DATABASE SEARCHING STRATEGY

1. Formulate your question / Break topic into components
2. Choose the best database
3. Check for subject terms
4. Select Boolean operators (and; or; not)
5. Run the search & apply limits
6. View results

Sample Research Question in Two Parts

1) What are the adverse effects, risk factors, and ethical issues surrounding childhood immunizations?

   The pieces for this question are:
   - Immunizations
   - adverse effects
   - risk factors
   - ethical issues
   - The patient population is children.

2) Are there studies linking vaccines with autism?

   This question has just three topics:
   - immunizations, autism, children.

TIPS FOR SEARCHING CINAHL

- Review the NS 400 Course Guide tab for CINAHL and Tree / Explode / Subheadings. http://libguides.consortiumlibrary.org/ns400
- Enter one subject/concept in the search box at a time. Each concept is listed as a search statement. Use Boolean operators to combine the concepts logically.
- OR is used to combine synonyms or when either concept will be acceptable. It can be used to combine more than two subjects, as in the example above. OR always broadens a search.
- Check the box to the left of the subject to display available subheadings. Use subheadings wisely.
- Clicking on the subject link will bring up the tree view and show related terms. Exploding a term will search for that term and any terms indented beneath that item.
- While it is often worthwhile to be as focused as possible, when beginning to look through the literature, I often cast a wide net and use the Explode feature routinely.
- Apply limits at the END of the process. Limits are not the critical pieces when searching, they are the refining touch.
- Using Major Concept or adding subheadings are strategies that can reduce the number of retrieved articles. Using too many subheadings or using the Major Concept option can reduce the resulting list of articles to very little or zero.
- Adding limits to a result of zero will return a result of zero.
- Limits can be removed by going to the limits page and unchecking each item.
(NANDA), (Iowa NIC), (Saba HHCC), (Iowa NOC) refer to classification systems. These subjects are **not** useful when searching for peer reviewed, research articles.

- Click **Add to Folder** as the first step in printing, emailing, or exporting citations.
- Use the Ask a Librarian option for help via email.

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**DATABASE SEARCHING – PUBMED / MEDLINE**

PubMed is a free resource developed by the National Center for Biotechnology Information (NCBI) and contains over 23 million citations for biomedical literature from MEDLINE, life science journals, and online books. MEDLINE, developed by the National Library of Medicine, includes indexed article citations from 5,245 medical, nursing, dental, veterinary medicine, the healthcare system, preclinical sciences, and research journals back to the 1940s. General science journals, such as Scientific American and Science send all the citations for each issue to PubMed. Only the biomedical articles are indexed and moved to MEDLINE. All non-indexed articles can be searched using author names, words in the title, and words in the abstract. Find an online tutorial at [http://www.nlm.nih.gov/bsd/disted/pubmedtutorial/](http://www.nlm.nih.gov/bsd/disted/pubmedtutorial/)

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**TIPS FOR SEARCHING PUBMED**

- The Boolean logic is processed from left-to-right. However, concepts inside parentheses will be searched first
- **Author searching.** [http://www.youtube.com/watch?v=ihrEWUMpJaY](http://www.youtube.com/watch?v=ihrEWUMpJaY)
- **Always limit to English and Human.** This database includes a large amount of animal research and foreign language material.
- Additional limits include: age group / gender / language; specific types of articles, e.g., review, or randomized control trial; and journal subsets, e.g., core biomedical, history of medicine, aids.
- All limits will PERSIST UNTIL REMOVED

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**FEATURES OF PUBMED**

- **Related Citations** is used to find similar articles. It is located below each citation and also in the right column when an individual article is displayed. Citations are displayed in rank order, from most to least relevant. Limits do not work to refine a related articles search.
- **Clinical Queries / Systematic Reviews** is an option on the PubMed home page. This feature may be useful when looking for evidence-based articles.
- **Print** using the browser print button. Consider using the Display Settings option to increase the number of items per page.
- Use the **Check Library for Full Text** icon (from the Abstract view). The full text article will appear if available. Otherwise, choose the Request an Interlibrary Loan link.
The Clipboard stores up to 500 marked articles to print, save, or order. Mark items using the box to the left of each article, click on Send to link, choose Clipboard, then click Add to Clipboard. The Clipboard list and your search history will disappear after 8 hours of inactivity. Click on the Clipboard link to view the list of articles.

FEATURES OF PsycINFO
PsycINFO is an interdisciplinary database providing access to international literature in psychology and related disciplines.

Consider using the APA Thesaurus to find subject headings (index terms) and the Search within Results to narrow your results. The purple arrow is pointing to the Export option which is linked to RefWorks.

GOOGLE SCHOLAR
Google Scholar searches specifically for scholarly materials such as journal articles, research reports, dissertations and theses, preprints, technical reports, patents, manuscripts in preparation, working papers and many other document types. When you do a search in Google Scholar, you get a list of citations. You'll get links to the full text if the Consortium Library subscribes to the journal title, if it's from an open access journal, or if the researcher posted the article on her/his website. Things to consider when using Google Scholar:

- You can't easily see what's included in Google Scholar: results will be articles, websites, essays from organizations, even PowerPoint presentations!
- It is difficult to determine with 100% accuracy all that Google Scholar searches. Therefore, we do not know the breadth of what Google Scholar is indexing and consequently cannot judge the comprehensiveness or completeness of the results of a literature search.
- We cannot tell how frequently items in Google Scholar are updated.
- Searching in Google Scholar is imprecise when compared with discipline-specific databases.

TIPS FOR USING GOOGLE SCHOLAR
- Open Google Scholar from the list of databases on the library website to gain access to the full text of articles paid for by library subscriptions and licenses.
- Click on the “Advanced Scholar Search” down arrow on the right side of the search box.
- This option permits more focused searching using “with all of the words”, “with the exact phrase”, “with at least one of the words” or “without the words”
- Use first initials when searching for author names.
- Keep in mind that Google Scholar gathers bibliographical data from text and citations, (including pre-prints, which may include incomplete information).
- Boolean operators (+ or -) are available, but not truncation.

Finally
- Database searching is a skill that can be developed and becomes easier with practice.
• Remember that there are two medical librarians in the Consortium Library ready to help you with your research. Use the Ask-A-Librarian option within the CINAHL database, email, or call us for assistance.