STRATEGIES FOR WRITING A SUCCESSFUL NSF CAREER PROPOSAL

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“Submit your first Career proposal as early as possible ...”
“Submit your first Career proposal as early as possible ... so you can get your first rejection quickly!”

Note: Few get award in first try!
Basic Advice

• More than any other proposal, the CAREER is about you & your research program
• 10 year vision; 5 year plan
• Convince reviewer
  – Novel ideas and inventions
  – Research topic is important
  – You are right person
  – Taking a risk; not safe
• 5 years is a long time...
  – Focus more on outcomes, directions, and student preparation than specifics
Things not to do

- Big implementation project
- Incremental over previous work
Wrong vs Right Words

• Be careful using words like:
  – Implement, increment, develop

• Instead, use Words Like:
  – Invent, create, novel
Advice from a PM

• Visit your PM
  – Discuss your ideas
  – Get to know your PM

• Your research may be appropriate to another PM

• They can tell if idea needs work.

• PMs are very busy; be persistent
Ask for help

• Get people to review your proposal
  – An ex-PM
  – One or more colleagues
  – The more experienced the better
  – Someone outside your area (most reviewers will not be experts in your area)
  – University editing services
Good vs. Bad Proposals (1)

• Grants are not technical publications with budgets attached
  – Good conference papers != good proposals
• NSF doesn't fund something just because it is a crazy cool idea
  – Place in a general framework of evaluating competing ideas/designs/approaches
Good vs. Bad Proposals (2)

- Grants are reviewed in stacks of 10-15 at a time: be kind to your reviewers
  - Removing figures, tables, examples, etc. for more text is rarely a good idea
  - Section/subsection headings keyed to RFP concepts help for quick reference

- Grants are not necessarily reviewed by people directly in your research area
  - Background, motivating examples, related work, etc. is welcome
Other Thoughts... (1)

• Serve on a panel!!!
  ➔ Learn what Panels look for:
      • Lack of evaluation is the biggest proposal killer
    – References/discussion of previous & related work
    – Project management discussions or other supporting evidence that you can actually do what you’re claiming...
    – Corresponding skills in your CV
      • Make sure your 2 page CV emphasizes the skills needed
Other Thoughts... (2)

• Tension between:
  – Submitting and getting the CAREER early will help bootstrap your research program
  – Holding on to your 3 shots until you know what you're doing