

National Science Foundation (NSF) Merit Review Principles and Criteria

NSF uses two merit review criterion for evaluating research proposals for funding: Intellectual Merit and Broader Impacts. Both criteria are to be given full consideration during the review and decision-making processes; each criterion is necessary but neither, by itself, is sufficient. Therefore, proposers must fully address both criteria.

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

Broader Impacts may be accomplished through the:

- I. the research itself,
- II. activities that are directly related to specific research projects
- III. activities that are supported by, but are complementary to the project.

The following questions will be asked of BOTH CRITERIA when reviewing proposals:

1. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
2. 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?
3. How well qualified is the individual, team, or organization to conduct the proposed activities?
4. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?

The Broader Impacts criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes. Such outcomes include, but are not limited to:

1. Full participation of women, persons with disabilities, and underrepresented minorities in STEM (specifically African Americans, Hispanics, Native Americans, Alaska Natives, and Pacific Islanders)
2. Improved STEM education and educator development at any level
3. Increased public scientific literacy and public engagement with science and technology
4. Improved well-being of individuals in society
5. Development of a diverse, globally competitive STEM workforce
6. Increased partnerships between academia, industry, and others
7. Improved national security
8. Increased economic competitiveness of the United States
9. Enhanced infrastructure for research and education

Note: Plans for data management and sharing of the products of research, including preservation, documentation, and sharing of data, samples, physical collections, curriculum materials and other related research and education products should be described in the Special Information and Supplementary Documentation section of the proposal.