment, facilities, etc.
- Requested support (budget)

Intellectual Merit, cont.

Encompasses the potential to advance knowledge

Considerations

1. What is the potential for the proposed activity to advance knowledge and understanding within its own field or across different fields
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?

Broader Impacts

Accomplished through

- The research itself
- Activities that are directly related to specific research projects, AND/OR
- Activities that are supported by, but complementary to the project.

Considerations

1. What is the potential for the proposed activity to benefit society or advance desired societal outcomes?
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 sound rationale? Does the plan incorporate a mechanism to assess success?
4. How well qualified is the individual, team or institution to conduct the proposed activities?
5. Are there adequate resources available to the principal investigator (either at the home institution or through collaborations) to carry out the proposed activities?

Broader Impacts, cont.

The Foundation shall apply a broader impacts review criterion to identify and demonstrate project support of the following goals:

1. Increasing the economic competitiveness of the United States.
2. Advancing of the health and welfare of the American public.
3. Supporting the national defense of the United States.
4. Enhancing partnerships between academia and industry in the United States.
5. Developing an American STEM workforce that is globally competitive through improved pre-kindergarten through grade 12 STEM education and teacher development, and improved undergraduate STEM education and instruction.
6. Improving public scientific literacy and engagement with science and technology in the United States.
7. Expanding participation of women and individuals from underrepresented groups in STEM.

(P.L. 114-329, "American Innovation and Competitiveness Act of 2017")

These examples should not be considered either comprehensive or prescriptive.

Proposers may include appropriate outcomes not covered by these examples.

Review Pitfalls

- Confirmation bias – the tendency to interpret information in a way that confirms or supports one's existing beliefs.
- Anchoring – relying on one piece of information or first impression (the anchor) rather than what is actually described in the proposal.
- Rating on a person's or organization's reputation or past achievement instead of the quality of the current proposal.

CAREER Proposals (solicitation-specific)

Identify proposals from early-career faculty who have the potential to serve as **academic role models in research and education** and to lead advances in the mission of their department or organization. Activities pursued by early-career faculty should build a firm foundation for a lifetime of leadership in integrating education and research.

Successful Principal Investigators will propose **creative, effective research and education plans**, developed within the context of the mission, goals, and resources of their organizations, while **building a firm foundation for a lifetime of contributions to research, education, and their integration**.

Program Solicitation: NSF 22-586

Data Management and Sharing Plan

- Two-page required supplementary document (PAPPG, Chapter II.D.2.i.(ii))
- Must be reviewed as part of the proposal (under IM, BI or both as appropriate)
- May Include:
  - the types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project*;
  - the standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate, this should be documented along with any proposed solutions or remedies);
  - policies for access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements;
  - policies and provisions for re-use, re-distribution, and the production of derivatives; and
  - plans for archiving data, samples, and other research products, and for preservation of access to them.
- If none of these materials are produced as apart of the project, PIs must provide a justification for not including a Data Management and Sharing Plan

  - See: https://new.nsf.gov/funding/data-management-plan for a full explanation

Reviewing Mentoring Plans

- If support is included for both graduate students and postdocs, does the mentoring plan address both?
  - Activities can, but need not be, differentiated for each type of scholar
- Does the plan effectively address both research mentoring and broader career and professional development?
- Will the mentoring activities support the development of skills and competencies needed for the proposed project? For the trainee's continuing professional growth?
- Will the mentoring activities help graduate students to graduate and postdocs advance to their next career step?
- Does the plan reference the annual use of Individual Development Plans (IDPs) for trainees receiving "substantial" support?

Discussion of proposals

- Panel moderators determine proposal order/panelist order
- Primary reviewer
  - briefly describes the objectives of the proposal
  - provides a summary of their evaluation, emphasizing key strength and weaknesses in the two criteria (do not read your reviews)
- Secondary reviewers
  - present additional strengths, weaknesses, and/or contrasting points based on their evaluations (do not read your reviews)
- Discussion open to all panelists
- Scribe
  - Takes notes during the discussion
  - Asks for clarification as needed for drafting panel summary
  - Makes initial placement of the proposal on the ranking board
  - Writes panel summary based on template capturing discussion
- Assign rating based on panel consensus

Role of NSF Program Officers – In Panel

- Introduce proposal
- Ensure conflicted individuals leave the room
- Listen and facilitate discussion
  - May ask questions of the panel
  - May prompt panel to address required elements
- Ensure discussion stays within scope of meeting
- Provide NSF context as needed
- Answer panelist's questions
- Keeps time
- Review and comment on panel summaries

Program Officers do not discuss the merits of proposals during panel

Rating of Proposals by Panel

High Priority (HP) – High quality proposal in all respects; deserves highest priority for support.

Medium Priority (MP) – Quality proposal in nearly all respects; should be supported if possible.

Low Priority (LP) – Proposal has some substantive weakness that need to be addressed.

Not Discussed in Panel (NDP) – Proposal received uniformly low-rated individual reviews and was triaged by the panel.

Remember: Rate each proposal on its merits

Reminder - Funding Decisions

- The panel is advisory
- Final award decisions are based on many factors
  - Your recommendation
  - Portfolio balance
  - Program priorities
  - Agency and Administration priorities
  - Budget
- Just because a proposal is highly ranked in this panel, does not mean it will be funded.