

Common pitfalls in writing grants

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Prepare a proposal that is hypothesis-driven

- Reviewers do not like open-ended or descriptive proposals.
- Your entire proposal should be driven by a well reasoned and clearly stated hypothesis.
- Your proposal should address a biologically, physiologically and/or medically important problem.

- The Background and Significance section should present a concise, but comprehensive, review of the literature on the subject that you chose to study and explain the reasons why additional studies (yours) are important.
- There is no such a thing as the right and wrong number of specific aims for a grant.

Consider your specific aims carefully

- Reviewers do not like descriptive or open-ended experiments, they like mechanistic experiments.
- Think of a goal and/or a hypothesis for each aim.
- Each aim should contain a finite number of experiments designed to address discrete questions.

- Try to make each aim be part of a coherent story.
- Avoid interdependency of aims.

Do not be overly ambitious

- You are no longer a member of an established laboratory with an established record of productivity.
- You are now the PI of a small lab and you do not yet have a track record of productivity.
- Be realistic about how much you can accomplish under your new situation.

Include relevant preliminary data

- Although new investigators are not expected to include preliminary data, it always helps to do so.
- Include preliminary data only from experiments that have been carefully designed and interpreted.
- Do not include inconclusive preliminary data resulting from hastily-designed experiments. Do a better experiment and send the results later.

- Preliminary data need not be restricted to the Preliminary Data/Progress Report section. Some preliminary data may fit better in the body of the application.

Be careful with the kinds of details included

- Do not waste precious space on trivial experimental details such as buffer composition, concentrations of reagents or volumes of a reaction.
- Use the space to briefly address important experimental variables that may affect the outcome of your experiments.

Consider feasibility

- Always include comments, data and/or calculations that would reassure the reviewers of the feasibility of your experiments.
- When appropriate admit that feasibility could be a problem and how you may overcome it.

Consider the pitfalls

- Explicitly state the reasons why an experiment or experimental approach may not work and discuss alternatives.
- When a choice of approaches is available, discuss the reasons why you would choose one approach over the other.

Consider alternative interpretations

- If they exist, consider alternative interpretations for the results obtained.
- Discuss ways to resolve conflicting results.

Recruit consultants or collaborators to help you

- Reviewers will criticize you for not having demonstrated expertise in a given area or line of investigation.
- Talk to an expert in the area and ask him/her to write a letter of collaboration to include with your application.
- Include preliminary data or other documentation to demonstrate that you have acquired the appropriate expertise.

Proofread your application

- Reviewers are easily annoyed by lack of attention to small details.
 - If you have three aims do not say that you have four aims.
 - Be sure that your references are formatted properly.
 - Always include a time table as required in the instructions.

Be responsive to the comments of the reviewers

- When submitting a revised application you need to be sure that the reviewers realize that you have carefully considered their comments.
- This does not necessarily mean that you should agree with them and change the application accordingly.