**NCBI** <https://www.ncbi.nlm.nih.gov/search> - **NCBI** (*National Center for Biotechnology Information*) databases

**PubMed** <https://pubmed.ncbi.nlm.nih.gov/> ["New" PubMed, since May 2020] - [Course](http://apollo11.isto.unibo.it/summa/en/bibliography/Index.htm)

The main part of PubMed (database developed by the *National Library of Medicine - NLM*) consists of MEDLINE, a bibliographic database that covers Medicine, Nursing, Dentistry, Veterinary, Health and Biomedical Sciences. It derives from the indexing of ~[5,300 journals](https://www.ncbi.nlm.nih.gov/nlmcatalog/?term=currentlyindexed), and contains ~39.1 million citations up to November 1, 2025 (1947-September 2027), plus another around 0.46 million from the period 1781-1946.

Citations may include links to full-text content from PubMed Central and publisher web sites.



[MeSH: Medical Subject Headings](https://www.ncbi.nlm.nih.gov/mesh/) Database (vocabulary thesaurus used for indexing articles for PubMed). Different "Entry Terms" are related to the same topic via the MeSH Term (e.g.: ascorbic acid, vitamin C). MeSH terms are arranged hierarchically by subject categories with more specific terms arranged beneath broader terms.

**PubMed - General search**

 Enter the terms (in english). Author: Brown J Truncation (root of the word): mutat\* Quoted expression: "in vitro culture"

**History and Search Details** [In **Advanced**] The Advanced Search page keeps track of the previous searches ("**History and Search Details**") and allows complex queries. "**Search details**" displays the query translation following its mapping with the "MeSH Terms".

 My NCBI (free personal account at NCBI) retains user information and database preferences to provide customized services for many NCBI databases. E.g: Save searches & automatic e-mail alerts.

**-------------------------**

**Search results** page - functions on the right bar:

Similar articles PubMed entries whose word content is most similar to the one of the considered record.

Associated data Database entries containing data associated with the considered article.

Related information Database entries containing information related to the considered article.

Using the Menu:  (below the "Search" bar) it is possible to change the way Results are displayed:

visualization format (Format), sorting order of the displayed records (Sort by), number of shown items per page (Per page).

Using the buttons:  (below the "Search" bar) has options for saving Results (Save), sending them to an e-mail address (Email), to saving them in your own account or adding them to the Clipboard (Send to).

Clipboard A temporary place on the NCBI website where records of interest can be saved, providing automated removal of duplicated records.

**PubMed - Advanced search**

**1. Filters area** on the left-hand column of the PubMed Result page. Filters may restrict Results to certain types of records by:

TEXT AVAILABILITY ARTICLE TYPE

PUBLICATION DATE SPECIES SEX

LANGUAGE AGE

**2. Field Tags** (in the main "Search" bar)

Restricted searches may be entered manually by following the term with the name of a specific field in square brackets “[ ]”

[ALL]=all fields **[**AU**]**=Authors **[**1AU**]** **[**LASTAU**]** **[**FAU**]**=Full Author name (since 2002) **[**TI**]**=Title

**[**JOUR**]**=Journal **[**TIAB**]**=Title or Abstract **[**TW**]**=text word

**[**PT**]**=Publication type E.g.: Retracted Publication [PT]

**[**PDAT**]**=Publication Date - E.g. 2010:2020 [PDAT] **[**LA**]**=Language **[**AD**]**=First Author's headquarters **[**MeSH**]**=MesH Terms **[**SH**]**=Subheading (an aspect of the MeSH term)

**Boolean operators: AND** ("and also", finds documents that contain terms on both sides of the operator terms, the intersection of both searches), **OR (**"or also"**,** finds documents that contain either term, the union of both searches), **NOT** ("but not", finds documents that contain the term on the left but not the term on the right of the operator, the subtraction of the right hand search from the one on the left).

PubMed processes all Boolean operators in a left-to-right sequence. Enclosing individual concepts in parentheses changes this priority. The terms inside the parentheses are processed first as a unit and then incorporated into the overall strategy.

**PubMed Find / Explore - Special searches**

[Clinical Queries](http://www.ncbi.nlm.nih.gov/pubmed/clinical/) Results of searches on this page are limited to specific **clinical research** areas.

[MesH Database](https://www.ncbi.nlm.nih.gov/mesh/) appendicitis/complications [MeSH Terms] (“has a complication”: perforation)

appendicitis/etiology [MeSH Terms] (“has an etiology”: schistosomiasis)

**Books** <https://www.ncbi.nlm.nih.gov/books>

Books database provides free **online access to books** and documents in life science and healthcare.

**OMIM** <https://www.ncbi.nlm.nih.gov/omim>

A comprehensive, authoritative compendium of human genes and genetic phenotypes that is freely available and updated regularly.

**Gene** <https://www.ncbi.nlm.nih.gov/omim>

Gene integrates information from a wide range of species. A record may include nomenclature, Reference Sequences (RefSeqs), maps, pathways, variations, phenotypes, and links to genome-, phenotype-, and locus-specific resources worldwide.