

Merit Review: Critical to America's Scientific Leadership

Underpinning the success and legitimacy of America's scientific enterprise is merit review, a competitive process by which federal agencies such as the National Institutes of Health (NIH) and the National Science Foundation (NSF) allocate grants to support the highest quality university-based scientific, engineering, and medical research. For 75 years, federal agencies have used the merit review process to make funding decisions based solely on the quality and impact of the science as determined by leading scientists and subject matter experts. Considered to be the best in the world, continued American scientific excellence depends upon merit review.

Merit review provides the best return on taxpayer investments in research

- Under merit review, university-based researchers compete for funding based on the scientific quality of their proposals.
- Merit review guarantees that only the highest-quality and highest-impact proposals receive federal taxpayer support.
- By ensuring that only the very best science receives support, merit review has resulted in scientific discoveries that have transformed human health, fueled the U.S. economy, and provided critical national security advances.
- Merit review does not favor applicants from particular geographies or political perspectives; instead, it focuses on the objective assessment of scientific quality.

Merit review is powered by the expertise of independent peer reviewers

- Merit review engages panels of independent and uniquely qualified scientific experts, also known as peer reviewers, to rigorously evaluate and recommend proposals strong enough to receive federal funding.
- Peer reviewers score and rank proposals based on objective criteria: potential for advancing scientific knowledge, study design and feasibility, and the qualifications of the research team.
- Peer reviewers are bound by systems of checks and balances, including strict confidentiality and conflict-of-interest rules designed to eliminate bias and ensure fairness.



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Merit review is necessary for the implementation of Gold Standard Science

- Merit review is essential to carrying out the administration's goal of restoring public trust in the scientific enterprise as identified in the president's May 23 Executive Order ("Restoring Gold Standard Science").
- Led by scientific peer reviewers, merit review must be used to develop scientific knowledge that is both replicable and reproducible.
- Giving political appointees the ability to override merit review, as expressed in the president's August 7 Executive Order ("Improving Oversight of Federal Grantmaking"), undermines the integrity and scientific objectivity of the merit review process.

