Searching for Journal Articles with SciFinder Scholar

SciFinder Scholar is a web-based program that links to Chemical Abstracts and Medline databanks. Please consult with the Research Supervisor with whom you will be conducting your Honours Research to set-up your username and password.

There are three ways to search: Explore References, Explore Substances and Explore Reactions. Your supervisor will walk you through the use of SciFinder.

Unfortunately, only one person on campus can access the databases at any given time; however infrequent use means that the databases are accessible most of the time. Remember to always sign-out when you have finished your search so that other researchers can sign-in.

Examples from Chemistry:

Your research involves the preparation of a compound using the Wittig reaction and therefore you require several references related to this reaction. For example, In Explore References

- 1. Under "Research Topic" type in the search words "Wittig reaction". This will bring up thousands of research papers that make reference to this reaction.
- 2. We must limit our search go back one screen and try "Wittig reaction mechanisms"
- 3. You can retrieve information based on publication year, document types etc.

Now try another case: "nitric oxide dimers", "nitric oxide dimer", "NO dimer", (NO)2, and N2O2 ... observe how the number of papers change with your different input.

Your supervisor suggests that you quote articles from a particular scientist who has done very similar research. Try an author search on Freywald, Mihichuk, Murphy, Suh, Wee ... You may have to include the author's initials to whittle down the search.

Articles are usually listed from most recent to least, but NOT ALWAYS.

Obtaining Articles

- Post-1998 articles are available electronically from journal publishers and can be downloaded and/or printed from the journal websites. Try <u>http://www.uregina.ca/library/search_find/index.html</u>, and under the Search-Find menu, click on the appropriate links: For example, try E-Journals. Older articles are usually found in the bound journals section on the 5th floor of our library.
- 2. Alternatively, we can order articles through inter-library loan (ILL). This can take two or more weeks depending on where the source is located, so plan and start your searches as soon as you know what you research area/project is.

Searching Articles through PubMed

Note: Scifinder covers PubMed, but if you want to restrict your search more to the Biological and Biochemical side, then I suggest using PubMed. PubMed is available over the internet 24 hours/day with no restrictions.

Go to:

http://www.ncbi.nlm.nih.gov/entrez/

At the top of the page, under "Search:" choose "PubMed" option, and enter your search words in the blank space below and click 'Search'.

An example from Biochemistry:

Let's search for information on 'membrane proteins'. Enter the search words "membrane proteins" and click "go". You come up with an enormous amount of information ~ 31715 hits!!!

There are a few ways that you can limit your search:

1. In blue underneath the search cue you will find "Limits" – choose this option.

Here you could limit your search to articles written in English, a time frame of the publication (i.e. 2000-2003) etc.

By limiting this to human, review articles, and English citations, we still have 595 articles.

2. By far the best way to limit your search is by using your KNOWLEDGE of the subject area. Why

not start by adding more keywords to your search. So let's limit this to a particular aspect

of what we need to know about membrane proteins, such as crystallization, structure determination, reconstitution and use the limitations set above (it is often nice to start

with

a good review article to further your comprehension of the area).

If I add "crystallization" to the search cue as follows: Membrane protein + crystallization, I

am now down to 17 articles!!! This is more manageable. Try something on your own.

If you find an article that looks really suitable, you can look at other closely related papers by clicking on "Related articles" or "Links" to the right of the citation in blue. Try this and see what you get.

Now, try searching for information in your research area and come up with questions.