

## **Product Proposal Rough Draft**

### Introduction and Statement of Purpose

For the Final Product, I would like to develop a mock research experiment in relation to the prevention of hematologic conditions. Through this research experiment, I would like to find if there are prevention methods to some conditions. Although some of them are inherited and they cannot be prevented, for the other conditions, I wanted to develop an experiment to see if there could be any prevention measures that could be taken.

### Review of Skills and Research

I will be researching the topic of hematology, more specifically the prevention of hematologic conditions. I will need research skills such as collecting information and analyzing information. I think another skill that will be useful to have is just understanding the scientific method that is used for experiments, because I will also need to be familiar with the method since I will be using it in my experiment. During the research and experiment, I will also probably learn skills such as writing accurate findings, coming up with a structured and valid hypothesis, and writing findings for the conclusions. These skills are anyways part of the scientific method, so I expect to get better at them as I work on the Final Product.

### Methodology

Participants: I most likely will be using sample patient data.

Materials: Sample patient data, research publications about hematologic disease prevention, scientific method chart

### Utilization of Higher Level Thinking Skills

I will need problem-solving skills, because if a problem comes up while I am doing research or, for example, if I am not able to find the exact data that I need, I may have to compromise and try something different, so in situations similar to that problem-solving skills would be essential. I would need synthesizing skills when I am collecting information, and designing skills to create the experiment. I will also need analytical skills when I am writing the conclusions and finding out the main conclusions from the research.

### Conclusions

This product will have applications to the real world, because if prevention methods for hematological conditions could be figured out, a lot less people would actually end up being

diagnosed with something. Of course, it is not ensuring that all people will be safe, but it could very much help decrease the chances of someone getting a hematologic disease that is not inherited. Also, my mentors may be able to use this at some point when they are talking to their patients. Maybe they could discuss prevention measures that could be taken to decrease the chance of a patient developing a disease.

## Calendar

Week 1 Jan. 18-24	<ul style="list-style-type: none"> <li>● Think about final product idea and come up with one</li> <li>● Start and finish working on the final product proposal</li> <li>● Start looking at hematology articles</li> </ul>
Week 2 Jan. 25-31	<ul style="list-style-type: none"> <li>● Send final product proposal to mentors</li> <li>● Go over and discuss final product ideas with mentors, make changes if needed</li> <li>● Start working on final product proposal - final draft and get ready to turn it in</li> <li>● Look at articles for hematologic disease prevention</li> </ul>
Week 3 Feb. 1-7	<ul style="list-style-type: none"> <li>● Start designing experiment</li> <li>● Write a hypothesis of what the prevention methods could look like</li> <li>● Look for sample experiments or publications online</li> <li>● Ask mentors for ideas on hypothesis</li> </ul>
Week 4 Feb. 8-14	<ul style="list-style-type: none"> <li>● Continue scientific method, write the abstract part</li> <li>● Ask mentors if sample patient data usage is a good idea</li> <li>● Confirm the abstract details</li> </ul>
Week 5 Feb. 15-21	<ul style="list-style-type: none"> <li>● Write experiment details: materials, objective, etc.</li> <li>● Design experiment</li> </ul>
Week 6 Feb. 22-28	<ul style="list-style-type: none"> <li>● Collect data on patient sample</li> <li>● Research prevention</li> </ul>
Week 7 March 1-7	<ul style="list-style-type: none"> <li>● Continue research on prevention methods</li> <li>● Ask mentors for prevention methods on a mentor visit if applicable</li> <li>● Continue looking for mock experiments to understand what to look for in my experiment</li> </ul>
Week 8 March 8-14	<ul style="list-style-type: none"> <li>● Finalize sample data (patient data)</li> <li>● Finish writing the experiment design</li> <li>● Start writing conclusion</li> </ul>
Week 9 March 15-21	<ul style="list-style-type: none"> <li>● Finish writing conclusion</li> <li>● Finish writing abstract and include experiment details</li> </ul>

Week 10 March 22-28	<ul style="list-style-type: none"><li>• Write a research paper or create some other medium detailing the experiment findings</li></ul>
Week 11 March 29-April 4	<ul style="list-style-type: none"><li>• Continue working on the research paper/other presentation</li><li>• Ask mentors for opinions and evaluation</li></ul>
Week 12 April 5-11	<ul style="list-style-type: none"><li>• Finish final product</li><li>• Check to make sure everything looks good, finalize experiment and presentation</li><li>• Ask for mentors' final opinions</li></ul>