

Merit Review

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.

Individual projects are expected to include:

- Clearly stated goals
- Specific descriptions of the activities the PI intends to do
- A plan in place to document the outputs of those activities

In evaluating the two merit review criteria, reviewers are asked to consider:

- What the proposer wants to do?
- Why they want to do it?
- How they plan to do it?
- How will they know if they succeed?
- What benefits could accrue if the project is successful?

In evaluating the two merit review criteria, reviewers are asked to consider:

- What the proposer wants to do? (problem statement—Goals/Objectives)
- Why they want to do it? (significance/literature review)
- How they plan to do it? (approach)
- How will they know if they succeed? (evaluation plan)
- What benefits could accrue if the project is successful? (impact statement)

Merit Review Criteria

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

The following elements should be considered in the review for both criteria:

1. What is the potential for the proposed activity to:
 - a. Advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and
 - b. Benefit society or advance desired societal outcomes (Broader Impacts)?
2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
3. 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?
4. How well qualified is the individual, team, or institution to conduct the proposed activities?
5. Are there adequate resources available to the PI (either at the home institution or through collaborations) to carry out the proposed activities?

Broader Impacts:

Consider NSF's Desired Societal Outcomes

- What is the potential for the proposed activity(ies) to benefit society or advance societal outcomes?
- Full STEM participation of women, persons of disabilities and underrepresented minorities.
- Improved STEM education and educator development at any educational level.
- Enhanced [STEM] infrastructure for research and education.
- Development of a diverse, globally competitive STEM workforce.

Broader Impacts: Consider NSF's Desired Societal Outcomes

- Increased public scientific literacy and public engagement with science/technology.
- Increased partnerships between academia, industry and others.
- Improved national security.
- Increased economic competitiveness.
- Improved well being of individuals in society.

Broader Impacts: Some Campus Resources

- Developing Scholars Program—Anita Cortez
cortez@ksu.edu
- Louis Stokes Alliance for Minority Participation—Breneee King-- breneek@ksu.edu
- Multicultural Engineering Program—Laverne Bitsie-Baldwin--ksumep@ksu.edu
- Collaborative Outreach, Recruitment, and Engagement in STEM (CORES)—Beth Montelone--bethmont@ksu.edu
- ORSP Website www.k-state.edu/research/research/writing