



**S u c c e s s f u l l y A p p l y i n g**  
**f o r a n**  
**N S F C A R E E R A w a r d**

**C o l l e e n**  
**C a r r i g a n**

**A s s o c i a t e P r o f e s s o r**  
**C a l P o l y , S a n L u i s O b i s p o**



# **O V E R V I E W**

✧ **C A R E E R P r o j e c t I d e a**

✧ **L e s s o n s L e a r n e d**

✧ **Submission #1**

✧ **Submission #2**

✧ **Panelist for three NSF directorates, including an  
Engineering CAREER panel**

✧ **Key Recommendations**





# **CAREER PROJECT IDEA**



✧ **What ideas are central to your intellectual development?**

✧ Take a risk!

✧ Consider & integrate research, mentoring, teaching, outreach, vision, and long-term career goal.

✧ Ask successful colleagues to share their proposal.

✧ Write and share one-page prospectus.



**CAREER PROJECT IDEA**



A low-angle, upward-looking photograph of a modern glass skyscraper, likely the Burj Khalifa, against a clear blue sky with a few wispy clouds. A large, black-outlined diamond shape is superimposed over the center of the image, framing the text. The building's glass facade reflects the sky and clouds, creating a grid-like pattern of light and dark squares.

TAKE  
A RISK



- ✧ What ideas are central to your intellectual development?
- ✧ Take a risk!
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## CAREER PROJECT IDEA





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**CAREER PROJECT IDEA**



- A research project born from my dissertation research:
  - Comparative study of gender in two subfields of computer science and engineering
- Education plan born from post-doc innovation
- Area of passion and expertise
- Preliminary research
- My Motivation
- Strong Department Letter
- Submitted end of Year 2

# My First CAREER Proposal



Rejected!

# My First CAREER Proposal



## Next Steps: Big Picture

- ✧ Met in person with Program Officer to review 1<sup>st</sup> submission
- ✧ Served on NSF panel
- ✧ Fostered more collaborations with peers and students
- ✧ Asked my university's Office of Research for support

**My Second  
CAREER Proposal**



# R E V I S E + R E S U B M I T !

- ✧ Writing and reframing—appeal to broader audience
- ✧ Emphasized Broad Impacts and pressing social need for my research
- ✧ Goals and objectives crystal clear!
- ✧ My unique advantage: Extensive experience in proposed area & other NSF-funded projects
- ✧ Did not compromise on most “precious” ideas and methods

## My Second CAREER Proposal



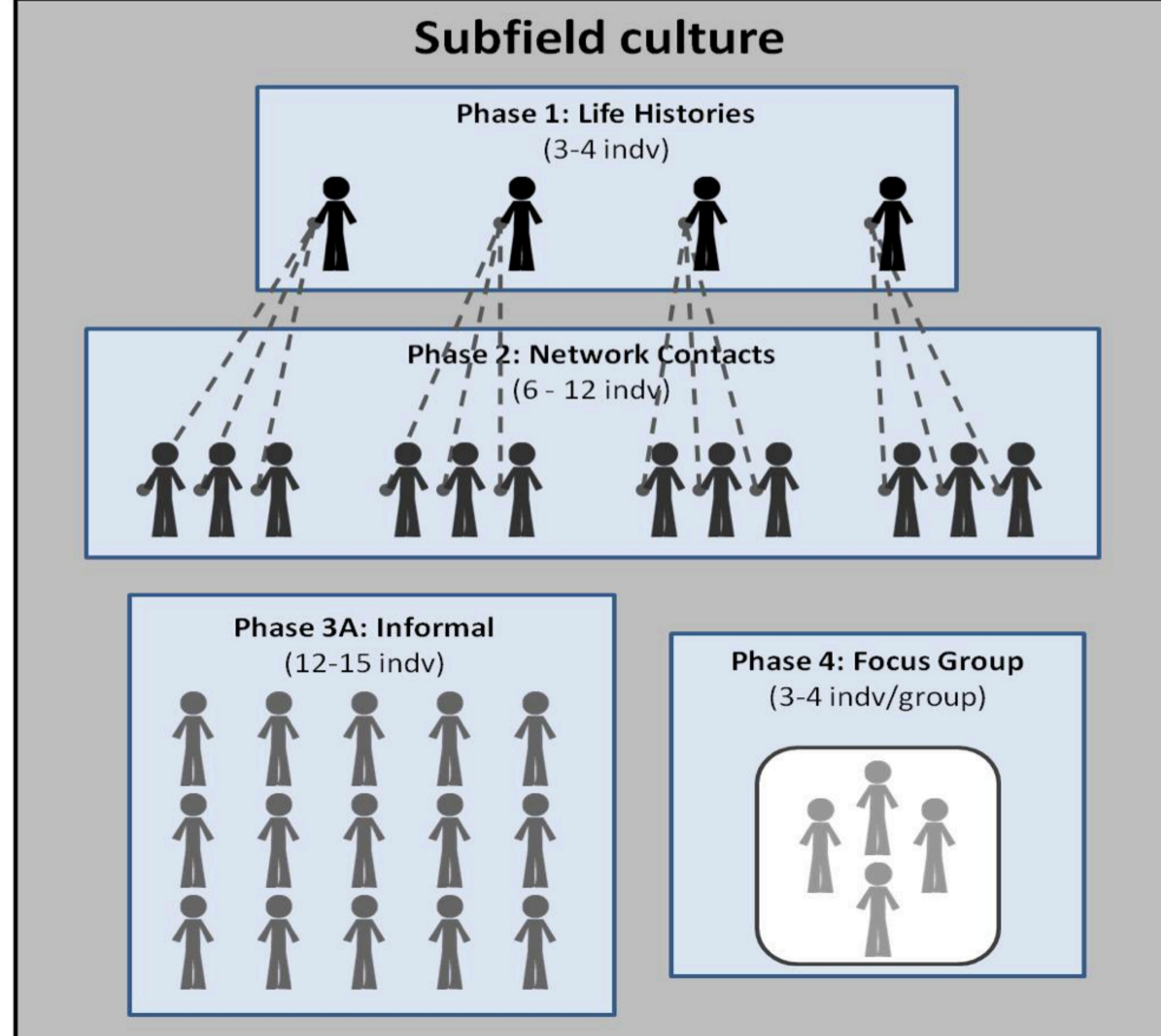
- ✧ Don't assume readers know the jargon.
- ✧ Must be readable by everyone, but technically precise
- ✧ Figures!
- ✧ Know *key players* in your field and put them in the literature review
  - ✧ One of these people could be on the panel or be admired by some on the panel

# Writing and reframing



# nix Jargon

- 2016:  
“Labor segregation in the US has gained wide attention in recent years, especially in science ,technology, engineering and mathematics (STEM) fields.”
- 2017 (R & R):  
“Barriers to diversifying science, technology, engineering and mathematics (STEM) fields have gained wide attention in recent years.”



Research Plan for Phases 1 – 4 for a single CSE subfield. Icons represent individual participants.



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# My Second CAREER Proposal



# BROAD IMPACTS



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# My Second CAREER Proposal



First page of your proposal should be your Overview section:

- ✧ Identify your career research goals
- ✧ State the research objectives of the proposal
- ✧ State the education objectives of the proposal
- ✧ Provide a general overview of the approach/activities.

# Goals & Objectives



R E V I S E + R E S U B M I T !

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# My Second CAREER Proposal



# KEY RECOMMENDATIONS



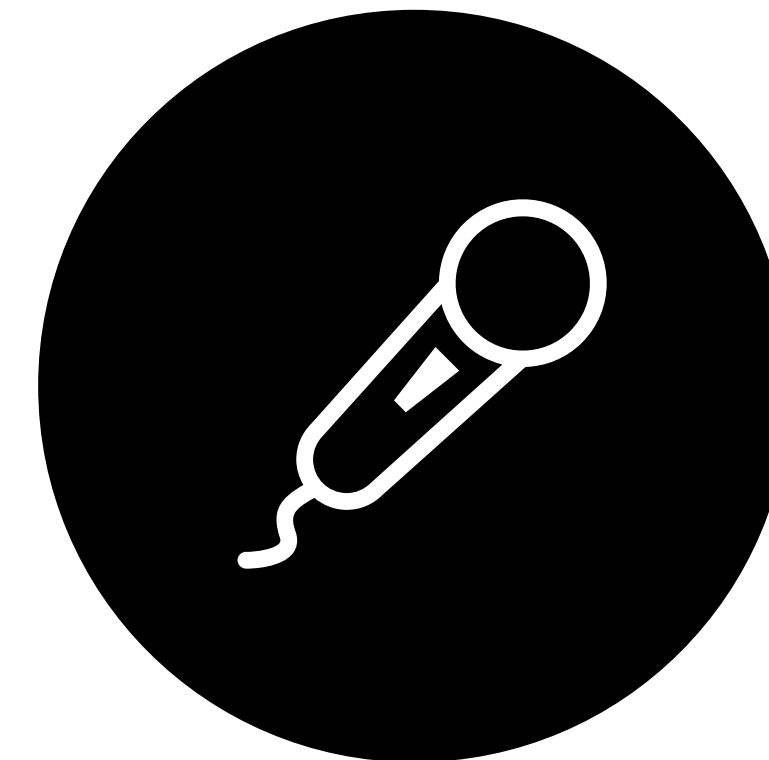
## CLARITY OF MESSAGE

- FIGURES
- FORMAT + ORGANIZING
  - OBJECTIVES
- MAKE IT EASY FOR SOMEONE TO CHAMPION



## BROAD IMPACTS

- RETENTION
- UP-TO-DATE LITERATURE
  - SUSTAINABLE
  - ASSESSMENT



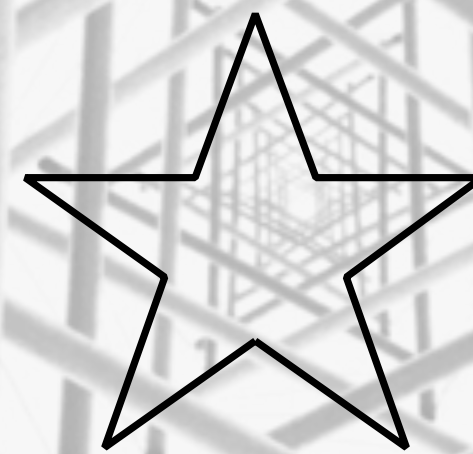
## VISION

“I’M TRYING TO DO  
SOMETHING NO ONE  
ELSE HAS DONE.”

PJ HARVEY



THANK YOU!



C  
C a r r i g a n  
o l e e n

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