**Scientific Writing**

McMillan VE, Arnold R, Priore CF. 2012. Writing Papers in the Biological Sciences. 5th ed. New York: Bedford/St. Martin’s.

Look at the journal articles your mentor gave you on your research topic. Look at how they are written, look at the citations in the text.

* Title
  + Informative but concise
  + Your mentor team will either already have a title in mind or will help you formulate one
* Abstract
  + Very short summary, informative but brief
  + Includes main aspects of the study and ends with brief summarization of results
* Introduction
  + Starts broad, this is where you explain the topic/problem
  + Include historical information/data from literature
  + Ends with very specific statement(s) of what your study was about - purpose
* Materials and Methods
  + Organized, specific details of your experimentation
  + Includes specific steps, equipment, reagents, times, specific locations, etc.
  + Details would allow others to replicate your methods
* Results
  + Summarize data, show important trends or patterns, statistics
  + Figures and Tables
    - Figure (graph, picture) – label at bottom
    - Table – label at top
* Discussion
  + What is the meaning of the results? Was there support of the hypothesis?
  + Do the findings relate to what others have found (whether researching the same organism or a related organism, etc.)?
  + Recognize “negative” results
  + What does future hold? Where does the research need to go next?
* Acknowledgements
  + List funding source, facility, thank anyone who helped with project
  + On the poster for the REPT program, you have to include: “The financial support of the National Science Foundation under Grant No. OCE1039107 to Indian River State College for COSEE Florida is gratefully acknowledged.”
* Literature Cited
  + List references cited
  + Your mentor team will let you know method they want you to use
* **Poster**
  + Developed in Powerpoint
  + In a poster you will have same sections but in a *very condensed* version
    - Here, the study is summarized more visually
      * Some like more pictures and less text, this will depend on your team preference and project as some projects can be summarized in less words than others
    - Only include necessary information to get idea across
      * However, you will need to know *all of the details* for anyone that is reading the poster and wants to inquire
    - Want to make sure it’s readable from a distance
      * Need to use large font (usually minimum is ~24, can be less for labels of graphs and figures)
      * You and your mentor team will decide based on preferences and how much information needs to be included on poster