Specific Aims* (the "elevator pitch" for your grant)

- Length: <u>1 page</u>
- Style: Non-technical. Write this section for all study section members, since they'll all read it. Note, this may be the ONLY part of your grant that reviewers (except for the 3 designated ones) will read.
- This section must include everything that is important and exciting about your project but without a lot of detail.
 - * A great resource for writing NIH grant applications is *The Grant Application Writer's Workbook* by Stephen Russell and David Morrison. It is available online at www.grantcentral.com.

Specific Aims (cont'd)

- The *flow of logic* must be so clear and compelling that reviewers at the study section meeting will be able to follow it, even when someone else is talking to them at the same time.
- Together with the Significance and Innovation subsections, it is one of the most important parts of the application in terms of capturing the attention of the majority of reviewers.

Specific Aims: Introductory Paragraphs

- Develop a compelling argument for funding.
 - The secret to creating a compelling flow of logic in this section is to appropriately link its components, one to another.
 - Begin with an interest-grabbing sentence that immediately establishes the relevance of your proposal to your field.
 - Describe the scope of the problem (such as a particular disease or relevance to the field).
 - Describe the gap in knowledge that your project will address (that is, from a research perspective, what we don't know that we need to know in order to move forward; provides rationale for specific aims).

Specific Aims: Introductory Paragraphs (cont'd)

- State your long-term goαl.
- It should be broad enough to give the impression that this study is part
 of a larger research plan that will continue beyond the bounds defined
 in the Specific Aims.
- It should reflect your "niche" area of research (that is, the area in which you will be the acknowledged expert).
- It must be realistic (i.e., something that is clearly achievable over a finite period of time).
 - For example, if you are a cancer researcher, it would not be credible to write that your long-term goal is to cure cancer.

Specific Aims: Introductory Paragraphs (cont'd)

- State the objective of this application
- This component defines the purpose of your application, which is to fill the gap in knowledge identified in the 1st paragraph.
- This must also link to your long-term goal as the next logical step along a continuum of research.
- Emphasize the "product" of the research, not the "process" that produced it.
 - For example, "to study" something would not be an appropriate goal; what you want is what the study will produce.

Specific Aims: Introductory Paragraphs (cont'd)

- If your project is <u>hypothesis-driven</u>, state your central hypothesis or model you will test.
 - Your central hypothesis must link to the objective, because the objective will be accomplished by testing your hypothesis.
 - The purpose of the hypothesis is to provide **focus** for your research project and, therefore, your grant application.
 - Tell reviewers how your hypothesis was formulated (rationale) either on the basis of your own preliminary data or on the published work of others.

Specific Aims

- After the introductory paragraph:
- Each aim should consist of a title and a few sentences: be concise and concrete; clarity is the goal.
- Keep the number of aims to a minimum (2 or 3).
- Aims should be able to "stand alone": they can be related but must be independent (i.e., they do not depend on a particular outcome of a previous aim).
- Start with rationale for the aim.
- Briefly describe how you will test the aim, details of methods is not important here but describe essential reagents or novel techniques.
- End with what you expect to understand/know if the aim is successful: i.e. the expected outcome.

Specific Aims:

- End with a statement that tells reviewers what will become possible after the research is completed that is not possible now.
 - The gap in knowledge discussed above represents a problem because its continued existence blocks the next step in the field from being taken.

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- Once the proposed research has been completed, you will be able to take the blocked step – that is why you want to do the research.
- This is where you can excite reviewers: this rationale can truly be exciting because it conveys that the expected outcomes will clearly advance your field.