Tips for writing an abstract
From the Writing an Abstract workshop hosted by Dr. Damer
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What is a scientific abstract?
- An abbreviated version or summary of an article, poster, or talk
- Introduces journal articles
- Informs readers about the article's content
- Helps readers decide whether or not to read article
- Extracts the valuable parts of each section of an article (IMRD)

Why should I learn to write an abstract?
- You need to write abstracts for your own posters, talks, and publications
- Helps you learn how to present complex information in a clear, concise manner
- Helps you read abstracts more effectively

Why is the abstract so important?
- Your abstract lets people quickly determine if they want to read the entire article/poster.
- Because an abstract is so short, every word is important to conveying your message.
- Scientific abstracts are a challenge to write and for the success of your publications, careful and planned writing of the abstract is essential.

What are some qualities of an effective abstract?
- Unified, coherent, concise paragraph
- Usually 200-300 words
- Follows IMRD format – or format of the article/poster/report
- Follows chronology (order) of the article/poster/report
- Adds no new information
- Can stand alone- can be understood without reading the article/poster/report
- Is accessible to a wide audience

PRACTICAL ADVICE:

Parts of an abstract
- Introduction/Background
- Problem Statement/Hypothesis Investigated/Research Question
- Methods
- Results
- Conclusions/Significance/Impact

Writing an abstract – Preparation
- Ideally, finish your article/poster/talk before writing your abstract
- Read your article/poster/talk (or outline) keeping in the mind the following categories
    - Introduction/background
    - Research question/hypothesis
    - Methods
    - Results –main findings
    - Conclusions/Significance
- Underline or write down the key points in each category

Writing your abstract - Layout
- Write 1-2 introduction sentences
    - Provide necessary background information.
    - Identify the research question or the hypothesis investigated.
    - Motivate the reader to finish the abstract and read the entire paper or poster.
- Write 1-2 sentences describing the main methods
    - What was your main approach for investigating the problem?
    - Don't go into detail about methods unless they are novel.
- Write 1-2 (or more) sentences describing your results/findings
    - Describe significant findings.
    - Here you can be more specific and detailed.
    - Try do not use vague terms like "most" or "some."
- Write 1-2 sentences containing your conclusions and significance or impact

How to meet the word limit:
- Don't worry too much about a length at first. Just make sure you include all important information.
- Then shorten your draft by start crossing out unnecessary or less important word and phrases.
- Look for places where you can combine sentences in ways that shorten the total length.
- Look for places where you can combine methods and results into one sentence.
- If it is still too long, look again for less important information to cut.
- Put it aside for a while, then come back and re-read your draft. You'll probably find new places to cut.

A good abstract…
- Is coherent and concise
- Covers all the essential academic elements of the full-length paper
- Contains no information not included in the paper
- Is written in plain English and is understandable to both a wider audience and discipline-specific audience
- Uses the language of the original paper, in a more simplified form
- Uses active voice instead of passive voice
  - https://www.internationalscienceediting.com/category/writing-tips/publication-ethics/
- Follows formatting rules, including word/character limit
- Follows grammatical rules, including verb tense (methods & results should be in past tense)

Things to avoid…
- Jargon or any technical terms that most readers won't understand
- Abbreviations or acronyms that are not commonly understood unless you describe what they mean
- Poorly defined objectives
- Excessive numerical data and statistical results
- Results don't correspond with objectives
- Conclusions not based on results presented
- Use of "I" or "we"
- A bibliography, citations, tables or graphs

Helpful websites:
- https://www.ptglab.com/news/blog/how-to-write-a-good-scientific-abstract/
- https://owl.purdue.edu/owl/research_and_citation/using_research/writing_scientific_abstracts_presentation.html