Literature Databases and Using EndNote

Biochemistry Boot Camp 2019
Session #11
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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
Cycle of Scientific Literature

Resources

- PubMed
- Scopus
- SciFinder
- Google Scholar

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


Scopus

- Scopus is a subscription-based citation indexing service.
- MSU is a subscriber, but you must be on campus (or connected via VPN) to use Scopus.
- It is focused on a broader range of topics than PubMed, which just focuses on biomedical journals.
- Scopus indexes not only the publications themselves, but also all of the cited articles in a given publication.
- This makes it possible to view a list of papers that have cited a paper of interest.

  [https://www.scopus.com/home.uri](https://www.scopus.com/home.uri)
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 them with publications.
- MSU has access, but you must first create an account at http://guides.library.msstate.edu/scifinder.
- https://sso.cas.org/as/9I9qv/resume/as/authorization.ping

Google Scholar

- Google Scholar is a free service for searching citations and text of a broad range 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.
- https://scholar.google.com/

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.

Don’t be an Age Discriminator

• Often the most important work in the field was performed many years ago.

• Don’t shy away from work published in the 1950’s, 1960’s, or even earlier, particularly if it is highly cited.

• 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.

### RSS Feed
- **Really Simple Syndication**
  - An easy way to keep up with websites without having to constantly visit them.
  - When a website is updated, that site’s newsfeed can notify you and give you a link to the new content.

### Feedly
- Compiles news feeds from a variety of online sources for the user to customize
  - [https://feedly.com/](https://feedly.com/)
Using Feedly

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

EndNote

• EndNote is a software program that works with Microsoft Word to automatically format in-text citations and end-of-paper reference lists with your chosen style (APA, MLA, Chicago, etc.).

• EndNote can also be used as a personal database to gather and store citation records from different information sources.

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
Manual Data Entry

• At the top of the screen, go to References -> New Reference
• Select the correct Reference Type
• Enter the citation data
• EndNote will automatically save on closing

Search Through Endnote

• Go to Tools -> Online Search -> Choose a Connection
• Choose the name of the appropriate database (PubMed, Business Source Premier, etc.)
• Enter your search and click “OK” to retrieve citations

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

Use EndNote with Microsoft Word

• Open the EndNote library that contains the citation you need In your paper, put your cursor in the text where you’d like to insert the citation
• From Word 2007, all EndNote tools are gathered in the "EndNote X7" tab at the top
  – Not present in Word, File -> Options -> Add-ins -> Scroll down under Inactive Application Add-ins -> Select EndNote Cite While You Write -> Select Go -> Check Box for EndNote -> Ok
• Insert citations -> Insert Citation...
• Insert citations -> Insert Selected Citation(s)
Placement of the References and Multiple References

- Depending on the style you have to place the reference before or after the period
  - Ex. end.¹ or end¹.

- Multiple references
  - Ex. Experimental evidence, such as FTIR and NMR spectroscopy, circular dichroism (CD), and Raman spectroscopy,¹⁸,⁴⁹-⁵¹

Fixing Capitalization of Titles using Capitalization Preferences

Fixing Journal Abbreviation using Term Lists

Import and Edit the Journal Term List

- In EndNote, go to “Tools > Open Term Lists > Journal Terms List”.
- Highlight the first journal, and press [Ctrl]+A on the keyboard to highlight all the terms (on a Macintosh, this would be [Command]+A). Note: If the Journal Terms List is empty, skip to step 4.
- Next, press the “Delete Term” button to the right to empty the list of old terms.
- Go to the “Lists” tab at the top, and click on the “Import List” button.
- Browse to the Term Lists folder within the EndNote folder, and choose to open the Medical text file (assuming you want to use the Index Medicus abbreviations).
Fixing Journal Abbreviation using Term Lists

Modify The Output Style So The Abbreviated Journal Name Is Used

- Next, to make sure the style is using the correct substitution, go to "Edit > Output Styles > Open Style Manager".
- In the list of styles, highlight the style you are using and click the “Edit” button.
- Click on "Journal Names" on the left.
- Make sure the style is using the Full Name or one of the Abbreviations as needed.

https://www.youtube.com/watch?v=Ewy8_DwdZGo
Questions?