The NSF CAREER Award

A lesson in two acts

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About Me

- Joined the Chemistry faculty in Fall 2004
- Did not apply for award in 2005
- Unsuccessfully applied in 2006
- Successfully applied in 2007

My first application

- Ambitious project in “hot” field
- Minimal preliminary results
- Tendency to be vague
- Fairly routine Educational Plan

First try: What went wrong?

- Very Good, Very Good, Good, Fair
- “difficult to deduce the PI's innovation”
- “unclear advantages offered by the PI's intended contributions”
- “the preliminary results are not convincingly presented”
- “The educational plan addresses important developments, but does not rise above the level of activities generally expected from faculty”

Next proposal

- Different project in less trendy field
- More and stronger preliminary results
- Nearly identical Educational Plan

What went right?

- Excellent, Excellent, Excellent, Good
- “The PI has not only identified a very, very important problem for which no general solutions exist, but has also proposed clever solutions and validated them experimentally”
- “The proposal reads very well”
- “Educational plan is well-thought-out and promising”
- “The strongest parts of this proposal are the potential utility of the proposed reactions and the preliminary results that show that the PI is likely to be successful in his pursuit”

Take-home lessons

- Communicate clearly
  - No typos
  - Well organized (many headers/many pictures)
  - Get feedback from multiple sources
  - Don’t shy away from details
- Set yourself apart
  - Explain what makes your science unique
  - Thoroughly cover background and significance
- Preliminary results are extremely helpful

Other Important Information

- Get successful applications from colleagues
- Know your audience (program manager and reviewers)
  - NSF Workshops
  - Phone
  - Suggested and prohibited reviewers
- Talk to chair about Educational Plan
- Use references in Educational Plan