NSF Graduate Research Fellowship Program: 
What Panelists Look For?!

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NSF GRFP Panelist Responsibilities

• Assemble in Washington (~early February) for the evaluation process

• Examine information available in the applicants' files

• Rate the relative merit of applicants using NSF’s 2 Merit Review Criteria

• Place each of the applicants into Quality Groups
NSF’s 2 Merit Review Criteria for the GRFP

**Intellectual Merit Criterion**

Intellectual merit includes intellectual ability and other accepted requisites for scholarly scientific study, such as the ability

1. to work as a member of a team as well as independently;
2. to communicate; and
3. to plan and conduct research.

**Broader Impacts Criterion**

The broader impacts criterion includes contributions that

1. effectively integrate research and education at all levels;
2. encourage diversity, broaden opportunities, and enable full participation;
3. enhance scientific and technical understanding; and
4. benefit society.
### INTELLECTUAL MERIT CRITERION

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<th>Excellent</th>
<th>Very Good</th>
<th>Good</th>
<th>Less Competitive</th>
<th>Insufficient Basis for Judgment</th>
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<td>Proposed Plan of Research:</td>
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<td>Previous Research Experience:</td>
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### BROADER IMPACTS CRITERION

Past, current, and future efforts to:

- Foster integration of research and education:
- Advance diversity in science:
- Enhance scientific and technical understanding:
- Benefit society:

### COMMENTS TO APPLICANT:

__________________________________________________________________________________________________

__________________________________________________________________________________________________

__________________________________________________________________________________________________

Reviewer comments to the applicant on this rating sheet should be constructive and reflect the two NSF merit review criteria. Upon request, NSF will send the applicant a copy of this rating sheet without the name of the reviewer. Maximum protection will be given to the reviewer's identity subject to the policy stated above and the Freedom of Information Act, 5 USC 552.
NSF Graduate Fellowship Application Review

Begin 1st Readings

Eligibility or File Content Questions?
- Yes → NSF/ORAU deems eligible or complete?
  - Yes
  - No → Retire
- No → 2nd Readings

2nd Readings

Needs 3rd Reading (Average in top 40%)?
- Yes → Panel deems applicant needs 3 reading?
  - Yes
  - No → Retire
- No

Panel deems applicant needs 3 reading?
- Yes → 3rd Readings
- No

3rd Readings

Review Score Discrepancies (ORAU Staff verifies that all scores are processed correctly)

A
Initial Rank Order of Applicants and Deliberations of Rank Order Changes

Score Changes?

Yes → Change Score Sheets and Process Changes

No → Final Rank Order

Establish Quality Groups

Rank QG2 Applicants

Rank QG3 Applicants
(if Engineering or Computer Science Panel)

Review Complete
**Essay Question 15:**
Describe any personal, professional, or educational experiences or situations that have contributed to your desire to pursue advanced study in science, mathematics, or engineering.

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_A panelist might ask:_

“What’s the applicant’s MOTIVATION for graduate study?”
“Is there TANGIBLE EVIDENCE demonstrating sincerity of interest?”
**Essay Question 16:**
Describe your experiences in the following, or describe how you would address the following in your professional career:

- Integrating research & education
  (e.g., participating in and encouraging discovery at various levels);

- Advancing diversity in science
  (e.g., contributing to the participation of underrepresented groups);

- Enhancing scientific and technical understanding (e.g., sharing scientific knowledge with the general community); or

- Otherwise benefiting society.

A panelist might ask:

  “How does applicant plan to GIVE BACK to society?”
  “Is there TANGIBLE EVIDENCE demonstrating sincerity of intent?”
**Proposed Plan of Research:**
In a clear, concise, and original statement, describe research topics you may pursue while on fellowship tenure, and include how you became interested in these topics.

Your statement should reflect your own thinking and work, demonstrate your understanding of research principles necessary to pursue these interests, and explain the relationship to your previous research, if any.

Present your plan with a clear hypothesis or questions to be asked by the research.

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*A panelist might ask:*

“Does the applicant develop a *relevant* research hypothesis?”

“Does the applicant develop a *cogent, cohesive* research plan?”

“Does the applicant understand *relevant* research principles & techniques?”

“Does the applicant demonstrate appropriate *intellectual maturity & reasoning*?”

“Does the applicant communicate the *impact & relevance* of proposed research findings?”
**Previous Research Experience:**
Describe any scientific research activities in which you have participated, such as experience in undergraduate research programs, or research experience gained through summer or part-time employment or in work-study programs, or other research activities, either academic or job-related.

Explain the purpose of the research and your specific role in the research, including the extent to which you worked independently and/or as part of a team, and what you learned from your research.

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*A panelist might ask:*

“Does the applicant *understand* previous research hypothesis, purpose & goals?”

“Does the applicant *cogently describe* at least their portion of the research activities?”

“Does the applicant understand *relevant* research principles & techniques used?”

“Does the applicant demonstrate independent *intellectual maturity & reasoning*?”

“Does the applicant communicate their research findings, *incl.* impact & relevance?”
Successful Applicants have:

- Strong—*but not necessarily perfect*—academic records
- Very competitive—*but not necessarily perfect*—GRE scores
- Extremely strong letters of recommendation—*primarily from tenure–track faculty*
- Conducted—*even planned*—“independent” research
- Clear understanding of impact & relevance of past & planned research
- Clear visions of how a Ph.D. fits into their career plans
- *Relevant* research hypotheses & *cogent, cohesive* research plans
- Demonstrable independent, intellectual maturity & reasoning
- Demonstrated leadership in giving back to society