

Lessons Learned from 10,000 Proposal Reviews: Top Reviewer Criticisms and How to Avoid Them

AAAS Research Competitiveness Program

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Synopsis: This webinar summarized the insights the AAAS Research Competitiveness Program gained from their work reviewing thousands of science and engineering proposals each year for national, state, and university-system grant competitions. They presented the ten most frequent reviewer criticisms and the strategies they've seen adopted in successful proposals to avoid those criticisms. Their work has spanned proposals in all fields of the sciences, engineering, technology development, and mathematics. The proposals that they have experience with range from small project development grants to large-scale trans-disciplinary collaborations among multiple institutions and countries.

Audience: The webinar may be of particular interest for graduate students, early career faculty, or established researchers interested in their perspective.

Presenter: The live webinar was presented by Dr. Charles E. Dunlap, Director of the Research Competitiveness Program. Dr. Dunlap has more than 20 years of experience designing and implementing national and international S&T grant competitions, overseeing funding agencies, and developing and leading symposia on peer review process. He has created and led S&T programs in the U.S. and more than thirty countries.

<https://www.aaas.org/events/lessons-learned-10000-proposal-reviews-top-reviewer-criticisms-and-how-avoid-them>

Other oft-seen reviewer comments to consider, and thus pro-actively address:

1. The problem statement, such as it is, is too global, showing no relationship to reality with no potential solution being indicated or even possible.
2. On Background:
 1. It has already been done; or the associated comments- Results along these lines were published by X, Y, Z so no enthusiasm for Innovation and diminished for Impact or This problem has been studied to death. I'm surprised the writer doesn't know this
 2. You missed this other important segment of the literature
3. On Feasibility:
 1. You did not persuade me that Z would actually work
4. On Significance and Impact:

1. Even if you do everything you say, who cares?
5. On Approach:
 1. Why are you not using superior method P?
 2. Reviewers did not find the PI's claim that her technique will increase the detection rate of Z compelling, and did not find any evidence in the proposal that suggested her technique is in fact better than others.
 3. It is not clear that the methodology proposed is appropriate to the questions being asked, or that the proposed work can reasonably be completed within the proposed time frame.
 4. It was unclear from the proposal whether all of the samples the investigators planned to study were already in-hand and ready for analysis or remained still to be collected.
 6. On grantsmanship and experimental design:
 1. The research plan was very ambitious for a one-year project.
 2. It is not clear what you mean by X
 3. There is not enough detail about Y
 4. There is too much detail about Y
 5. The logic does not flow from A -> B
 6. On page J you say alpha, on page K you say not-alpha
 7. The writer has a flair for the dramatic. The world will not collapse if we do not fund a study of XYZ
 7. On Research Team, Budget, Logistics:
 1. None of the proposed personnel seem to have critical expertise E'
 2. The carpet (duration, budget, staffing) does not match the drapes (specific aims)
 3. Budgets weren't commensurate with the scope of work
 4. Proposed budget in one section overlaps with budget justification in another section