

PHYS 496—Reviewing a Research Proposal

1. Title

Does the title accurately describe the project?
Is it interesting?
Is it memorable?

2. Project Summary

Is the project summary written at an appropriate level (scientifically literate generalist, not a specialist in the proposer's narrow field)?
Does it separately address both National Science Board review criteria (intellectual merit and broader impacts)?
Does it adequately describe the entire project?
Does it contain undefined acronyms or excessive jargon?
Does it contain proprietary information?

3. Project Narrative

What hypothesis is going to be tested? Why is it important?
What methods will be used? Are they appropriate to rigorously test the hypothesis?
List the main points made in the draft, in order of presentation. Then number them in order of importance, noting particularly parts that were not interesting or that seemed unnecessary. Are important points positioned strategically?
Highlight anything that is unclear.
Highlight anything that seems superfluous.
How well were the authors' main points supported by reference to the literature or to prior work?
Do the authors provide sufficient detail of their proposed experimental approach and methods that you can adequately judge the likelihood of their success?
How will the authors evaluate their data? How will they know when they've achieved their objectives?
Do the authors provide a reasonable statement of work? Milestones and deliverables?
Do the authors provide convincing evidence that their group is uniquely well positioned to carry out the proposed work?
Do the authors provide a succinct, compelling summary of their project and its importance?
Does the narrative end in a call to action, or does it trail off into vagueness?
Do the figures engage you as a reader and draw your attention to the important points of the project?
Can you extract five compelling reasons from the narrative for why the project should be funded?
What five sentences are the most effective and memorable?
What five sentences are the weakest (confusing, awkward, vague)?

4. Budget and Budget Justification

Does the amount of money requested seem commensurate with the work to be performed?

Is there obvious padding in the budget?

Is adequate detail given in the justification for how costs were determined?

Do the assumptions made about costs seem reasonable and prudent?

5. Facilities and Equipment

Do the proposers have access to facilities and equipment adequate to carry out the work proposed?

If they don't already have the necessary equipment, why not? What will they have to buy or borrow?

What special capabilities does this group have that others might not have?

6. Final thoughts:

What are the main strengths and weaknesses in the proposal?

What single thing do you remember?

What should be the priority for funding?