Literature Databases and Using EndNote

Biochemistry Boot Camp Session #10 Randika Perera yrp7@msstate.edu

Scientific Literature

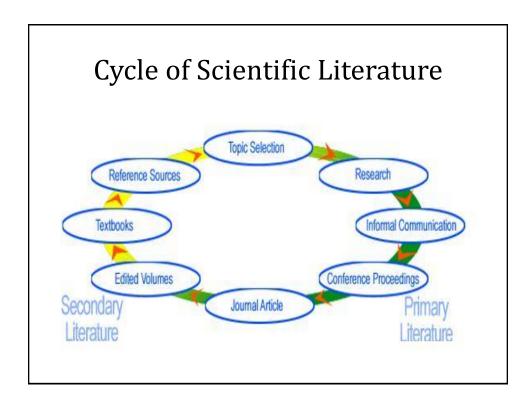
• Comprises scholarly publications that report original empirical and theoretical work in the natural and social sciences, and within an academic field, often abbreviated as the literature.

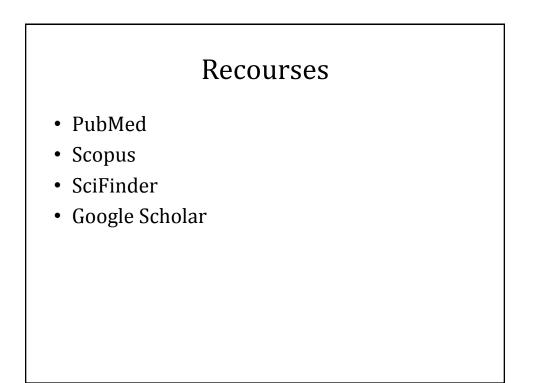
Scientific Literature

- Babylonians recorded astronomical events like lunar eclipses on clay tablets
- Galileo Galilei's letters on astronomy
- Isaac Newton's landmark *Philosophiæ Naturalis Principia Mathematica*

Types of Literature

- Primary research articles
- Review articles
- Editorials/Opinion/Commentary/Perspectives
- Trade publication articles
- News/Blog posts
- Technical Reports
- Field Trip guides
- Conference proceedings
- Books
- Dissertations/Thesis



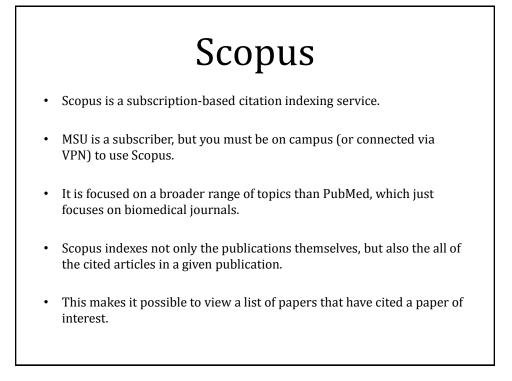


PubMed

- This is the nation's main portal for searching publications in all biomedical and related fields.
- It is free, funded by the US Government through NCBI.
- Many records are cataloged back to 1966, but some go as far back as the 1800s. All new medical research is added to PubMed shortly after publication.
- PubMed has a unique system for refining searches; for example:

Smith_J [auth] AND Jones_D [auth] AND 1997 [dp]

• This query will search for articles published by J. Smith and D. Jones in the year 1997.



SciFinder

- SciFinder is a literature database maintained by the Chemical Abstracts Service (CAS) of the American Chemical Society.
- While it includes biochemistry topics, it also includes all other divisions of chemistry.
- Its strength is the ability to search chemical compounds and reactions and link then with publications.
- MSU has access, but you must first create an account at http://guides.library.msstate.edu/scifinder.

Google Scholar

- Google Scholar is a free service for searching citations and text of a broad arrange of articles.
- It can be very useful, especially for finding old literature not covered in other databases; however, the results can be inconsistent or incomplete.
- The results it gives will not be inaccurate, and it may find full-text articles that you may not be able to locate otherwise.
- Currently, though, it is recommended to use the other search engines listed above while Google Scholar matures.

Tips for Searching the Literature

- Start with a review
- Science is a web
- Citations count
- Look at the reference list
- Don't be an age discriminator
- Ask for help
- Subscribe!

Start with a review

- Review articles contain a summary of the research in a given field.
- They usually do not contain new experiments, but they can help you understand how the field is currently thinking about a topic.
- Review articles generally cite more research-centric papers, and these are often important papers in the field, so be sure to look at the list of references, too.
- In PubMed, you can often find review articles simply by adding "review" in the search field.

Science is a web

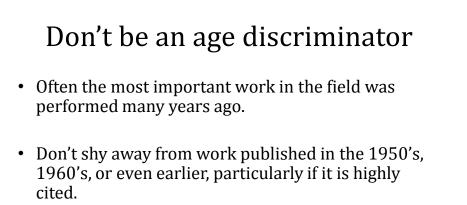
- An easy way to review the newest research is to find an informative article and see what papers have cited that article.
- Scopus and Web of Science let you search "up" to find newer research, so it's possible to find work published today by starting from a 10- year old paper.

Citations count

- Generally, important papers will be cited more frequently.
- Sorting by the number of times a paper is cited will allow you to find high-impact publications.
- But watch out: often times these papers are review articles, which may not contain original research.

Look at the reference list

- Even if the results of a paper aren't relevant to your work, the introduction may contain an invaluable discussion of important points.
- And the list of references may give you a starting point for creating your own literature review.



• At the same time, remember that online databases may not cover the earliest dates, and you may need to venture to the library (or use Google/Wikipedia) to see if you're missing a critical history.

Ask for help

- Your research adviser, the reference librarian, and other researchers in the field have been where you are now.
- Ask them how they find good papers, and see if they have advice on what you should read.

Subscribe!

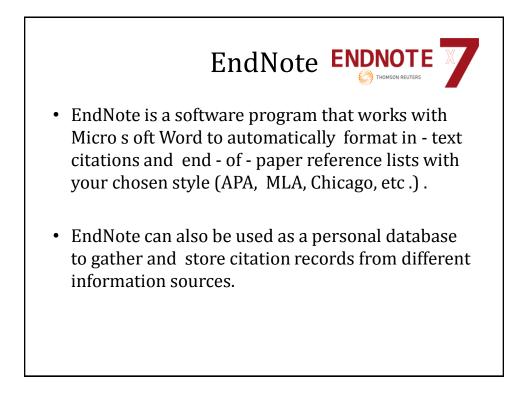
- Many journals offer a free table of contents service that you can subscribe to via email.
- This lets you see the most current articles as they are published.
- While you don't want to be overwhelmed, if there is a particularly relevant journal, it may be worth subscribing to their eTOC service.





Using Feedly

- Create an account
- You can add categories
- Adding a website of your interest

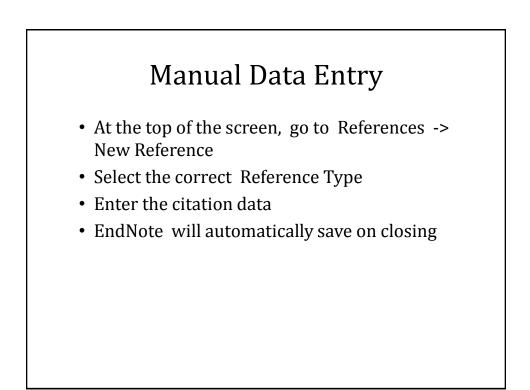


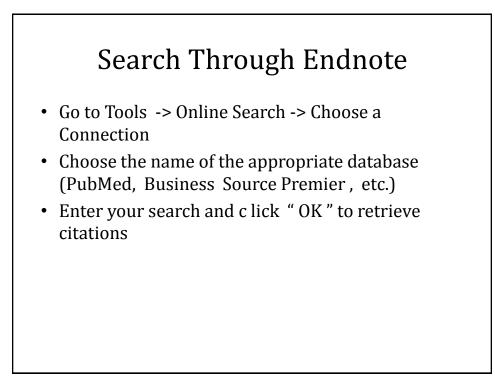
EndNote

- Automatically insert well formatted citations into your paper
- Automatically reformat citation style in one click
- Tag citations with your own keywords
- Search live within your EndNote library
- Sort your library by author, title, or date.

Creating an EndNote Library

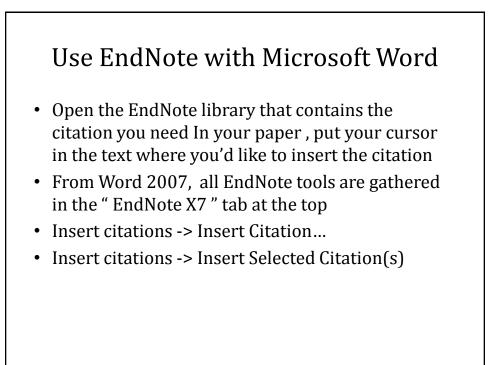
- Open EndNote
- Go to File -> New
- Name your library





Export citations to an EndNote Library

- Open your EndNote library
- Search your selected database
- Within the database citation or list of marked citations, follow the "How to Cite" link
- Select Export to Third Party Software -> EndNote and click the "Export" button
- The citation should automatically appear in the EndNote Library



Thank you