



PubMed QUICK GUIDE

Use this URL to access UCB holdings and special services within PubMed for UCB faculty, staff and students

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

PubMed contains all of MEDLINE (1966-present), Old Medline (1950-1965), PubMed in-process records (new citations not yet fully indexed) and some additional non-MEDLINE citations.

The screenshot shows the PubMed search interface. At the top, there are navigation tabs: All Databases, PubMed, Nucleotide, Protein, Genome, Structure, OMIM, PMC, Journals, and Books. Below the tabs is a search bar with the text "Search PubMed" and a dropdown arrow. To the right of the search bar is a "for" label and a text input field. Further right are "Go" and "Clear" buttons. Below the search bar are several buttons: Limits, Preview/Index, History, Clipboard, and Details.

BASIC SEARCH TECHNIQUES

PubMed searching is easy. Just enter search terms in the query box, and press **Enter** or click **Go**. The Tabs directly beneath the query box provide access to additional search options. The PubMed query box and Tabs are available from every screen, so you don't need to return to the homepage to enter a new search.

Author Searching:

Enter the author's name in the format of last name first followed by initials (e.g., koshland me). Initials are optional. However, to search for an author in the author field when only the last name is available it's best to qualify the author name with the author search field tag [au], e.g., yang [au].

Subject Searching:

Enter one or more subject terms (e.g., molecular motors) in the query box and click **Go**. PubMed automatically combines (ANDs) significant terms together using automatic term mapping. If PubMed finds a phrase it automatically searches the terms as a phrase rather than simply combining them. If you enter molecular motors in the query box, PubMed searches "molecular motors" as a phrase. If you do not want this, enter each term separated by AND (use uppercase), e.g., molecular AND motors.

Journal Searching:

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

Example: Cell [ta] PubMed will search unqualified single journal titles in All Fields.

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

Examples: thorner protein kinase
curr biol protein kinase

If you only know part of the journal title, use the **Journals Database** located in the left hand menu. Enter the title words, and click **Go**. Use **Links** on the far right side to search the complete journal title in PubMed.

Truncation:

Use an asterisk (*) at the end of a search term.

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

Truncation turns off automatic term mapping and the automatic explosion of a Medical Subject Heading (MeSH) term.

Boolean operators:

Use these to combine terms or phrases. AND, OR, and NOT must be entered in UPPERCASE. PubMed processes all Boolean connectors in a left-to-right sequence. To change the order in which search statements are processed, enclose a concept in parentheses.

Example: common cold AND (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** tab to go to the Limits page. You can restrict the search to English language or Entrez date (the date when a citation was added to the PubMed system). **Limits remain in effect until you remove the check on the Limits tab.** Limits other than language or date will exclude "records in process."

History:

The **History** tab holds all your search strategies and results. Combine searches or add additional terms to an existing search by using the pound sign (#) before the search number.

Example: #2 AND (#6 OR #3) AND microarray

Clipboard:

Clipboard is a place to collect selected citations from one search or several searches. Citations are added to the clipboard by selecting **Clipboard** from the "Send to" pulldown menu. Once you have added items to the Clipboard, you can click on the **Clipboard** tab to view your selections. Within the Clipboard you can **Sort** results by author, journal title, or publication date.

Click on the Review tab to see review articles.

The image shows a search results toolbar with the following elements: a 'Display' dropdown menu set to 'Summary', a 'Show' dropdown menu set to '20', a 'Sort by' dropdown menu, a 'Send to' dropdown menu, a status bar showing 'All: 91' and 'Review: 5' with a close button.

VIEWING, PRINTING, EMAILING AND SAVING

PubMed's default display is the **Summary** format. Citations can be viewed in 5 other formats. You may select another format and/or show more than 20 citations per page by using the pull-down menus on the action bar. Then click **Display**.

Brief format:

Author, 1st 30 characters of the title, and PubMed Unique Identifier.

Summary format:

Authors, Title, Journal Source, record status for in-process or publisher-supplied citations, non-English article indication, Publication Type for review or retracted publication, "No abstract available" notation, and PubMed and MEDLINE Unique Identifiers.

AbstractPlus Format:

Journal Citation, Title, Authors, Affiliation/Address, Abstract, Related Articles, and Full Text Links.

Citation format:

Journal Citation, Title, Authors, Affiliation/Address, Abstract and Full Text Links plus Medical Subject Headings


MEDLINE format:

Includes all fields formatted for downloading to reference management programs such as **EndNote**.

Click on the author name of an individual citation to display the AbstractPlus format. Click on the boxes to the left of each author name to select specific citations. The checked citations can be **emailed**, **saved** as a text file, **displayed** in a different format, **displayed as plain text** without the sidebar menu and toolbars, or **added to the Clipboard** by clicking on the appropriate button on the action bar.

FINDING FULL TEXT AND CALL NUMBERS

Links to Full-Text documents

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

ADVANCED SEARCHING TECHNIQUES

Searching using PubMed's Field Tags

Use PubMed's search field tags to refine your search strategy. Enter the specific term qualified with the appropriate search field tag. Below is a list of the more frequently used PubMed search field tags with examples of how to use them. 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)

Common Field Tags:

Affiliation [AD]	Subset [SB]
Author [AU]	AIDS = aids [sb]
Journal Title Abbreviation [TA]	Bioethics = bioethics [sb]
Language [LA]	Complementary and Alternative Medicine = cam [sb]
MeSH Terms [MH]	History of Medicine = history [sb]
Personal Name as Subject [PS]	Toxicology = tox [sb]
Publication Date [DP]	Text Words [TW]
Publication Type [PT]	Title Words [TI]

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 "MEDLINE record 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*.

MeSH terms found using the "All Fields" search, however, are NOT exploded. 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.