

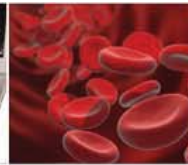


# Revised NSF Merit Review Criteria Effective for Proposals Submitted or Due on or After January 14, 2013





WHERE DISCOVERIES BEGIN

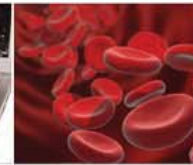


# Topics

- Merit Review at NSF
- Current Revisions to Merit Review
- Implementation
- Resources



WHERE DISCOVERIES BEGIN



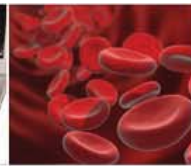
# Merit Review at NSF

## Refining Intellectual Merit & Broader Impacts

- Intellectual Merit & Broader Impacts (1997-2007)
- Emphasis on Transformative Research in Intellectual Merit & Broader Impacts (2007-2013)
- Revised Intellectual Merit & Broader Impacts (2013)
  - Three review principles
  - Two review criteria
  - Five review elements



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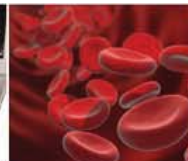


# NSF Merit Review Criteria Revision Background





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# NSB Task Force on Merit Review

- Established Spring 2010
- Rationale:
  - More than 13 years since the last in-depth review and revision of the review criteria
  - Opportunity to align review criteria with NSF's new Strategic Plan
  - Persistent anecdotal reports about confusion related to the Broader Impacts criterion, and inconsistency in how the criterion was being applied.

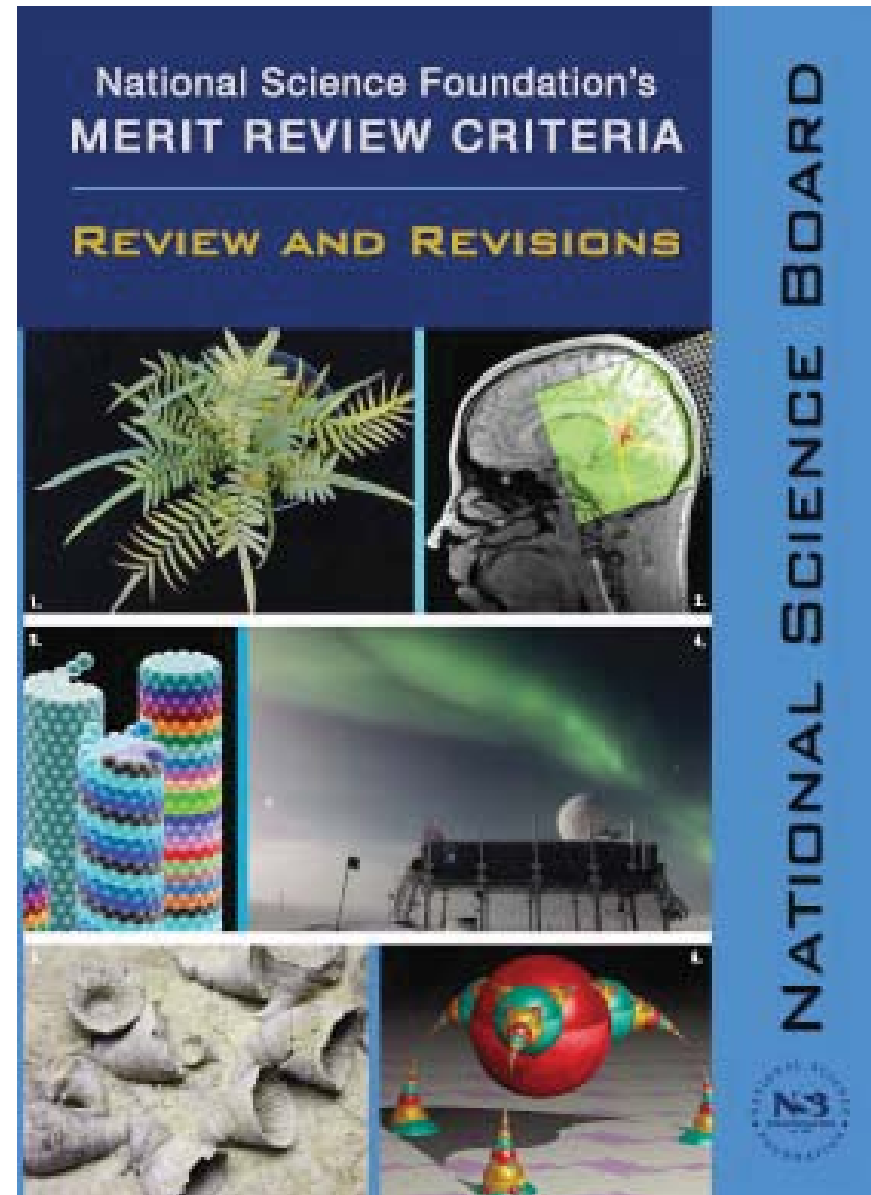


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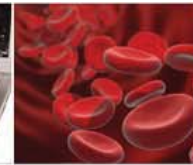
# Final Report

- Task Force used input from the community to revise the description of the review criteria and underlying principles
- Presented the final report to the National Science Board on December 13, 2011





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# Final Report: Conclusions

- The Intellectual Merit and Broader Impacts review criteria together capture the important elements that should guide the evaluation of NSF proposals.
- Revisions to the descriptions of the Broader Impacts criterion and how it is implemented are needed.
- Use of the review criteria should be informed by a guiding set of core principles.



# Final Report: Recommendations

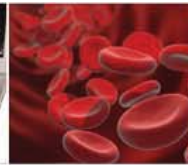
1. Three guiding review principles
2. Two review criteria
3. Five review elements







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# Merit Review Criteria Guiding Principles

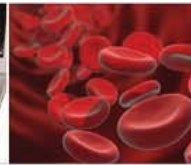
- All NSF projects should be of the highest quality and have the potential to advance, if not transform, the frontiers of knowledge.
- NSF projects, in the aggregate, should contribute more broadly to achieving societal goals.
- Meaningful assessment and evaluation of NSF funded projects should be based on appropriate metrics, keeping in mind the likely correlation between the effect of broader impacts and the resources provided to implement projects.



# Merit Review Criteria

When evaluating NSF proposals, reviewers should consider what the proposers want to do, why they want to do it, how they plan to do it, how they will know if they succeed, and what benefits would accrue if the project is successful. These issues apply both to the technical aspects of the proposal and the way in which the project may make broader contributions. To that end, reviewers are asked to evaluate all proposals against two criteria:

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



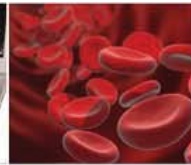
# Five Review Elements

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?



WHERE DISCOVERIES BEGIN

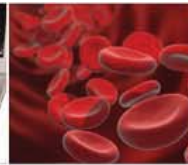


# NSF Merit Review Criteria Revision Implementation





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# PAPPG Revision Process

- Federal Register Notices issued in January 2011 and May 2012 to alert the public to NSF's intent to revise PAPPG
- Disseminated draft document with changes highlighted to research community
- Comments submitted to OMB/NSF (were due July 12<sup>th</sup>)
- Updated PAPPG to be released October 2012; effective **January 14, 2013**



# Merit Review Criteria

## For Proposers

- Project Summary components will be required text boxes in FastLane not to exceed 4,700 characters and will include
  - Overview
  - Statement on Intellectual Merit
  - Statement on Broader Impacts
- Proposals with special characters may upload Project Summary as a PDF document
- Text boxes must be filled out or a project summary must be uploaded or FastLane will **not** accept the proposal.



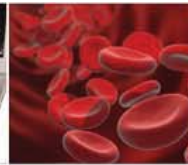
# Merit Review Criteria

## For Proposers

- Project Description
  - Must contain a separate section with a discussion of the broader impacts of the proposed activities
  - Results from Prior Support (if any) must address intellectual merit and broader impacts
- New certification regarding Organizational Support
  - Requires AOR certification that organizational support will be made available as described in the proposal to address the broader impacts and intellectual merit activities to be undertaken
- Annual and Final reports
  - Must address activities intended to address the Broader Impacts criterion that are not intrinsic to the research



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# Merit Review Criteria

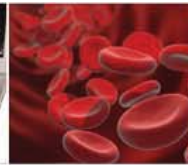
## For Proposers

- NSF Program Announcements and Solicitations to include updated language about the enhanced review criteria.
- Updated NSF FastLane Help to assist in preparation of proposals





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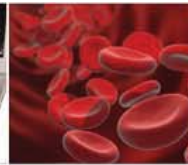
# Merit Review Criteria

## Resources

- NSF Merit Review Website
  - [www.nsf.gov/bfa/dias/policy/merit\\_review/](http://www.nsf.gov/bfa/dias/policy/merit_review/)
- Resources for the Proposer Community
  - [www.nsf.gov/bfa/dias/policy/merit\\_review/resources](http://www.nsf.gov/bfa/dias/policy/merit_review/resources)



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# Merit Review Criteria

## FAQ Development

- Please submit questions to [policy@nsf.gov](mailto:policy@nsf.gov).