

## SIGNIFICANCE SUBSECTION

An important part of our proposal-writing strategy is to gradually ratchet up detail as the reviewer reads farther into the application. The idea is to get the reader “hooked” on the conceptual, exciting parts of the proposal to the extent that s/he will want to read the details that are presented later. The Significance subsection is where you begin to increase the level of detail that has been included to this point. It is meant to provide new information and citations that will extend and validate the brief assertions that you made in the first paragraph of the Specific Aims section, as well as the general statement of positive impact you wrote at the end of that section.

**SIGNIFICANCE Core Review Criterion** ([http://grants.nih.gov/grants/peer\\_review\\_process.htm](http://grants.nih.gov/grants/peer_review_process.htm)): “Does the project address an important problem or a critical barrier to progress in the field? Is there a strong scientific premise for the project? If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved? How will successful completion of the aims change the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field?”

Not surprisingly, characterization by the *Research Instructions for NIH and Other PHS Agencies* of what should be written in the Significance subsection is similar (see text box, below).

**Research Instructions for NIH and Other PHS Agencies, section R.400.3.1:**  
"Explain the importance of the problem or critical barrier to progress in the field that the proposed project addresses. Describe the scientific premise for the proposed project, including consideration of the strengths and weaknesses of published research or preliminary data crucial to the support of your application. Explain how the proposed project will improve scientific knowledge, technical capability, and/or clinical practice in one or more broad fields. Describe how the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field will be changed if the proposed aims are achieved."

Given the above information, the three purposes of the Significance subsection are to (i) help justify the need for what you will propose, (ii) establish the scientific premise for your application, and (iii) inform reviewers as to why your research contribution is expected to be significant.

The format we recommend for the Significance subsection is:

## RESEARCH STRATEGY

### Significance:

#### **Scientific Premise:**

Overall Scientific Premise

Scientific Premise for Aim #1 (Literature & Preliminary Results)

Scientific Premise for Aim #2 (Literature & Preliminary Results)

Scientific Premise for Aim #3 (if applicable; Literature & Preliminary Results)

#### **Significance of the Expected Research Contribution**