

NSF MERIT REVIEW CRITERIA

REVIEW CRITERIA

-Intellectual Merit

-Broader Impacts

INTELLECTUAL MERIT

DOES IT ADVANCE KNOWLEDGE?

HOW QUALIFIED IS THE PROPOSER?

DOES IT EXPLORE CREATIVE CONCEPTS?

HOW WELL IS IT ORGANIZED?

ARE THE NEEDED RESOURCES AVAILABLE?

BROADER IMPACTS

**DOES IT PROMOTE TEACHING AND
LEARNING?**

**DOES IT INCLUDE PARTICIPATION OF
OTHERS?**

**WILL THE RESULTS BE BROADLY
DISSEMINATED?**

HOW WILL SOCIETY BENEFIT?

Additional Criteria

- Integration of Research and Education
- Integrating Diversity into NSF Programs, Projects, and Activities
- Substantial Improvement in the Institution's Capability to Conduct Leading-Edge Research

Additional Criteria Continued

For Acquisition Proposals:

- Extent of shared use of the instrumentation
- Sufficient infrastructure and technical expertise
- Justification of request for operations and maintenance
- Training the next generation of instrumentalists

Additional Criteria Continued

For Acquisition Proposals:

- Plans for use of the new or enhanced capability in research and research training
- The impact of the instrumentation at the national level and on the research community of interest (for proposals requesting more than \$2 million)

Additional Criteria Continued

For Instrument Development Proposals:

- Adequacy of the management plan, including mechanisms in place to deal with potential risks
- Availability of appropriate technical expertise to design and construct the instrument
- The appropriateness of the cost of the new technology
- The need for the development of a new instrument

Examples of Broader Impacts

Advance Discovery and Understanding

- Integrate research activities into the teaching of STEM at all educational levels
- Participate in the recruitment, training, and professional development of K-12 science and mathematics teachers
- Establish special mentoring programs for students

Examples of Broader Impacts

Broaden Participation

- Establish research and education collaborations with students and/or faculty who are members of underrepresented groups
- Establish research and education collaborations with students and faculty from non-Ph.D.-granting institutions
- Participate in conferences, workshops, and field activities where diversity is a priority

Examples of Broader Impacts

Benefits to Society

- Provide specific examples and explanations regarding the potential application of research and education results
- Analyze, interpret, and synthesize research and education results in formats understandable and useful for non-scientists
- Provide information for policy formulation by Federal, State, or local agencies

Additional Information on Broader Impacts

See additional examples of Broader Impacts
at:

<http://www.nsf.gov/pubs/gpg/broaderimpacts.pdf>