How-to efficiently perform background research and write a manuscript

Writing a manuscript, whether it is original research, a review, or case report, is a daunting challenge. However, by learning to efficiently do background research and write, you will save lots of time writing the original draft and with subsequent revisions from your research mentor. Hopefully, writing manuscript can even become enjoyable.

Background research
There are many medical literature search engines available, but PubMed is the cornerstone for most medical researchers. To access PubMed, go to library.med.utah.edu and follow the link on the left side of the page under "quick links". It is okay to use Google too. Google is often a superior search engine to our medical literature engines.

1. If unfamiliar with the general topic you are writing about, start with reading the UpToDate or DynaMed page for that topic. Both sources cite the landmark primary trials for the topic and help familiarize you with the literature.
2. Ask your research mentor for key papers that your research is based off of.
3. In general, use PubMed to find any papers you are searching for.
4. After finding a paper you intend to use in your manuscript, download the citation for that paper to your citation tool (EndNote or Mendeley).
To download a citation from PubMed:
   A. Click "send to" in upper right hand corner
   B. Click the citation manager radio button
   C. Open the downloaded citation file, which will open it in your EndNote or other citation tool
   D. Store citation under a folder for the manuscript you're writing.
5. Now you're reading the paper.
   • Write potentially useful facts or results on a note card (or equivalent).
   • Be sure to label the top of each note card with Author, abbreviated title, and journal.
   • This allows you to quickly recall what papers to cite for as you outline and write.

Outline (!!!)
Just like grade school, a good outline for your manuscript will make writing much easier and improve the quality of your writing.
   • Try to make an outline by paragraph for your manuscript.
   • List citations from your background research with each paragraph in your outline.

Writing manuscript
There are many ways to write, but we will just provide a few brief tips here.
1. Before you write, know the formatting guidelines of the journal you're submitting to. You'll save yourself from having to revise it for formatting.

2. If original research, start by writing your methods as you're doing research.

3. Write your manuscript in the following order: results, discussion, conclusion, introduction, and abstract.

4. Be sure to cite references as you are writing using EndNote or Mendeley.

5. Write over multiple days to weeks. Don't try to do it all at once.

6. Once you finish writing your first draft, let it sit for 1-2 days then review and revise as necessary.