## Medline via PubMed: A Brief Tutorial

Medline is the world's premier biomedical research database. It indexes more than 4,000 journals, including hundreds of titles that pertain to complementary and alternative medicine. The free PubMed interface to Medline is loaded with features, but you don't need to know everything in order to make good use of it. The purpose of this handout is to offer a few examples about how to use Medline via PubMed, and a few tips for future reference. There are links to Medline on the library webpage, or you can bookmark this customized URL: <a href="http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?holding=ncnmlib\_fft\_ndi">http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?holding=ncnmlib\_fft\_ndi</a>.

## **Search strategy examples:**

- 1. Suppose I want to find articles about naturopathic treatment of cancer patients. Here's a simple strategy:
  - a. Go to the Medline database.
  - b. Type cancer AND naturopath\* in the Search box, and click Go.
  - c. Check the box next to the articles that are most relevant, click the Send To drop-down menu and drag to Clipboard to put them aside for later use.
  - d. If you find one article that is exactly what you need, click on the Related Articles link to search for more articles just like it.
  - e. Click the Clipboard tab to retrieve what you set aside with the Send To menu. Choose the appropriate Display and Sort formats from the pull-down menus. To format citations for easy printing, choose the Text or Printer option from the Send To drop-down menu.
- 2. Suppose somebody told you they saw an article in a 2001 issue of BMJ about treating menopause with phytoestrogen. How would you find any letters to the editor in response to that article?
  - a. Go to the Medline database, and click on the Preview/Index tab.
  - b. Select Substance Name as the pull-down search field, then type phytoestrogen, and click the AND button.
  - c. Change the search field to Journal, type BMJ, and click AND again.
  - d. Change the search field to Publication Type, type letter, and click AND again.
  - e. Click Go to execute the search.
- 3. Suppose you want to find articles about human subjects protection, but you aren't quite sure about what your search term should be. You might start by typing in a series of terms or concepts that come to mind, like this:
  - a. Go to the Medline database, type "human subjects", then click Go.
  - b. Type ethics, then click Go.
  - c. Type "review board", then click Go.
  - d. Click on the History tab in order to combine previous search sets as a way of constructing a good search term.
  - e. Type #3 AND #4 to combine two result sets, and repeat the process of combining sets until a good result is obtained.

## **Summary of tips for future reference:**

- 1. Use boolean operators--AND, OR, NOT--to refine your search term. They no longer need to be capitalized. The AND is crucial for narrowing down your results.
- 2. Use \* to truncate terms that could have several different endings. Naturopath\* would retrieve results for naturopath, naturopathic, and naturopathy, for example.
- 3. What if you need help? Click on the Help/FAQ link in the left blue column, and look for the appropriate heading or topic.
- 4. Use complementary therapies as the new MESH term of choice when searching for alternative medicine materials.
- 5. Use quotation marks to designate a phrase that should be searched as a phrase and not as single terms combined with an AND: "human subjects" with quotations will not retrieve the same results as human subjects without them, for example.
- 6. Click on the Related Articles link when you find exactly what you are looking for—you may find more good hits that way.
- 7. If you click on the History link, you can combine previous search sets to refine your results.
- 8. Clicking on Preview/Index gives you access to an advanced search capability—you can choose from a number of searchable fields and click on boolean operators.
- 9. Clicking on Limits is also a good way to refine your search results—you can specify dates, publication type, language, and a subset for complementary medicine.
- 10. When you find a citation that you want to keep, check the box next to it, add it to the Clipboard by choosing Clipboard in the Send To drop-down menu. When you have finished all your searching, you can click on the Clipboard link to retrieve all the items you checked and added.
- 11. Change the Display option to Abstract or Citation if you want to view links to NCNM library full-text and paper journal holdings.