

## SPECIFIC AIMS – ADVICE FROM JHMI REVIEWERS (Revised, January 2017)

*Think of the Specific Aims to answer the following questions: What's the problem, Why should we care, and How will you fix it?*

Specific Aims may be the only part of your application reviewers read. **Write the Specific Aims as a standalone document.** Expect to go through many revisions. This is the most important section and the hardest to write well. Write Specific Aims from the lens of the reviewer, someone who just flew across the country, is tired, cranky, may not be familiar with your research area and has a stack of other grant applications to review.

**Create an easy to read document that guides the reviewer through the grant.** Do not make the reviewer work to understand what you are proposing. Make it compelling; sound excited about your work and prelim. data (e.g., use language that suggests that "we are particularly excited about our data demonstrating...", "we are encouraged by findings that suggest...", "these data are intriguing as they bring to light..." etc.).

**Do not use abbreviations**, especially if the word is only used twice. This makes the reviewer go back and find what the abbreviation means – too much work, remember they are cranky. Introduce all content methodically, **tell a story**. Do not introduce a new concept in the Specific Aims. The flow and logic must be connected and compelling. The page should not be text heavy, and have white space and flow. Sentences should be no longer than 2.5 lines. It should have **visual appeal**. If applicable, include a diagram or image to tell your compelling story. Don't start an aim with "to use technique x to..." but instead, use "to investigate whether" or "to investigate the underlying..." followed by "by using technique x." Consider organizing your aims (but don't use headers) into:

- 1) Introduction – Grab their interest quickly and explain why funding your proposal will help NIH achieve their goals and be a **good use of tax payer money**. Explain what is known and what is missing that is holding back the field, **what knowledge gap will you fill**. Conclude with why the missing information is important to the agency.
- 2) What, Why, Who paragraph – Clearly state your hypothesis and link it to the objective. Emphasize the product not the process. **What will become possible after the research is completed.**
- 3) Specific Aims Paragraph – **Think of your specific aims as headlines**, succinct and attention grabbing. **Use action verbs** (test, analyze, prove) not descriptive verbs (compare, investigate, describe). Ideally, the aims should result in something you can measure. **Your application should have only two to three specific aims.**
  - a. Too many aims will be seen as overambitious
  - b. More aims give the reviewers more content to find fault with.
  - c. Do not go into the experimental details of each aim – stick to the big questions you will be answering and leave the details for the grant itself
  - d. Be aware that some reviewers get hung up on wanting to see a hypothesis stated in the specific aims so consider when this might be applicable in your writing.
  - e. One aim should not depend upon another aim, they should be independent.
- 4) Impact Paragraph – There should be at least one important expected outcome for each of your specific aims. Show how the research will impact the field and **why this work must be done now and that you are the best person to do the research**. If writing an R01 be sure that it is clear that you are independent as you lay out the rationale for your work on the specific aims page. Consider stating a long term goal of your work (that is really a concrete and specific goal) to help highlight the significance and provide context.

**Training Grants** – Integrate your training and career development plan into your specific aims. Some applicants make one of their aims, or sub-aims, training specific.