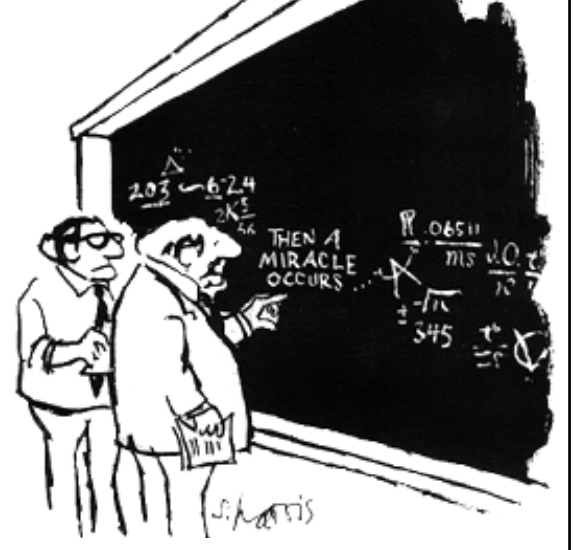










Tips on Proposal Preparation

Clarity Is Key!



I think you should be more explicit here in step two

A Good Proposal

A good proposal is a creative, generally important idea, well motivated in theory, clearly expressed and justified with background data, and with appropriate methods for pursuing the idea, evaluating the findings, and making them known to all.

<http://sev.lternet.edu/~bmilne/tencommands.htm>
Bruce Milne's 10 commands to proposal writing

Appropriate for the Program
Responsive to the Program Announcement










What Makes a Proposal Competitive?

- *Compelling* - clearly spells out the novel and exciting elements and general scientific importance
- Well-written and organized
- Knowledge of subject area, relevant literature
- Experience in essential methodology
- Succinct, focused project plan with sufficient detail
- Logical experimental design
- Sound scientific rationale and theoretical context
- Realistic amount of work
- Critical approach (considers alternatives)
- Likelihood of high impact


























Proposal Planning Tips

- Space Allocation – plan for a balance
 - Introduction and synopsis (within first page)
 - Background (scholarship) and conceptual framework
 - Frame question(s) clearly and broadly
 - Work plan
 - Overall approach philosophy
 - Details of methodology and feasibility
 - Integration of results and analysis to address questions
 - Broader impacts
 - Timeline for work
 - Prospectus
 - Special sections

Valued Aspects

- Integrative:
 - Approaches (pluralistic, interdisciplinary)
 - Scales
 - Conceptual frameworks
- Risky – but feasible
- Potentially transformative to field
- Significant Broader impacts
- Quantitative
- Theoretically-driven

Broader Impacts

- Will this work attract others in your discipline – might it change their research directions?
- Are there interdisciplinary implications?
- What are the educational impacts: on your career, on students, in formal courses?
- Will this project broaden participation of groups underrepresented in science?
- What collaborations (individuals) and partnerships (institutions), will be enhanced or created?
- Will this project improve the infrastructure of science?
- Does this project contribute to informal science education ?
- Might the results have societal impact?
- Do you plan to leverage existing programs to broaden impacts?



Additional Program Considerations









- PI Career Point (tenured/“established”/ “beginning”)
- Scientific diversity in Program portfolio
- Other support for PI
- Impact on institution/state
- Special programmatic considerations (CAREER, RUI, EPSCoR)
- Diversity (including underrepresented groups)
- Educational impact
- Availability of infrastructure/community facilities

7











Don't forget the little things

- Formatting requirements & readability
 - (density of text, white space, references, figures)
- Compliance check before submitting
 - (FastLane won't do it for you!)
- **Be available by email to fix compliance problems** (proposals may be returned if NSF can't contact you)
- **Suggest reviewers (*but avoid conflicts of interest*)**
- Include all conflicts of interest in your CV
- Respond explicitly to previous reviews
 - (Panels may be asked to comment on this)
- Avoid verbiage, sloppiness & poor scholarship
 - (numbered references can be annoying)
- Remember special need documents (e.g, ship time, animal use, permits, commitment letters, etc.)
- When in doubt on something – email or call your Program Director

Other Advice

- Contact the program officer with specific questions (*but we can't design your project*)
- Collaboration is good, if appropriate
- Give yourself plenty of time
- Have a near final draft reviewed by two NSF funded PIs: An expert in your discipline & someone distant from your discipline (generalist).
- Discover alternative funding sources

If Declined

- Learn to accept rejection as part of life
- Study reviews carefully – be open minded
- Compare reviews and panel summary
- Talk to your Program Officer
- Revise – resubmit if reasonable
- Explicitly address prior panel criticisms in a constructive way
- Persist (*but take review and program advice **seriously***)