



# **NSF MERIT REVIEW CRITERIA & PROPOSAL REVIEW PROCESS**

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NSF/NOYCE Workshop

March 27-28, 2015

Baltimore, MD

# **NSF Merit Review Criteria**

## *Guiding Principles*

- All NSF projects should be of the highest quality and have the potential to advance, if not transform, the frontiers of knowledge.
- NSF projects, in the aggregate, should contribute more broadly to achieving societal goals.
- Meaningful assessment and evaluation of NSF funded projects should be based on appropriate metrics, keeping in mind the likely correlation between the effect of broader impacts and the resources provided to implement projects.

# **NSF MERIT REVIEW CRITERIA**

## **REQUIRED**

**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.

# INTELLECTUAL MERIT

## (unpacked)

- Does it advance knowledge?
- How qualified are the proposers?
- Does it explore creative concepts?
- How well is it organized?
- Are the needed resources available?
- Is the data management plan satisfactory?
- How solid is the evaluation plan?
- Does it comprehensively address the post-doc mentoring plan, if applicable?

# **BROADER IMPACTS**

## **(unpacked)**

- Does it promote teaching, training, and learning?
- Does it include the participation of underrepresented groups? New Institutions?
- Does it enhance the infrastructure for research and education? Partnership development?
- Will it disseminate results broadly?
- How will society benefit?

# ADDITIONAL SOLICITATION SPECIFIC REVIEW CRITERIA

- The extent to which the proposed work attends to the expectations and requirements discussed in *Section II Program Description* relevant to the specific track
- The potential for the project to recruit, prepare, and retain STEM majors and/or STEM professionals (S&S and TF)
- The potential to develop and retain NSF Master Teaching Fellows (MTF) in teaching careers in high-need schools
- The quality of academic requirements and components of the program, the extent to which the proposed preparation, recruitment, and retention strategies reflect effective practices based on research
- Proof of institutional commitment beyond NSF funding period

# WHAT MAKE A PROPOSAL COMPETITIVE?

- Original ideas
- Succinct, focused project plan
- Realistic amount of work
- Sufficient detail provided
- Cost effective
- High impact
- Knowledge and experience of PIs
- Contribution to the field
- Rationale and evidence of potential effectiveness

# NSF PROPOSAL REVIEW PROCESS





# PRELIMINARY REVIEW

- If proposal doesn't adhere, will be returned without review (RWR)

RWR Examples: The proposal:

- is inappropriate for funding by NSF;
- does not meet NSF proposal preparation requirements as specified in the GPG or program solicitation;
- is a duplicate of a proposal already under consideration from the same submitter;
- was previously reviewed and declined and has not been substantially revised.

# REVIEWER SELECTION

- Preliminary Review
  - If proposal meet basic requirements, at least 3 reviewers selected
    - Selection based on reviewers' specific and/or broad knowledge of an S&E field and its educational activities

# WHO REVIEWS?

Experts in:

- STEM education
- STEM content
- research/assessment methodology
- cognitive science, psychology, sociology, anthropology
- school-based experts
- others as appropriate for the proposals submitted

# REVIEWER SELECTION

- Program Officers also look for potential Conflicts of Interests
- Proposers may suggest persons they believe are well-qualified to review their proposal as well as identify persons they would prefer not review their proposal

# PROPOSAL RATINGS

- Excellent

- Very Good

- Good

- Fair

- Poor

**(For Some Programs)**

- Highly  
Competitive

- Competitive

- Noncompetitive

# PLEASE NOTE

- Some solicitations have additional review criteria, as noted in the solicitation (Noyce does!)
- In some programs, not all proposals may go to panel – potentially if all individual reviews are Fair or below
- Not all programs/proposals have external reviewers
- You don't need all Excellents for your project to get funded! (Likewise, you could get all Excellents and not get funded.)

# PROGRAM OFFICER REVIEW

- Reviewers/panels provide their analyses and evaluations to NSF Program Officers
- After scientific, technical, and programmatic review, the Program Officer recommends to the Division Director whether the proposal should be recommended for an award or declined for funding

# DIVISION DIRECTOR REVIEW

- If the decision is to decline the proposal, the proposing organization is notified and review information is available in the NSF FastLane System
- If the decision is to make an award, the recommendation is submitted to an officer in the Division of Grants and Agreements



# DECLINED: NEXT STEPS

Receive:

- Written description of the review process that your particular proposal went through,
- Individual reviews, and
- Panel summary if applicable

Proposer Follow Up:

- Read the reviews
- Determine next steps (Revise and Resubmit?)
- Follow up with Program Officer if needed

# AWARD RECOMMENDED NEXT STEPS

- Grants and Agreements Officer conducts a review of business, financial, and policy implications
- **Special Note:** Proposal will not be funded if there are any outstanding annual or final reports due on any previous awards.
- Proposal Review Process:  $\approx$  6 months; Business Review:  $\approx$  1 month

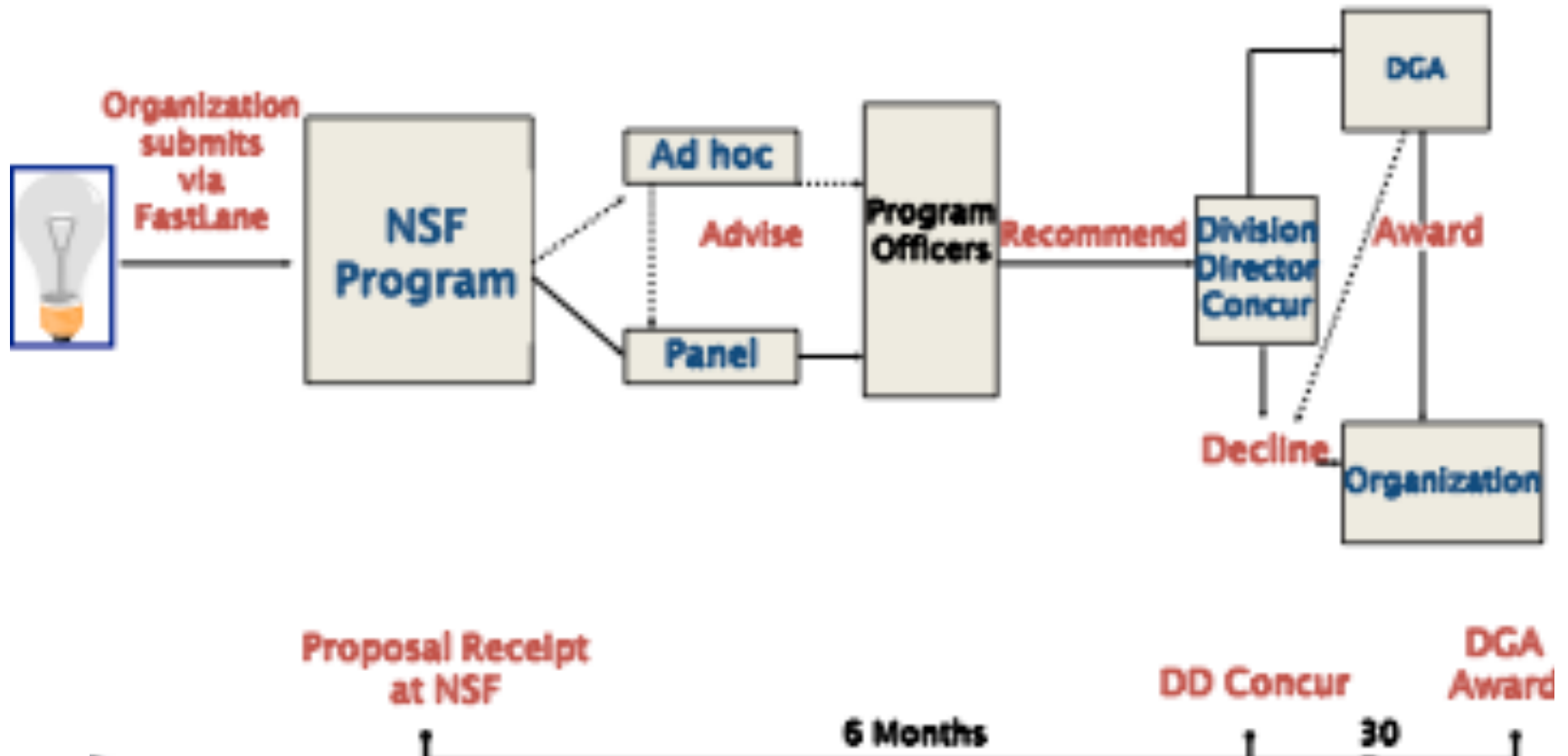
# AWARD FINALIZED

Awards sent via email, electronically signed by Grants and Agreements Officer (who is the only person who may make awards on behalf of NSF)

The award documentation is comprised of:

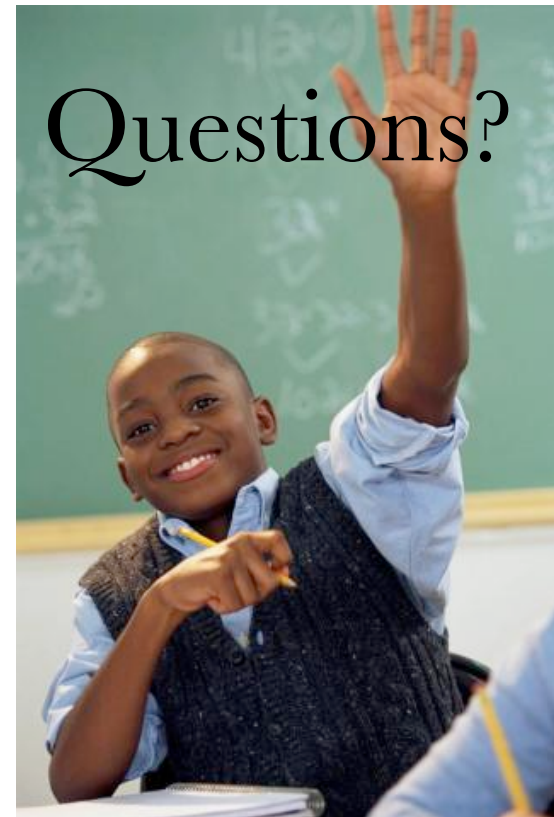
- An award notice
- Budget
- Proposal
- Applicable NSF conditions

# NSF Proposal Process and Timeline



# NSF MERIT REVIEW CRITERIA AND PROCESS

Reminder:  
One of the best ways  
to get to know the  
NSF review process  
is to serve as a  
reviewer!



[http://www.nsf.gov/bfa/dias/policy/merit\\_review/reviewer.jsp](http://www.nsf.gov/bfa/dias/policy/merit_review/reviewer.jsp)