

## STARS II

The Research Proposal and Personal Statement should be on different pages but uploaded as one file. Please put your Research Proposal first. Line spacing should be 1.5 and margins 1". Indent each new paragraph and separate paragraphs with an extra space. Below are instructions on both statements.

### **RESEARCH PROPOSAL**

#### Abstract

The abstract should summarize your proposal. Include one sentence to introduce the problem you are investigating, why this problem is significant, the hypothesis to be tested, a brief summary of experiments that you wish to conduct and a single concluding sentence. (250 word limit)

#### Introduction

The introduction discusses the background and significance of the problem you are investigating. Lead the reader from the general to the specific. Include the main project's primary goal and its impact, (i.e., why is this important to study? Also include what is known about the problem so far and what are the limitations? What remains to be addressed? It is best to include figures here to better illustrate your points and help your reader understand unfamiliar science (2 pages max). Ensure that your figures have properly labeled legends and attribution (is it your own work, is it unpublished from the lab, or is it from a cited reference?) Remember to carefully cite all your sources throughout.

#### Hypothesis/Research Questions

Formulate a hypothesis that will be tested in your grant proposal or propose specific research questions you will answer with your research. Your hypothesis/question should be focused, concise and flow logically from the introduction. For example, your hypothesis could be "I hypothesize that overexpressing wild type Brca1 in Brca1 null tumor cells will prevent metastatic spread in a mouse xenograph model." Based on your hypothesis, your Specific Aims section should be geared to test the hypothesis/answer the question. It should be stated in one sentence.

#### Specific Aims (listed as Specific Aim 1, Specific Aim 2)

This is where you will want to work with your mentor to craft the experimental portion of your proposal. Propose two original specific aims to test your hypothesis. Don't propose more than two aims. You do not have to go into extensive technical details, just enough for the reader to understand what you propose to do and why you have chosen to do these specific experiments. It is very important that the two aims are related but NOT interdependent. What this means is that if Aim 1 doesn't work, Aim 2 can still be achieved. (2 pages max)

#### Potential pitfalls and alternative strategies

This is a very important part of any proposal. This is where you want to discuss the experiments you propose in Aims 1 and 2. Remember, no experiment is perfect. Are there any reasons why experiments you proposed might not work? Why? What will you do to resolve this? What are other possible strategies you might use if your experiments don't work? If a reviewer spots these deficiencies and you don't propose methods to correct them, your proposal will not get funded. You will want to work with your mentor to write this section. (1/2 page per Aim)

## STARS II

### References

Cite all references, including unpublished data from your mentor. Last, First, (year), Title, Journal, volume, pages.

***\*6 page proposal limit (not including References), 1.5 spacing, 1" margin, 12pt Times New Roman font***

### **PERSONAL STATEMENT**

Please describe what you hope to gain from this program.  
Limit 250 words.