

**National Science Foundation  
Office of the Director  
Arlington, VA 22230**

**Notice No. 132**

**March 27, 2012**

**IMPORTANT NOTICE TO PRESIDENTS OF UNIVERSITIES AND  
COLLEGES AND HEADS OF OTHER NATIONAL SCIENCE FOUNDATION  
GRANTEE ORGANIZATIONS**

**Subject: Implementation of revised National Science Board-approved Merit Review Criteria**

In December 2011, the National Science Board (NSB) released a report on the National Science Foundation's merit review criteria. The NSB report, [\*National Science Foundation's Merit Review Criteria: Review and Revisions\*](#), was the result of a thorough examination by the NSB Task Force on Merit Review. The Task Force was charged to investigate the effectiveness of the merit review criteria (intellectual merit and broader impacts) used by the National Science Foundation (NSF) since 1997 to evaluate all proposals.

At the same time that the Task Force began its review, the U.S. Congress was writing the [\*America COMPETES Reauthorization Act of 2010 \(ACRA\)\*](#), which provides reauthorization for the NSF. The Broader Impacts review criterion was specifically addressed in Section 526 of the ACRA, which was signed into law on January 4, 2011. The Act stipulated that NSF shall apply a Broader Impacts review criterion to achieve an array of societal goals. It also charged NSF to develop policies related to strategies and approaches employed to address the Broader Impacts criterion: assessment and evaluation; institutional engagement in assisting investigators with activities associated with addressing broader impacts; and training to ensure NSF staff, merit review panels, and potential NSF-supported investigators understand these new policies.

**Merit review criteria unchanged, underlying principles articulated**

Based on the NSB Task Force's analyses and recognizing the provision in ACRA mandating the retention of the Broader Impacts criterion, the NSB determined that the two current Merit Review Criteria remain appropriate for evaluation of NSF proposals and should be retained. The Task Force did, however, seek to clarify and enhance the function of the criteria. Therefore, the NSB's report contains the following three principles that govern NSF's approach to utilizing these criteria and provides guidance addressing several issues associated with their implementation:

- 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. These "Broader Impacts" may be accomplished through the research itself, through activities that are directly related to specific research projects, or through activities that are supported by, but are complementary to, the projects.
- 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. If the size of the activity is limited, evaluation of that activity in isolation is not likely to be meaningful. Thus, assessing the effectiveness of these activities may best be done at a higher, more aggregated level than the individual project.

These principles provide the basis for the merit review criteria, as well as a context within which the users of the criteria can better understand their intent.

In response to the report, NSF established a Merit Review Criteria Working Group comprised of representatives from NSF's Directorates/Offices. The Working Group has been meeting on a weekly basis to develop plans for consideration by senior management regarding implementation of the Board's recommendations.

### **Opportunity for community input on NSF implementation**

In January 2011, NSF published a Federal Register Notice alerting the public to NSF's intent to revise the *Proposal and Award Policies and Procedures Guide (PAPPG)*. NSF plans to publish a second Federal Register Notice in April 2012, and that notice will contain information highlighting specific changes that are necessary to implement the Board's recommendations regarding the Foundation's merit review criteria. Once the Federal Register notice is published, the public will have the opportunity to formally comment on the proposed changes to the PAPPG. At this time, we anticipate issuing the revised PAPPG in October 2012 with an effective date of January 2013.

### **Next Steps**

We foresee that in addition to revisions to NSF policy documents (e.g., the PAPPG), implementation of these recommendations will involve updates to NSF systems, such as FastLane and the Interactive Panel System, as well as Foundation websites. Information about changes and updates will be widely disseminated, and we plan to cover these issues extensively in our spring and fall outreach sessions. In addition, plans are underway to develop and provide comprehensive internal and external training on the revised criteria. Once finalized, information about training opportunities will be broadly announced to the community.

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Director