

## **BIOL8700 Research Proposal**

### **How to get started on a reading list**

Read publications from your supervisor relevant to the laboratory

From these papers, go to the papers that have been referred to, especially ones that give background information, usually referred to in the introductory paragraph

Also look up some current reviews on the subject (WebScience search using review filter)

Be critical and up to date

### **What makes a good research question?**

Compelling, important and significant, expands on the knowledge of the field of research

Supports multiple perspectives, is a problem that can generate a number of viewpoints

Is researchable, achievable

Succinct

Topic will still be at the forefront of the research field in a year's time

### **Step 1: The research question**

- 1      What topic (idea) of study are you interested in?
- 2      What has already been done in this area? (The literature)
- 3      What major outcome(s) (dependent variable) are you interested in?
- 4      What intervention (independent variable) are you interested in?
- 5      Are you looking for differences or a relationship (association)?
- 6      To what group (population) do you wish to apply your results?
- 7      What is your specific research question?
- 8      What answer do you expect to find to your question? (The research hypotheses)
- 9      Why is this question important today? (Relevance)

Bordage G and Dawson, B (2003 Experimental study design and grant writing in eight steps and 28 questions Medical Education **37** 376-385