CAREER Writing Workshop* HCC Breakout

- Avoiding common problems with CAREER proposals
- Strategic Issues

* Some materials adapted from the 2020 CISE MATTERS taskforce "Top Ten Mistakes" presentation

Write a Clear Project Summary

Your Project Summary is

- Used by program officers to gauge the suitability of your proposal to their program and to group proposals into panels
- Used by panelists to gauge the match between their review expertise and the proposal for reviewing assignments.

These are <u>critical functions</u> where a vague, uninformative, or confusing Project Summary can have adverse effects on outcomes.

Your Project Summary should <u>clearly</u> and <u>concretely</u> communicate:

- The set of problems you will address, and why (motivation)
- What you are going to do (methods)
- What will be the benefits for both Intellectual Merit and Broader Impacts – how the work will change the world
- Salient, novel aspects of Educational Plan

Make a clear distinction between preliminary results and proposed work

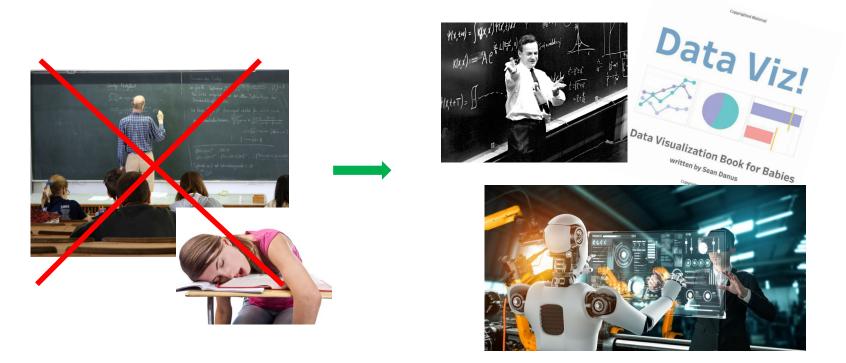
- Make an unmistakable distinction between the old and the new
- Distinguish your approaches and anticipated results from others', and from your previous work
- Justify chosen approaches



- Identify obstacles you (or the reader) might anticipate, and provide risk management strategies
- Highlight how you will know you've succeeded
- Tell reviewers how success will change the world

Avoid the Lackluster Education Plan

- Should be integrated with research plan
- Think well beyond standard teaching --- be as <u>creative</u> with education planning and public outreach as with the core research.



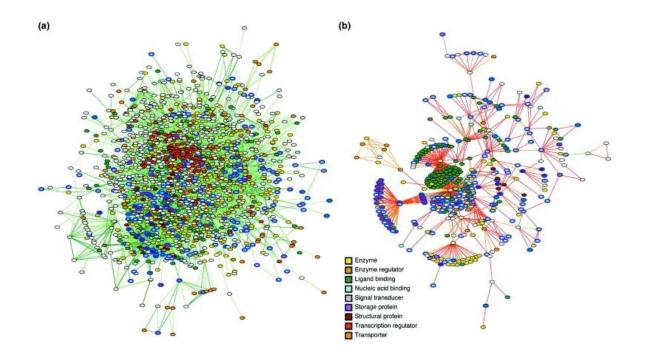
Conceive a Long-Range Vision

- CAREER proposal should be forward-looking --- launch your career!
- Move above and beyond your PhD work
- "Imagine a world ..."



Fix Illegible Figures

- Avoid "crowded" visuals and tiny fonts
- Don't assume reader will print in color
- Use vector graphic formats



Strategic Considerations

- Think about submitting to a different target (e.g. CRII or Small) if this is your <u>very first proposal</u> submission
- If you have submitted a CAREER proposal, had it declined, and are thinking of
 - submitting to a different program, or
 - changing the topic of your CAREER application

<u>please</u> talk to the program officer who handled the review first. Changing horses in mid-stream may not be the best approach.

Strategic Considerations (cont'd)

- If your first (or second) submission results in a Low Competitive, it might be a good idea to submit to Small next time --- it can take 2 more submissions to elevate a proposal from LC to High Competitive, or a fundable level in competitive. Talk to your program officer.
- Get mentoring from your department --- an assigned mentor who will read and comment on two drafts of your proposal before submission to NSF.

Your department and dean are spending well over \$1M to support you during your run-up to submitting a promotion/tenure case. The incremental cost of providing grantwriting mentoring to help ensure your success is a no-brainer.