NSF's Merit Review Process

NSB Report on Merit Review Criteria:

Two Review Criteria

When evaluating NSF proposals, reviewers 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, and what benefits would 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. To that end, reviewers are asked to evaluate all proposals against two criteria:

- **Intellectual Merit:** The intellectual Merit criterion encompasses the potential to advance knowledge; and
- **Broader Impacts:** The Broader Impacts criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes.

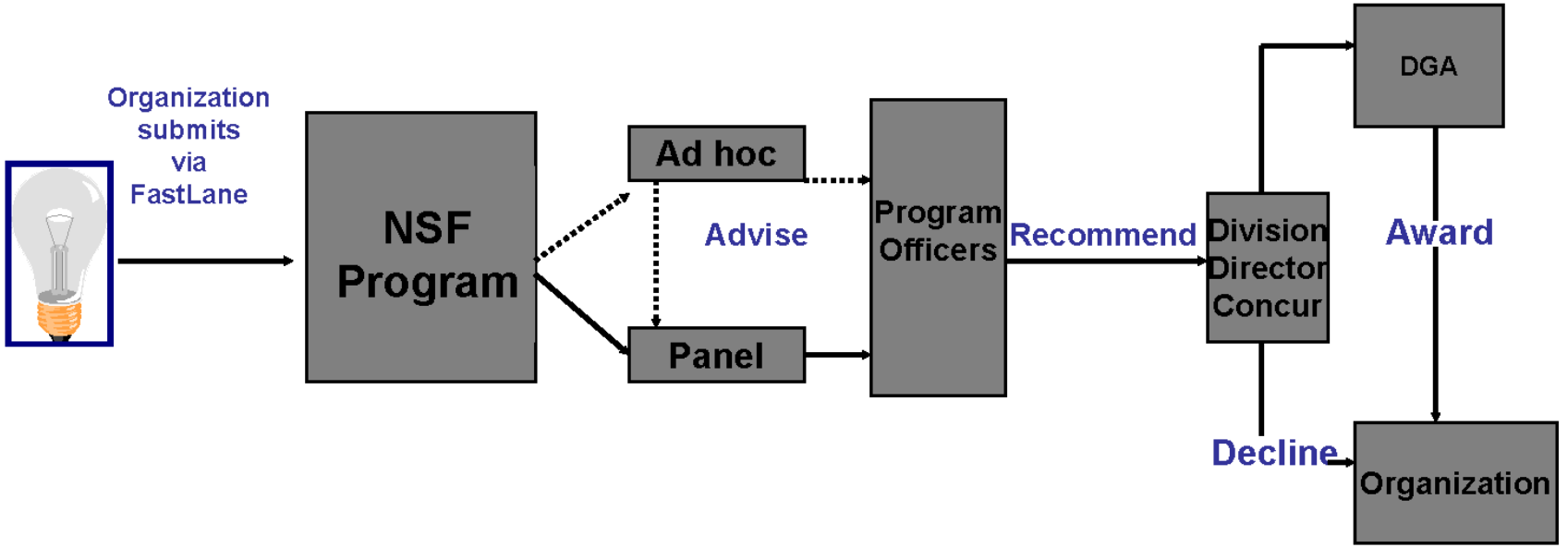
Five Review Elements

The following elements should be considered in the review for **both criteria**:

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 institution to conduct the proposed activities?
5. Are there **adequate resources** available to the PI (either at the home institution or through collaborations) to carry out the proposed activities?

(emphasis added)

Proposal Review Process and Timeline



Selected Funding Programs & Priorities

CAREER

CAREER PROGRAM SOLICITATION NSF 14-532

- Established in 1994 to recognize efforts by **junior faculty members** in integrating research and education, and fostering the connections between learning and discovery . . . **especially women, members of underrepresented minority groups, and persons with disabilities.**
- The **Presidential Early Career Award for Scientists and Engineers** (PECASE) is the highest honor bestowed by the U.S. Government on outstanding scientists and engineers beginning their independent careers.

Goals of the CAREER Program

- Provide support for five years to allow the career development of outstanding new teacher-scholars in the context of the mission of their organization.
- Build a foundation for a lifetime of integrated contributions to research and education.
- Provide incentives to Universities to value the integration of research and education.
- Increase participation of those traditionally underrepresented in science and engineering.

ITEST

Aim of the ITEST Program

Ensure a high-quality STEM workforce by supporting projects that:

- Increase student awareness of career opportunities in STEM and cognate fields.
- Motivate students to pursue appropriate educational pathways to STEM-related careers.
- Provide technology-rich experiences that develop disciplinary knowledge, practices, and non-cognitive skills needed in STEM fields.

STEM Workforce & Cognate Fields

- Traditional STEM Disciplines
- Information and Communications Technology (ICT)
- Computing, Computer Sciences, Data Analytics, and related fields.
- Professionals at all levels, including technicians, technologists, scientists, engineers, computer scientists, and mathematicians.

ITEST Projects

- Must involve students.
- Are informed by relevant research.
- Will focus on workforce development for youth or school-to-work transitions.
- Will conduct foundational or design-based research of strategies, conditions and contexts that improve student STEM learning pathways and STEM-focused career preparations and mentorships.

Two Types of Projects Supported

Strategies projects that address the creation and implementation of innovative workforce-related activities or programs.

- Awards for up to $1.2M for projects lasting up to 3 years.
- Approximately 15-20 projects to be supported.

SPrEaD (**S**uccessful **Pr**oject **E**xpansion **a**nd **D**issemination) projects that support the wider and broader dissemination and examination of innovative strategies.

- Awards for up to $2M for projects lasting 3-5 years.
- Approximately 5-10 projects to be supported.

Other Divisions of Interest

- Education and Human Resources (EHR) Directorate
  - Division of Undergraduate Education
- Social Behavioral and Economic Sciences (SBE) Directorate
  - Sciences of learning program
- Computer & Information Sciences & Engineering (CISE) Directorate
  - Division of Information and Intelligent Systems
    - Cyber-human systems program (HCI)
    - Cyberlearning

Cyberlearning

Cyberlearning program vs. other cyberlearning research

- Cyberlearning program in CISE is only one option (see Dear Colleague Letter for other venues)
- Cyberlearning program is open to all learning domains (STEM or non-STEM) and contexts (formal or informal)
- Cyberlearning program emphasizes future learning technologies (not today's)

Where to Submit Proposals

- NSF's FastLane:

https://www.fastlane.nsf.gov/index.jsp

- Grants.gov:

http://www.grants.gov

Note:

- Collaborative proposals must be submitted through FastLane.
- Fastlane will check for required sections of proposals.

Where to find more info:

- All current EHR funding opportunities: https://www.nsf.gov/funding/pgm_list.jsp?org=EHR

- Program resource centers for most programs (CAISE, STELAR, CADRE)
- Bob Russell: rlrussel@nsf.gov, 202-997-5539 (cell); 703-292-2995 (text)

Questions

NSF Needs You!