Sharpening Your Focus: 
Tips on Grant Proposal Preparation

Writing the Research Approach:
A Well-Laid Plan

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This is a series of tips published in UMMS Research News about writing proposals.

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Approach is the third section in the Research Strategy of a NIH R-series proposal (after Significance & Innovation).

Here are some basic tips adapted (in part) from a National Institute of Allergy and Infectious Diseases newsletter.

Spread the news.
Savvy Principal Investigators (PIs) create opportunities to drive their main points home. Don't stop at the Significance section to emphasize your project's importance, and look beyond your biosketches to highlight your team's expertise. For example, look for another opportunity to tie your work to that larger picture, including past research and future applications.

Judicious use of space.
• Use graphics: A picture can be worth a thousand words.
  Graphics can illustrate complex information in a small space
and add visual interest to your application.

- See Tom Annesley’s “Basics of a Good Graph.”
- Make sure your graph is legible and not too complex!

- Be Organized. Here are some principles to follow:
  - Add bold headers or an outlining or numbering system—or both—that you use consistently throughout.
  - Organize the Approach section around your Specific Aims (unless your study is easier to explain using your tailored headings/subheadings, (e.g., first describe subjects, recruitment, protocol, etc., and then analyze data by aims/hypotheses).
  - Consider adding a timetable (even a paragraph of overview of work by year) or flowchart to illustrate your experimental plan, and show reviewers that it is feasible within timeframe of grant.

Write persuasively.
- A tenet of persuasive writing is to first list the arguments of your readers. Try to anticipate reviewers’ questions/objections to your work. Identify those that may be roadblocks, and attend to those with pointed rationale/explanation in your Approach.
- Go to NIH’s study sections roster list to identify reviewers.
- Be familiar with their publications so you can write with those methodology/analyses perspectives in mind.

Details?
You need enough detail to convince reviewers that you can handle the method.

- Focus on experiments that highlight your expertise or are especially interesting. For experiments that are pedestrian or contracted out, just list the method.
- Spell out a few sets of experiments to address each aim.
- Cite a publication that shows you can handle the method where you can, but give more details if you/team don’t have a proven record using the method—and state explicitly why you think you will succeed.
  - You can annotate that citation in your biosketch with more details.
- Be careful about directing reviewers outside of page limits to “see details.” While it makes sense to describe protocol in more detail in sections such as Human Subjects (e.g., power analysis, recruitment procedures), be sure to give summary in Approach, and let reviewer get more information in other sections without calling attention to the re-direct.

See what others have done successfully.
Visit the UMMS Grant Proposal Sampler. (This site is password-protected with access restricted to Medical School faculty, staff, and postdoctoral fellows.)

View the NIH R01 samples.