

## 1. National Science Board invites input into NSF merit review criteria

### From

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Over the past year, the National Science Board (NSB) has been conducting a review of the National Science Foundation's merit review criteria (Intellectual Merit and Broader Impacts). At the Board's May 2011 meeting, the NSB Task Force on Merit Review proposed a revision of the two merit review criteria, clarifying their intent and how they are to be used in the review process. In addition, the Task Force identified a set of important underlying principles upon which the merit review criteria should be based. We now seek your input on the proposed revision and principles. The NSF community at large was invited to provide comments and suggestions for improvements through the NSF web site.

The two draft revised criteria, and the principles upon which they are based, **are below**. Comments are being collected through July 14. NSF invites you to send comments to [meritreview@nsf.gov](mailto:meritreview@nsf.gov). It is expected that NSF will develop specific guidance for PIs, reviewers, and NSF staff on the use of these criteria after the drafts are finalized. Your comments will help inform development of that guidance, and other supporting documents such as FAQs.

The Foundation is the primary Federal agency supporting research at the frontiers of knowledge, across all fields of science and engineering (S&E) and at all levels of S&E education. Its mission, vision and goals are designed to maintain and strengthen the vitality of the U.S. science and engineering enterprise and to ensure that Americans benefit fully from the products of the science, engineering and education activities that NSF supports. The merit review process is at the heart of NSF's mission, and the merit review criteria form the critical base for that process.

## Merit Review Principles and Criteria

The identification and description of the merit review criteria are firmly grounded in the following principles:

1. All NSF projects should be of the highest intellectual merit with the potential to advance the frontiers of knowledge.
2. Collectively, NSF projects should help to advance a broad set of important national goals, including:
  - Increased economic competitiveness of the United States.
  - Development of a globally competitive STEM workforce.
  - Increased participation of women, persons with disabilities, and underrepresented minorities in STEM.
  - Increased partnerships between academia and industry.
  - Improved pre-K–12 STEM education and teacher development.
  - Improved undergraduate STEM education.
  - Increased public scientific literacy and public engagement with science and technology.
  - Increased national security.
  - Enhanced infrastructure for research and education, including facilities, instrumentation, networks and partnerships.
3. Broader impacts may be achieved through the research itself, through activities that are directly related to specific research projects, or through activities that are supported by the project but ancillary to the research. All are valuable approaches for advancing important national goals.
4. Ongoing application of these criteria should be subject to appropriate assessment developed using reasonable metrics over a period of time.

## **Intellectual merit of the proposed activity**

The goal of this review criterion is to assess the degree to which the proposed activities will advance the frontiers of knowledge. Elements to consider in the review are:

1. What role does the proposed activity play in advancing knowledge and understanding within its own field or across different fields?
2. To what extent does the proposed activity suggest and explore creative, original, or potentially transformative concepts?
3. How well conceived and organized is the proposed activity?
4. How well qualified is the individual or team to conduct the proposed research?
5. Is there sufficient access to resources?

## **Broader impacts of the proposed activity**

The purpose of this review criterion is to ensure the consideration of how the proposed project advances a national goal(s). Elements to consider in the review are:

1. Which national goal (or goals) is (or are) addressed in this proposal? Has the PI presented a compelling description of how the project or the PI will advance that goal(s)?
2. Is there a well-reasoned plan for the proposed activities, including, if appropriate, department-level or institutional engagement?
3. Is the rationale for choosing the approach well-justified? Have any innovations been incorporated?
4. How well qualified is the individual, team, or institution to carry out the proposed broader impacts activities?
5. Are there adequate resources available to the PI or institution to carry out the proposed activities

## **2. The US-Israel Binational Agricultural Research and Development Fund**

### **BARD Research Grants Program**

**Funds projects conducted cooperatively by US and Israeli scientists. Covers all phases of**

**agricultural R&D including strategic or applied research.**

Award duration: 3 years

**Next submission date: September 14, 2011**

### **Vaadia-BARD Postdoctoral Fellowship Program**

Funds postdoctoral fellowships for US citizens to perform agricultural research with established Israeli scientists. Recipients travel to Israel to carry out their research.

Award duration: 1-2 years

**Next submission date: January 15, 2012**

### **Senior Research Fellowship Program**

The program promotes joint agricultural research of high quality between established scientists from the US and their Israeli hosts.

Award duration: 2-12 months

**Next submission date: January 15, 2012**

### **Graduate Student Program**

The program enables Ph.D. students in one country (US or Israel) to travel to the other country to acquire new skills and techniques in their field of study.

Award duration: 3-6 months

**Next submission date: January 15, 2012**

### **Workshop**

Funds workshops whose purpose is to identify research needs and to promote increased contact between scientists throughout the world in areas related to the binational and agricultural interests of the US and Israel.

**Next submission date: January 15, 2012**

**Details and Application Forms: [www.bard-isus.com](http://www.bard-isus.com)**