Scientific Writing: The IMRaD Abstract

This handout was created to accompany the Writing in the Sciences video series.

The purpose of the Abstract is to provide an overview of the entire report. Although the Abstract is generally the first section it is often written last. An Abstract is written in the span of 300 words or under. Readers may use the abstract to evaluate whether it fits the information they are seeking, often times other researchers may only read and cite the abstracts of papers.

Questions to ask about how much information to include:

- If I was a researcher doing a similar study and I could only read the abstract, would the information here be helpful to me?
- Are there components missing?

Writing the Abstract steps

The abstract should provide all of the main points of your paper, including a full mental picture of your research project, including the introduction to the conclusion.

1. Go through the paper, section by section and write the main idea of each paragraph in the margins.
2. Take each main idea and create sentences. These will form the basis for the abstract.
3. Not all of these sentences may be included in the final abstract. Keep it brief.
4. Focus on your research alone. Use clear, unbiased, and straightforward language. DO NOT include tables, images, or figures.

Note: Abstracts should not include an abundance of background information or theory, only a summary of the basics. You should also avoid referring to other literature, unless absolutely necessary. The Abstract is solely of YOUR research. Additionally, abstracts should be written in a clear manner, avoid using metaphors, abbreviations, jargon, confusing terms, or creative language.
Organizing the Abstract

1) Purpose
   a. A good abstract begins by identifying the purpose of the study. Typically, this is taken from the introduction section.

2) Methods
   a. Provide a brief summary of the procedure, with information about key materials (such as samples tested)

3) Finding
   a. Discuss results in terms of the hypothesis or research questions. Identify any pattern, trends or notable outcomes in the data. Indicate any limitations.
   b. If there are any flaws or limitations to the study, note those as well.

Note: Avoid using vague terms like ‘many’, ‘most’, ‘should’, etc. Abstracts must be clear, precise and specific.