Proposal Writing Tips

Cynthia A. Brown
Portland State University
(with Bryant York)
Über Tip

Never submit a paper as a proposal!
Before You Begin

- Know the agency’s organizational structure
- Know your agency’s programs
  - Solicited vs. unsolicited proposals
- Review the Summary of Awards
  - Past trajectory
- Know your program officer and division director
  - Current trajectory
- Participate in workshops
  - Help set future trajectories
- Serve on panels
  - Read lots of proposals
  - Good citizenship
Project Description (1)

Must propose a new idea
Distinguish between research and development
Make the research challenges and goals explicit
Make your methodology explicit
Project Description (2)

Support your motivation section with at least one good example or application

Acknowledge the areas of high and low risk as well as the associated rewards

Purpose of a software artifact is to support the research
Project Description (3)

Objectively assess the work of competitors and place in proper perspective ("on the shoulders of giants ...")

Avoid pejorative terms in describing competitor’s work

Cite all of the relevant work

  journal and conference papers (yes-yes)
  Textbooks are generally a no-no; monographs okay
Avoid fallacious arguments

Be clear that early prototypes and experiments do not indicate that the work has already been done

Avoid excessive detail. Succinctness gets rewarded.

Budget your space. A one-quarter-page diagram should replace a page of text
Project Description (5)

Avoid such terms as “obvious”, “trivial”

Develop a well-defined evaluation and dissemination plan

Include assessment experts if necessary

Include text on technical merit and broader impacts of your proposed work – why it is good and whom it will impact

Explain leverage of existing facilities, equipment and other support for the project

Obtain all relevant letters of support and required documents

If CAREER develop a research program vs. a research project

If CAREER develop an education plan
Project Summary

Write it last, spend as much time as you did on the project description

Get your new idea into the first 50 words

Give a taut summary of the problem, your research plan and what you hope to achieve

Must include a succinct description of technical merit and broader impacts

Iterate many times as the summary is an important bifurcation point
Review Questions (1)

- Have I done a good job in the first page of explaining what I want to do and why it is important, in a way that the typical reader can understand? This has to be both readable and interesting, and directed to the mission of the funding agency.

- Did I spend the right amount of space on the various aspects of what I'm proposing: intro, history, research plan, etc.? Does it make sense as a narrative, and read well?

- Did I reference the right people? Particularly likely reviewers.

- Is my proposal understandable to the probable reviewers? Is it at the right technical level?

- Did I show why I am the right person to do this work? (Prior results, how this relates to my earlier work)
Review Questions (2)

Did I include a plan to evaluate or assess my results? this is essential for some kinds of proposals

Is there an educational component beyond the usual grad student involvement? (depending on the funding agency) for some agencies, this is a big plus

If there are issues this agency particularly looks at, have I addressed them?

Does my proposal look professional? Well formatted, nice diagrams, correct spelling and grammar?

Did I follow all the rules and suggestions in the RFP?

Does my budget make sense in terms of being proportional to the amount of work I'm proposing to do? Did I ask for everything I reasonably could without going overboard?
Get Feedback

Schedule your writing to allow plenty of time for feedback and several iterations
Ask experienced colleagues who have funding
Ask your trusted friends
Ask people at your university who are assigned this responsibility
PAY ATTENTION TO WHAT THEY SAY!
Be Persistent

If at first you don't succeed...