

*Read the GPG and
listen to George*

[Archis Ghate](#)

Industrial and Systems Engineering

What I learned from the solicitation

CAREERs are **NOT** “research grants”

“Foundation-wide activity that offers the National Science Foundation's most prestigious awards in support of junior faculty who exemplify the role of **teacher-scholars** through **outstanding research, excellent education and the integration of education and research within the context of the mission of their organizations.** Such activities should build a firm foundation for a **lifetime of leadership in integrating education and research.**”

Who is George?

- http://www.nsf.gov/staff/staff_bio.jsp?lan=ghazelri&org=NSF
- George has given fabulous presentations on grant-writing
 - I had the privilege of attending two
 - Google will find these for you. For instance,
 - <http://physical-sciences.uchicago.edu/jrfaculty/pdf/presentation-from-program-director.pdf>
 - <http://www.umaine.edu/epscor/Powerpoints/George%20Hazelrigg%20%5BCompatibility%20Mode%5D.pdf>

What I learned from George

- The first sentence of a CAREER proposal **should be**
 - “My long-term goal is ...”
- The second sentence of a CAREER proposal **should be**
 - “As a major step toward this goal, the research objective of this CAREER proposal is”
- There are **only four** ways to complete the above sentence (next slide)

Four ways to construct the research objective sentence

- ... the research objective of this CAREER proposal is to
 1. test hypothesis H.
 2. prove conjecture C.
 3. measure parameter P with accuracy A.
 4. apply method M from field F to problem P from area A.
- FAQ: But what if my research objective doesn't fit into these four categories?

What I learned from George contd.

- Specific is better than vague (the example below is mine)
 - In this human winged-flight project, the PI will conduct several flight experiments with wings made from various materials and of different lengths.
 - In this human winged-flight project, 6-, 9-, and 12-foot wings made from canvas, cloth, and plastic will be used. One hundred flight tests will be conducted at a field on the UW campus over five days at 10 AM and 3PM. Ten human subjects between the ages of 21 and 30 will attempt these flights; they will be recruited by placing ads on the AA notice board.
- And many other things ... (just look up his slides)