How to Review a Proposal

1) Summarize the proposal in 3-4 sentences. What is the central focus of the work? What hypotheses are being tested? What are the approaches? What are the broader impacts?

For the review comment on whether the proposal clearly outlines the problem to be investigated. Is it clear how the work fits into the larger scope of the discipline? Is it clear how the proposed experiments will address the hypotheses? Is there something obvious missing from the proposal? Are there expected results? Is the significance of the work stated?

2) Summarize the broader impacts. Are they reasonable and sufficient? Comment on how they could be more connected to the proposal.

3) Give the proposal an overall funding score from 1 (best) to 5 (worst). Also select a category for it: must fund, superior, good, not competitive.

4) Make any notations on the proposal that will help the proposer. Circle any typos. Indicate any areas that could be clarified.

5) Remember to critique the work and not the person. Try to make your comments as clear as possible.

http://www.nsfgrfp.org/how_to_apply/review_criteria

Review Criteria for the Predoc Reviewers

Applications will be reviewed by panels of disciplinary and interdisciplinary scientists, mathematicians, and engineers and other professional experts in graduate education. Applications will be assigned to panels based on the applicant’s chosen field(s) of study and the discipline(s) represented. Thus, applicants are advised to select the fields of study in the FastLane applicant module that are most closely aligned to the proposed graduate program of study and research plan. Applications to interdisciplinary fields of study are reviewed by interdisciplinary panelists based on the disciplines indicated by the applicant and review of the application by the GRFP staff.

Each application, therefore, will be reviewed independently on the basis of merit using all available information in the completed application. In considering applications, reviewers will be instructed to address the two Merit Review Criteria as approved by the National Science Board – Intellectual Merit and Broader Impacts (Grant and Proposal Guide, NSF 08-01). Applicants, therefore, must address each criterion in their written statements to provide reviewers with the information necessary to respond fully to both.

1. **Intellectual Merit**
   a. How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields?
   b. How well qualified is the proposer (individual or team) to conduct the project? (If appropriate, the reviewer will comment on the quality of prior work.)
c. To what extent does the proposed activity suggest and explore creative, original, or potentially transformative concepts?
d. How well conceived and organized is the proposed activity?
e. Is there sufficient access to resources?

1. **Broader Impacts** – Activities and projects that:
   a. How well does the activity advance discovery and understanding while promoting teaching, training, and learning?
   b. How well does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)?
   c. To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships?
   d. Will the results be disseminated broadly to enhance scientific and technological understanding?
   e. What may be the benefits of the proposed activity to society?

*See this NSF document for representative Broader Impacts activities*

For each criterion, panelists evaluate and comment on the applicant’s strengths and areas for improvement on the rating sheet, assign an "excellent", "very good", "good", "fair" or "poor" rating for each criterion, and determine an overall point value.

**Intellectual Merit**

Panelists will consider factors including: the strength of the academic record, the proposed plan of research and whether it is potentially transformative, the description of previous research experience, references, Graduate Record Examinations (GRE) General and Subject Tests scores, and the appropriateness of the choice of institution relative to the proposed plan for graduate education and research.

**Broader Impacts**

The broader impacts criterion includes contributions that infuse learning with the excitement of discovery, and assure that the findings and methods of research are communicated in a broad context and to a large audience.

A strong application will encourage diversity, broaden opportunities, and enable the participation of all citizens—women and men, underrepresented minorities, and persons with disabilities—in science and research.

In addition to reaching a broad audience, a strong application must demonstrate how it will enhance scientific and technical understanding, while benefiting society.

Applicants may provide characteristics of their background, including personal, professional, and educational experiences, to indicate their potential to fulfill the broader impacts criterion.