Ten mistakes to avoid when writing grants

1. Time to write

- Typically, you can assume you will need 120 hours to write, review and revise an application for a three- to five-year grant.
- Bottom line: Overestimate the time you think you'll need, and plan all your timelines accordingly.

2. Skipping the instructions

- **Rules are rules**
- **Reviewers hate ‘creative adjustments’**
- Do not bend, modify or get creative with instructions.
- Follow rules regarding font, font size, margins and word count.
- Pay attention to details on allowable budget expenses. When in doubt, ask.

3. Poor writing

- Don’t assume the reader understands your jargon and can follow the compelling rationale or bridge the gaps in your logic.
- Lead the reviewer to logical and natural conclusions.
- Keep abbreviations, acronyms and jargon to a minimum.

4. Failing to edit

- Everyone makes mistakes or communicates less clearly than needed.
- A spelling and grammar check alone is not enough.
- Edit your proposal yourself and ask others for feedback.

5. Inadvertent plagiarism

- Some funding agencies runs all grant proposals through plagiarism programs.
- Before submitting yours, do the same. Programs include iThenticate, Plagiarism Detector and Copyscape.
- You can even enter sections of your proposal into a search engine to be sure you haven't inadvertently copied from someone else's research.

6. Framing the right question in the right way

- Single most common reason for a grant receiving a low score is reviewers' perception that your central scientific question lacks significance.
- Reviewer uninterest in your question could stem from your failure to communicate its significance clearly, an overly narrow focus, or a lack of novelty and originality that suggests you are addressing a problem already solved.
- One way to test your proposal's significance is to provide a non-expert colleague with a three-sentence description. If he or she can appreciate why you are doing the work, then you are on the right track.

7. Preliminary data

- Preliminary data builds your case
- If the preliminary data are weak and call into question your proposal's feasibility, there is a problem.
- Or there is an overly large gap between your hypothesis and your preliminary data.

8. Single route to success

- Problem if the overall success of your project depends upon the outcome of a key experiment, which you have not yet performed.
- There is a natural tendency to organize experiments in a linear and sequential fashion. For a research grant, however, this strategy can be risky.
- If the succeeding aims all depend on a positive outcome of Aim One (which is yet unproven), your whole project depends on that first experiment's success.

9. Too ambitious a scope

- Too ambitious, with multiple hypotheses or rationales that pull the grant in disparate directions.
- This is called “spaghetti syndrome,” in which every good hypothesis, experiment or reagent in the PI’s pantry is thrown at the problem.
- This approach rests on the assumption that reviewers will find at least a few good ideas stuck on the proverbial wall, and this will raise their enthusiasm.
- In reality, this approach diminishes enthusiasm.
- It suggests a PI is unable to prioritize among the project’s various facets, which can lead to an inefficient deployment of people and resources.

10. Lack of experience

- For first-time and early investigators, reviewers will assess training and accomplishments during the postdoctoral years.
- For more senior investigators, reviewers will look at past career experience and productivity. If a particular approach is unproven with respect to your group, the most reliable strategies are:
  - a) Identifying and soliciting an outside collaborator with a published track record in the method
  - b) Devoting existing efforts to generate the preliminary data and remove doubts about your ability