Instructions:

The over-arching principle is that your university lab is a business and has to be run like a business unless you are independently funding it. The more business principles you put into the running of your lab the better it will run. A grant proposal must convince the reviewer that the money funded have a good return on investment.

The goal of this template is to help you focus your aims, one vital component of writing a successful proposal. This template is derived directly from two recent R01's of mine that were funded with scores better than the 5th percentile. This approach works.

The aims are a crucial part of winning over the reviewer. Your whole proposal should be written for a general science audience, not for just specialists in your field. This is particularly important in the specific aims. If you use specialized terminology without explaining it here, you will loose your reviewer's good will quickly, and your chances of funding are slim to none.

Keep it general, and keep it interesting. For more on how to "keep it interesting," try to get hold of my book Marketing Your Science as soon as it comes out.

I want to thank Dr. Marshall Edgell for his initial inspiration for this template, and Dr. Peter Drain for his recent input to improve it.

2. Specific Aims

<1 sentence: Name a big picture, central challenge of your field that lots of people are interested in solving.>

<2-3 sentences: elaborate on the problem and what is going on in your field towards solving it>

<1 sentence: Concisely name a single, critical gap or hurdle [or bottleneck] that is slowing or stopping progress towards solving the big picture named in the first sentence. **This is the most critical part of your aims**! You must have a single, clear hurdle that needs solving [clearing], in order to have a good proposal.>

<(optional)1-2 sentences: elaborate on the hurdle/roadblock>

<1-2 sentences: Propose an approach to solving the roadblock>

<(optional)1-2 sentences: Explain why the approach hasn't been implemented yet>

<1-2 sentences: Explain why you and your team are the right people to implement this solution/approach. **This is another critical section.** You need to point out why not just anyone can do this, and why you are qualified and ready to jump in and solve it. The best thing is to cite one or more previous papers of yours on the subject, or point to unpublished work: "It will be shown in the Preliminary Studies that we are uniquely able …that we have begun to solve this ….".>

<1 sentence: Recapitulate the hurdle and how the field advances by clearing it>

<1 sentence: "We are proposing to accomplish [goal] with the following specific aims:">

Then, for the aims, repeat the following from 1-4 times, as required

<"Aim #: To X we will Y." - I've literally used this exact format on the last 5 funded proposals for ALL of my aims. It forces you to clearly state WHAT you will do (X) and HOW you will do it (Y). Sometimes the HOW (Y) is divided into several sub-steps, as a numbered/lettered list, and can even be more than one sentence, if absolutely necessary.>

<1-4 sentences: How clearing the hurdle fits into the big picture. For the NIH, this big picture needs to be tied to improving health or curing disease. For the NSF, this may be solving one of their named grand challenges. The more people afflicted and the deadlier the disease, the easier it is to establish the importance of the project in the big picture context.>

Comment on the Gestalt of this template from Peter Drain:

Grant writing is getting the money. Science is what you do when you get the money. Two distinct activities. First, get the money. Second, decide on the best science to do with that money. Getting funded and the science done with the funds are not the same. The bottom line is that grant writing is a learned skill with some key components that are not scientific but rather based on relating the study to the reviewers goal, in a word, relationships.