Helen's guidelines for reading research papers (primary literature)

In this course you will be asked to read and evaluate the primary scientific literature yourself. When you read a paper it is not enough to just remember the take home message. Below are some guidelines to help you read the assigned papers and prepare for the discussion.

(1) Skim the paper to get a quick overview of what the authors are trying to say. Note headings and subheadings, as well as graphics and their captions.

(2) Read the Introduction. The introduction provides a context and background for the subject. In reading the Introduction, note how the context is set. What is this the paper about? What larger question is this a part of?

(3) Read the Abstract, which will give you a synopsis of the major findings of the study. A well written abstract should clearly state what the data shows, and then at the end, say the authors opinion “These data suggest that….”

(4) Skim the Results, FIRST, look carefully at the figures and tables, as these contain the graphical representation of the actual data. THEN, read the text to follow the logic of the authors. Be sure that you can summarize the data.

(5) Read the Discussion. The Discussion is where the author interprets the data and presents their conclusions. These conclusions, however, do not have to be your conclusions.

(6) Evaluate the Text. Question authority! After you have read and understood the article, you should be able to evaluate the data and draw your own conclusions. Are the methods well designed? Are the data convincing? Are the conclusions inferred from the results logical? Could there have been other factors that could have influenced or accounted for the data? What questions are remaining? What questions still need to be answered?