

Common Mistakes in NIH Applications

From: http://www.ninds.nih.gov/funding/grantwriting_mistakes.htm

The five review criteria for most NIH grant applications are:

Significance, Approach, Innovation, Investigator(s), and Environment

Innovation is not necessary, but the results should have compelling significance.

Common Mistakes:

Problems with significance:

- Not significant nor exciting nor new research
- Lack of compelling rationale
- Incremental and low impact research

Problems with specific aims:

- Too ambitious, too much work proposed
- Unfocused aims, unclear goals
- Limited aims and uncertain future directions

Problems with experimental approach:

- Inappropriate level of experimental detail
- Feasibility of each aim not shown
- Little or no expertise with approach
- Lack of appropriate controls
- Not directly testing hypothesis
- Correlative or descriptive data
- Experiments not directed towards mechanisms
- No discussion of alternative models or hypotheses
- No discussion of potential pitfalls
- No discussion of interpretation of data

Problems with investigator:

- No demonstration of expertise or publications in approaches
- Low productivity, few recent papers
- No collaborators recruited or no letters from collaborators

Problems with environment:

- Inadequate institutional support

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Common Mistakes in Writing Applications

From NIMH: <http://www.nimh.nih.gov/funding/grant-writing-and-application-process/common-mistakes-in-writing-applications.shtml>

The five review criteria for most NIH grant applications are: significance, approach, innovation, investigator, and environment. Common problems with each of these criteria are listed below.

1. Problems with Significance:

- Not significant nor exciting nor new research;
- Lack of compelling rationale;
- Incremental and low impact research.

2. Problems with Approach:

- Too ambitious, too much work proposed;
- Unfocused aims, unclear goals;
- Limited aims and uncertain future directions;
- Too much unnecessary experimental detail;
- Not enough detail on approaches, especially untested ones;
- Not enough preliminary data to establish feasibility;
- Feasibility of each aim not shown;
- Little or no expertise with approach;
- Lack of appropriate controls;
- Not directly testing hypothesis;
- Correlative or descriptive data;
- Inadequate consideration of power;
- Experiments not directed towards mechanisms;
- No discussion of alternative models or hypotheses;
- No discussion of potential pitfalls;
- No discussion of interpretation of data.

3. Problems with Investigator

- Not clearly addressed in application;
- Not innovative.

4. Problems with Investigator:

- Inadequate demonstration of expertise or publications in approaches;
- Low productivity, few recent papers;
- No collaborators recruited or no letters from collaborators;
- Need a more senior collaborator.

5. Problems with Environment:

- Little demonstration of institutional support;
 - Little or no necessary equipment;
 - Little evidence of effective collaboration among institutions, if applicable.

Additional Criteria

1. Problems with the description of [Human Subjects](#) or [Animal Subjects](#) protections
2. Problems with the description of:
 - [Inclusion of Women and Minorities As Participants In Research Involving Human Subjects](#) ,
 - [Inclusion of Children As Participants In Research Involving Human Subjects](#) .
 - [Refer to the Instruction Guides SF 424\(R&R\)](#) or [PHS 398 \(Part II\) for help with these areas](#) .
3. Problems with Budget
 - When submitting a composite categorical budget for future years, if greater than 3% escalation is requested per year, be sure to provide justification for each year explaining the additional costs.
 - When requesting a fringe benefit rate increase in future years, the rate must be in the grantee organization's rate agreement, otherwise the rate at the time of the award will be used.
 - When applying for a modular award, \$250,000 or more in direct costs, consortium/contractual Facilities & Administration (F&A) costs are no longer factored into the direct cost limit. If this amount is exceeded only by the F&A costs on the consortium, you must still use the modular format.
 - Be sure to submit a separate detailed budget for each participating consortium/contractual organization and a checklist form page (PHS398).