## **Research Proposal Assessment Sheet**



This grading form was used in a graduate level science course in which students selected a research topic and wrote grant proposals. Emulating the proposal structure required by major funding agencies, students identified pivotal papers in their chosen field to establish context, argued the significance of their proposed research aims, and developed a reasonable and effective experimental plan. This form was used to assess drafts; students then made changes in their final proposal, based on assessment comments.

#### 1. Specific Aims Section (10%)

• Are the aims introduced and explained sufficiently to be understood without reading the Background section?

#### 2. Background and Significance Section (30%)

- Is the background sufficiently researched and referenced?
- Does the background make a good case for the relevance of the experiments?
- Does extraneous information clutter the argument or presentation?
- Has the student introduced all the key players (genes, proteins, organisms, etc.) that the reviewer needs to be familiar with in order to read the rest of the proposal?
- Is the material presented logically so that reading it is straightforward and, perhaps, even a pleasure?
- Are figures used when necessary to illustrate concepts?

### 3. Research Design and Methods Section (30%)

- Are the specific aims clear and complete?
- Are rationales provided for each experiment (that is, a few sentences describing what the experiment is designed to ask and what the general method used will be) before plunging into technical details of the experiment?
- For each set of experiments, is there appropriate discussion of the possible results, what they will mean and how they will affect further work?
- Is the level of description of the technical details appropriate?
- If applicable, have the necessary administrative requirements to do with human subjects, animal welfare, etc. been addressed?

# 4. Style, Formatting, Citations, Grammar, Sentence Structure, Punctuation, and Word Choice (30%)

- Are the ideas clearly stated?
- Are acronyms and terms defined at their first use?
- Are there page numbers, appropriate and consistent headings, and appropriate and complete citations (for the text and figures)?

- Is each figure relevant enough to warrant inclusion, legible with an appropriate legend, and referred to appropriately in the text? Is the caption sufficiently informative?
- Do paragraphs have topic sentences? Do sentences within paragraphs support an idea that is, is there a logical flow in the writing?
- Are there few errors in grammar, sentence structure, punctuation, and precise word choice?
- 5. What were the strengths of this application?

6. What were the weaknesses of this application?

7. What would you suggest the student do to improve the proposed research?

