Development of a Research Statement

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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