



SANTA FE INSTITUTE

## PROPOSAL WRITING POINTERS

### 1. ***Begin with a good idea....***

- What is the research question?
- Keep it simple
- What's unique and innovative

### 2. ***Know the funding agency***

- Do your homework – know their mission/programs
- Read the guidelines, read the guidelines, read the ....

### 3. ***Know your audience***

- Board of directors?
- Peer reviewers?
- Other?

### 4. ***Writing the proposal***

- Use simple, clear, concise style
- Don't make assumptions – spell things out
- Comprehensive but brief title

### 5. ***Common proposal contents:***

- Summary/Abstract – 1 page or less
- Background and significance of project
- Goals and objectives (what you plan to accomplish)
- Planned activities (include a time-line)
- Resources (staff and physical capabilities)
- Evaluation Plan (have you accomplished objectives)
- Dissemination
- Budget and Budget Justification
- Biosketches of Key Personnel
- Publications
- Letters of Support (when requested)

### 6. ***Other Considerations***

- Expertise: demonstrate qualifications of PI and key staff to conduct research
- Budget: make sure it matches project description
- Significance: what are the benefits, innovation, uniqueness
- Acknowledge if other similar work exists and explain how yours is different, better, serves other constituents

6. **Finally** ....

- a. Obtain sample proposals
- b. Have peers review drafts
- c. Establish contact with program officers
- d. And, if not successful the first time - don't give up! Use review comments to rewrite a more compelling and successful proposal.

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### **Why Proposals are Rejected**

*(from Don Thackrey's Proposal Writer's Guide, UMich)*

The list is excerpted from an article by Dr. Ernest M. Allen (Chief of the Division of Research Grants, National Institutes of Health) that appeared in Science, Vol. 132 (November 25, 1960), pp. 1532-34.

#### **A. Problem (58 percent)**

1. The problem is not of sufficient importance or is unlikely to produce any new or useful information. (33.1)
2. The proposed research is based on a hypothesis that rests on insufficient evidence, is doubtful, or is unsound. (8.9)
3. The problem is more complex than the investigator appears to realize. (8.1)
4. The problem has only local significance ... or otherwise fails to fall sufficiently clearly within the general field of health-related research. (4.8)
5. The problem is scientifically premature and warrants, at most, only a pilot study. (3.1)
6. The research as proposed is overly involved, with too many elements under simultaneous investigation. (3.0)
7. The description of the nature of the research and of its significance leaves the proposal nebulous and diffuse and without a clear research aim. (2.6)

**B. Approach (73 percent)**

8. The proposed tests, or methods, or scientific procedures are unsuited to the stated objective. (34.7)
9. The description of the approach is too nebulous, diffuse, and lacking in clarity to permit adequate evaluation. (28.8)
10. The overall design of the study has not been carefully thought out. (14.7)
11. The statistical aspects of the approach have not been given sufficient consideration. (8.1)
12. Controls are either inadequately conceived or inadequately described. (6.8)
13. The material the investigator proposes to use is unsuited to the objective of the study or is difficult to obtain. (3.8)
14. The number of observations is unsuitable. (2.5)
15. The equipment contemplated is outmoded or otherwise unsuitable. (1.0)

**C. Investigator (55 percent)**

16. The investigator does not have adequate experience or training for this research. (32.6)
17. The investigator appears to be unfamiliar with recent pertinent literature or methods. (13.7)
18. The investigator proposes to rely too heavily on insufficiently experienced associates. (5.0)
19. The investigator is spreading himself too thin; he will be more productive if he concentrates on fewer projects. (3.8)
20. The investigator needs more liaison with colleagues in this field or in collateral fields. (1.7)

**D. Other (16 percent)**

21. The requirements for equipment or personnel are unrealistic. (10.1)
22. It appears that other responsibilities would prevent devotion of sufficient time and attention to this research. (3.0)
23. The institutional setting is unfavorable. (2.3)