Definition of a Research Statement

What is a research statement?

- Articulation of your research field
  - Key directions
  - Promising lines of inquiry
- Articulation of your own research
  - Motivation
  - Long term goals
  - Short term goals
  - Key approaches
  - Results to date
  - Specific research proposals
- The importance of the field, and of your research to it
The Key Elements of a Research Statement. I

- **Content**
  - Clear Statement of the Problem (Set)
    - Broad and inclusive
    - Is this a single issue, or a potential new field?
  - Summary of the State of the Art
  - Discussion of Research Methodologies and Approaches
    - Theoretical
    - Experimental
    - Computational or Numerical Simulation

The Key Elements of a Research Statement. II

- **Content (cont.)**
  - Discussion of Research Methodologies and Approaches (cont.)
    - Observational
    - Cataloguing
    - Design-Oriented
    - Hypothesis-Driven (e.g., NIH)
    - Area-defining (new intellectual territory)
  - **Uniqueness** of the Problem and Approach
  - **Progress** to Date
    - Summary of Ph.D. Thesis
    - Summary of major publications
The Key Elements of a Research Statement. III

Content (cont.)

- **Impact** on the State of the Art to Date
- **Proposed Research Initiatives**
  - Near Term
  - Mid Term
  - Far Term
- **The End Goals**
  - If all of this works out, what can one envision as the result?
- **Incorporation of this Research in the Classroom**
  - Exploration of research methodologies
  - Problem statements and related research projects