

## Honors Thesis Proposal Format

The Honors Thesis Proposal is a template for your Honors project. Your committee will use it to (i) learn the relevant background information for your work, (ii) understand the goals of your project, (iii) gauge the feasibility of the thesis, and (iv) evaluate your conceptual understanding of the material. To facilitate this review, your Proposal should have the following sections:

Specific Aims  
Background and Significance  
Preliminary Studies (if any)  
Research Design and Methods  
Timeline  
Summary  
References

### **Specific Aims**

The Specific Aims should provide a brief overview of the topic, beginning with the broad area of study and then narrowing down to the specific problem and issue to be addressed. You should clearly state what hypothesis or model will be tested in your project, and what will be gained from your work. This should be followed by subsections with bolded titles (Aim 1, Aim 2, etc.) that explicitly state the goal for each section of your project. After the subsection title, provide a brief description of the methodology that will be used to complete the Aim and a concluding sentence that states what will be gained from your work. An Aim is not usually equivalent to a single experiment - it is instead a cohesive set of experiments focused on one theme or question related to the larger hypothesis/goal of your project.

The Specific Aims page is essentially an abstract or summary of your entire project. It should be no longer than 0.5 - 1 page, but it also needs to contain enough detail for the reader to immediately understand the purpose and value of your work. Often, the Specific Aims is written last.

### **Background and Significance**

This section provides an introduction to your topic. It should begin with general concepts and then narrow to the specifics of your project. You should use this section to state (i) what is known; (ii) what is unknown; (iii) why it is important to address the unknown; (iv) your hypothesis / model; and (v) what will be gained from your study. You use this section to provide a broad conceptual context for your project and to demonstrate a mastery of the relevant literature. The background information covered in this section will be more expansive than the overview of your topic provided in the Specific Aims.

### **Preliminary Studies**

Preliminary Studies are not required, but you can present any preliminary data you have generated in advance of the thesis proposal. Your preliminary studies provide support for your hypothesis / model and demonstrate you can use the appropriate techniques to complete the

proposed work. Only your work and the work of your lab should be placed in the Preliminary Studies; the work of others should be discussed in Background and Significance. If you present data that was generated in your lab but not by you personally, be sure to acknowledge this in the Figure Legend. It would only be necessary to show the work of the lab if that particular experiment was essential for the development of your own project.

### **Research Design and Methods**

This section is divided into subsections that mirror your stated goals from the Specific Aims page. Begin with a brief rationale for each Aim that reiterates your hypothesis / goal. The bulk of this section will describe the experimental procedures to be used in the execution of your project. Proper control conditions should also be emphasized. Each subsection should end with a consideration of potential problems and alternative approaches.

### **Timeline**

A timeline will help the committee evaluate the feasibility of completing your project in the available time.

### **Summary**

Provide a brief overview of the project, emphasizing the significance of what will be gained from your project.

### **References**

References cited numerically in the proposal can be listed at the end of the proposal. References are generally not provided in the Specific Aims, but they are important for the Background/Significance and Research Design sections. References allow the reader to consult the literature for additional information, demonstrate that you have a firm grasp of the literature, and can be used to justify experimental approaches.

Endnote and other electronic bibliography programs are invaluable for the formatting of your written thesis. These programs are commonly used in the preparation of grants and manuscripts and are probably available in your lab. The programs insert references into your Word document from a library of references you create. The references in your library can be downloaded from PubMed, so there is no need for the manual input of references. Furthermore, the format of the references in your Word document (chronological, alphabetical, all authors listed, only first author listed, etc.) can be changed at the click of a button. It takes a little time to become familiar with these programs, but it is highly recommended that you learn how to use them. In the long run, it will actually save you quite a bit of time.

### **Concluding Remarks**

Critical information will appear in multiple sections of your proposal. This is by design: you want your audience retain the key points of your proposal, and the best way to do this is by repetition. By repeatedly stating the same point in slightly different ways, you also minimize the potential misunderstanding of your work.

When organized in the manner suggested above, your Honors Proposal can serve as the foundation for your Honors Thesis. You will simply expand upon most of the sections to generate a complete thesis. The Honors Thesis Proposal can also serve as the template for your HIM Scholarship application.