

10 Habits of Successful Grant Writers

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1. Think ahead, plan backwards
2. Develop a concept that is SMART
3. Have a secret weapon
4. Talk to the program officer/
funding agency
5. Think like a reviewer
6. Write well
7. Get feedback
8. Be persistent
9. Respond well to criticism
10. Behave responsibly

1. Think Ahead, Plan Backwards

submit application	0 days
get approvals	2-60+days
outline, write, and edit	2 months
develop concept	> 3 months

Don't be in a hurry

2. Develop a concept that FITS and is SMART

- Fills a gap in knowledge
- Important to
 - you
 - the field
 - funding agency
- Tests a hypothesis
- Short-term investment in long-term goals
- Specific, Measurable, Achievable, Relevant, Time-bound

3. Have a "Secret Weapon"

4. Talk to the Program Officer

- Is concept relevant?
- Funding
 - Rate?
 - level (amount years)?
- who reviews?
- What are the criteria?

5. Think like a Reviewer

- Estimate of time spent considering a proposal

primary reviewer 7-8 hr

secondary reviewer 1 hr

discussion at review 20 min

Implications

- Anticipate questions, provide answers
- Know and use the review criteria
 - significance
 - approach
 - investigator
 - environment
- also: ethical conduct of research

6. Write well

1. simplify your writing tasks
2. make application easy to appreciate

Simplify writing tasks

- outline
- write first draft
- revise

If you try to write well and edit at the same time, you will do neither well.

George Sides

Easy to appreciate

- Write in paragraphs
 - 1 major idea per paragraph
 - topic sentences
 - initial paragraphs of section most important

Easy to appreciate

- Have a table of contents
- Use their organization, numbering
- Use headings frequently
- Make it easy to find key points
 - bold face
 - cross reference (see Methods, page X)
 - some redundancy

Appearance

- Use type size ≥ 11 pt.
- Let your text breathe
 - indent paragraphs
 - skip line between paragraphs

B. BACKGROUND AND SIGNIFICANCE

The importance of training in “Survival skills.” Success in science requires a solid background in a specific scientific discipline as well as extensive laboratory experiences. However, for individuals to develop into accomplished professionals, they must acquire survival skills, that is, they must be able to communicate effectively, both orally and in writing, obtain employment and funding, manage stress and time, teach, and behave responsibly (1,2,3). This has always been the case and is becoming even more true as our doctoral and postdoctoral trainees need to be prepared for a variety of vocations (3,4).

In addition to traditional jobs in academia, many of our Trainees will ultimately find themselves doing research in industry, teaching in 4-year colleges, or serving in some administrative capacity. Others will combine their PhDs with professional degree in medicine or law and become clinical researchers, patent lawyers, or become involved in the formulation of public policy. With many of these new vocations, extra-laboratory skills become even more essential (3).

Traditionally, higher education in the sciences has focused almost exclusively on the content of the scientific discipline and on research methodology. Indeed, individual employed in research and related fields often complain that although their academic training provided them with a sound foundation in their

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7. Get Feedback and Revise

- Aims
- Background
- Preliminary data
- Experiments
- Writing (including English)
- Appearance

8. Be Persistent

9. Respond Well to Criticism

- Reviewer comments...
 - can be depressing to read
 - may be incomplete
 - may contain contradictions
- Read carefully
- Seek advice
 - peers
 - program officers
- Respond carefully and completely

Reason for rejection: Research proposals

- not innovative, important
- inadequate rationale
- uncritical approach
- not well reasoned
- unfamiliar with literature
- diffuse, superficial, or unfocused research plan
- overambitious
- lacks experimental detail
- lacks experience w/ essential methods
- uncertain future directions
- ethical concerns

Revised application

- Deal with each comment in introduction
 - insert "critique" from reviewer
 - response
 - agree and indicate change, or
 - disagree (politely) and explain
- mark all changes

10. Behave responsibly

- subject welfare
- preliminary data
- fabrication
- falsification
- graphics
- accuracy of cvs
- collaborators
- unique resources
- budget
- funding overlap