



## University of California Berkeley Library

# PubMed QUICK GUIDE

Use this URL to access the UC-customized version of PubMed, with links to UCB-subscribed full text:

<http://uclibs.org/PID/17708>

PubMed contains all of MEDLINE (1966-present), OLDMEDLINE (1946-1965), PubMed in-process records (new citations not yet fully indexed) and some additional non-MEDLINE citations. It is the primary database for researchers in the fields of biochemistry, molecular biology, and related life sciences, containing records for over 20 million articles published in more than 5000 biomedical and biological journals worldwide.

PubMed.gov  
U.S. National Library of Medicine  
National Institutes of Health

Search: PubMed

Limits Advanced search Help

Search Clear

### BASIC SEARCH TECHNIQUES

PubMed searching is easy. Just enter your search terms in the search box and click **Search**. The **Limits** and **Advanced Search** links just above the search box provide access to additional searching options.

#### Keyword Searching

Enter one or more keywords (e.g., *molecular motors*) in the search box and click **Search**. PubMed automatically combines (ANDs) significant terms together using automatic term mapping. Automatic term mapping matches your search terms with MeSH terms (Medical Subject Headings) so you get better search results.

*Example:* A PubMed search for *heart attack* retrieves articles that contain the words *heart attack* in their titles or abstracts. It also retrieves articles that contain the words *myocardial infarction*, the medical term for heart attack, in their titles, abstracts, or MeSH terms.

To search by keyword from the **Advanced Search** screen, use the Search Builder and select **All Fields** from the pulldown menu.

#### Author Searching

Enter the author's last name first, followed by initials, without punctuation (e.g., koshland me). Initials are optional. To search for an author when only the last name is available, qualify the author name with the author search field tag [au], e.g., yang [au].

#### Journal Title Searching

To retrieve articles from a specific journal, enter the full journal title (e.g., Current Biology), or use the MEDLINE title abbreviation (e.g., curr biol) in the search box. Qualify single word journal titles using the **Journal Title** [ta] search field tag.

*Example:* Cell [ta]

In the search box, an author's name or journal title can be combined along with subject terms.

*Examples:* thornier protein kinase  
curr biol protein kinase

If you only know part of the journal title, use the **Journals in NCBI Databases** link. Use the **PubMed search builder** to select and add titles to your search.

### Truncation (Wildcards)

Use an asterisk (\*) to replace zero to many characters at the end of a word.

*Example:* bacter\* retrieves bacteria, bacterium, bacteriophage, etc.

*Important note:* Truncation turns off automatic term mapping and the automatic explosion of a Medical Subject Heading (MeSH) term; for this reason, truncation is not generally recommended.

### Boolean operators

Use **AND**, **OR**, or **NOT** to combine terms or phrases. PubMed processes all Boolean connectors in a left-to-right sequence. Use parentheses to specify the order in which PubMed processes your search terms.

*Example:* common cold AND (vitamin C OR zinc)  
(searches for articles containing "common cold" and *either* "vitamin C" or "zinc.")

Terms inside a set of parentheses are processed as a unit and then incorporated into the overall strategy.

### Limits

Click on the **Limits** link to go to the Limits page. Using Limits, you can restrict your search by date, language, publication type, and many more criteria. Limits remain in effect until you click **Change** or **Remove** on your search results screen; *limits other than language or date will exclude records in process*.

### Related Articles

View the full record for an article (Abstract or Summary view) and click on the **Related Citations** link to retrieve closely related citations, based on shared MeSH (Medical Subject Heading) terms.

### Advanced Search

On the **Advanced Search** screen, you can use the **Search Builder** to specify the exact fields for your search terms (author, affiliation, journal title, etc.). You can also access your **search history** and view and combine past searches. Searches remain in your Search History for up to eight hours.

To find review articles click on the **Review** link under **Filters**.

**Filter your results:**

All (2179)  
**Review (569)**  
Free Full Text (781)

### VIEWING, SAVING, EMAILING AND EXPORTING

Check the boxes to the left of each article title to select specific citations. The selected citations can be **emailed**, **saved** as a text file, **collected in MyNCBI**, or **added to the Clipboard** by selecting the appropriate button under the **Send** to pull-down menu.

After adding items to the Clipboard, click on the **Clipboard** link (top right corner of page) to view your selections. Up to 500 items at once can be stored on the Clipboard. Clipboard items will be lost after eight hours of inactivity.

### Summary display

PubMed's default display on the search results page is the **Summary** format, which includes basic citation information, links to related citations, and PMID (PubMed Unique Identifier). *The Summary display does not show links to full-text content.* Citations can be viewed in 6 other formats. You may select another format and/or show more than 20 citations per page by using the **Display Settings** pull-down menu.

### Finding Full Text and Call Numbers: Abstract display

Click on the title of any article to view it in the **Abstract** format, which shows links to full-text content. This format also shows the article abstract, MeSH terms, citation information, links to related citations, and PMID (PubMed Unique Identifier).

In the Abstract display many records in PubMed include a link to the publisher's website, which *may* take you to the full text. Click the **UC-eLinks** icon for more complete retrieval options: UC-eLinks provides access to the **electronic full text** of the article which UC Berkeley has licensed (when available), checks for a **print copy** in the Melvyl catalog, and allows you to **Request** articles which UC Berkeley does not own.

Off-campus access to many full-text articles is limited to current UCB faculty, staff and students. See [http://www.lib.berkeley.edu/Help/connecting\\_off\\_campus.html](http://www.lib.berkeley.edu/Help/connecting_off_campus.html) for instructions on setting up your computer for off-campus access.

### Exporting to a Citation Manager: MEDLINE display

Under the **Display Settings** dropdown menu, choose the **MEDLINE display** to format your citations for downloading to citation management programs such as RefWorks or EndNote.

### Other displays:

Choose **XML** to see your selected citations in XML markup format. Choose **PMID List** to see a list of all the PMIDs (PubMed Unique Identifier numbers) from your selected citations.

## ADVANCED SEARCHING TECHNIQUES

### Single Citation Matcher

When you have all the citation information for a specific article you want to find in PubMed, use the Single Citation Matcher tool. From the main entry page of PubMed (<http://uclibs.org/PID/17708>), choose **Single Citation Matcher** (under **PubMed Tools**). Enter as much or as little of the citation as you wish; journal titles may be entered in full or as abbreviations.

### Searching using PubMed's Field Tags

Use PubMed's search field tags to refine your search strategy; enter your search term qualified with the appropriate search field tag. A complete list of search field tags is available in PubMed's **online help**, under "Searching PubMed."

*Example:* dna [mh] AND crick [au] AND 1993 [dp]  
(searches for *DNA* as a medical subject heading and *Crick* in author field and publication date of 1993)

### Frequently Used Field Tags:

- Affiliation [AD]
- Author [AU]
- Journal Title Abbreviation [TA]
- MeSH Terms [MH]
- Subset [SB]
  - Complementary and Alternative Medicine: cam [sb]
  - History of Medicine: history [sb]
  - Toxicology: tox [sb]

If you prefer not to use field tags, go to the Advanced Search page and use the Search Builder to specify specific fields for your search terms.

### MeSH [mh] or [majr]

NLM's Medical Subject Headings are a list of biomedical terms which are used to describe the subject of each journal article indexed in MEDLINE. The [majr] tag retrieves all MeSH terms that are marked as being of major importance in an article. Use either search field tag to search.

*Example:* asthma [majr] AND child [mh] AND english [la]

*Note:* Searching with MeSH terms will exclude "records in process" citations, as they have not yet been indexed with MeSH.

### Explode feature

MeSH terms are automatically exploded by PubMed; that is, all terms which are logical subsets of the term entered are also included. For instance, *vision disorders* includes *blindness*. If you want to turn off the automatic explosion, enter the MeSH term and qualify it with [mh:noexp].

### MeSH Database

Another approach to advanced searching: look up official MeSH terms to view hierarchical relationships to other subject headings and subheadings, and incorporate them in your PubMed search. Access the MeSH database from the **Resources** pull-down menu in the top left corner of your screen: Resources > Literature > MeSH database.