### Searching the Literature Effectively

**May 2013**

<table>
<thead>
<tr>
<th>Try This ...</th>
<th>In PubMed ... <em>(link to PubMed from hsl.uw.edu for best full-text access)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Use Filters</strong></td>
<td>Limit your search by using the Filters on the Results page sidebar. Choose the restrictions for your search, e.g., specific language, article type (e.g., randomized controlled trials, review), ages, date, etc. <strong>Note:</strong> Filters remain in place until you change or remove them. Limits other than language or date will exclude NEW records that are &quot;in process&quot; or &quot;supplied by Publisher.&quot;</td>
</tr>
<tr>
<td><strong>Search by phrase (&quot;&quot;)</strong></td>
<td>Add quotations around words to tell PubMed to find an exact phrase. <strong>Note:</strong> using quotations (&quot;&quot;) turns off automatic term mapping.</td>
</tr>
</tbody>
</table>
| **Search for words in a specific field** | Use the Advanced Search Builder or use the correct field tag in square brackets:  
*Search for words in article titles*
Ex: **a1c[ti] AND diabetes[ti]**  
*Search for an author*
Ex: **Berg AO[au]**  
To see all field tags go to PubMed Help *(www.ncbi.nlm.nih.gov/books/NBK3827/#pubmedhelp.Search_Field_Descr)* |
| **Find Related Citations** | Related articles, citations closely related to the original citation, are available in the Abstract format. These citations are displayed by relevancy and may be reviewed and added to the clipboard, saved or printed. |
| **Use Clinical Queries** | Enter your search terms and evidence-filtered citations will appear under Clinical Study Categories. Systematic Reviews or Medical Genetics. For health services research and other filters see Topic-specific Queries. Find filters on the PubMed home page or under More Resources at the top of the Advanced Search screen. |
| **Construct a search using MeSH terms** | Once you've identified an article that looks relevant, take a look at the article's MeSH terms.  
- In the abstract view, click on the + next to Publication Types, MeSH terms  
- Click on the term to send it to the PubMed search box.  
- You may send additional terms to the PubMed search box (use AND to combine; OR for synonyms).  
- You may add keywords to your search to narrow your results.  
- If you know a MeSH term enter in the search box followed by the field tag in square brackets [mh] MeSH heading; [majr] major MeSH heading  
  Ex: **mass screening[mh] AND cardiovascular diseases[majr]**  
- Use subheadings to further refine search results  
  Ex: **mass screening[mh] AND cardiovascular diseases/diagnosis[majr]** |

---

*MeSH terms, Medical Subject Headings, are assigned to all indexed articles in PubMed; they are a key to finding relevant articles*
PubMed Reminders

- Use of MeSH terms excludes most current (not yet indexed) or unindexed citations.
- Truncation and use of quotations ("") for phrases turns off automatic term mapping.
- Filters remain in place until you change or remove them. Filters other than language or date will exclude NEW records that are "in process" or "supplied by Publisher."
- Save your search using MyNCBI or download search strategy from the Advanced Search/History page
- If the UW does not own the journal, you can follow the link under Get a Copy for obtaining the article at no charge.

Database Selection for Systematic Review Searches

- Default databases to search: PubMed, Embase, and Cochrane Register of Controlled Trials
- For additional specialty databases see HSL Toolkits or contact Sarah or Leilani
- For more information see Develop Search Strategy tab on HSL Systematic Review Guide (libguides.hsl.washington.edu/sr)

Hints for Improving Search Results

No References or Too Few References

- Look for misspellings in your strategy.
- Decrease the number of concepts searched.
- Try a broader search term.
- Use a term from the thesaurus (i.e., MeSH or subject heading list) for searching.
- Use the Related Articles feature.
- Increase the number of synonyms or alternatives for a term.
- Use a truncation symbol at the end of a term to pick up variant endings. The asterisk (*) is the truncation symbol used in PubMed. Example: asthm* will retrieve asthma or asthmatic. Note: using truncation ‘turns off’ automatic mapping which can result in missing MeSH terms.
- Try a different database.

Too Many References

- Choose the most specific subject headings or most significant key words.
- Use subheadings to narrow the focus of the subject heading if appropriate.
- Add additional concepts to your search to narrow focus.
- Make a MeSH term the main/major focus of the article [majr]
- Select specific article types (e.g. randomized controlled trials or reviews) using Filters.
- Limit your search by language, age group, current years, etc. by using Filters.
- Ask for significant words to be in the TITLE of the article.

Other Resources:

- For additional information on searching PubMed see PubMed at the UW libguides.hsl.washington.edu/pubmed
- MyNCBI, individual for PubMed and other Entrez databases libguides.hsl.washington.edu/myncbi
- EndNote Web libguides.hsl.washington.edu/enw
- Information Management Software: libguides.hsl.washington.edu/cat.php?cid=30673
- Family Medicine Systematic Review Workshop (Searching Effectively) libguides.hsl.washington.edu/fmsr

Contact Your Librarian: Sarah Safranek (safranek@uw.edu), Leilani St Anna (lstanna@uw.edu)