NCBI	http://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]

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 ~ 5,200 journals, and contains ~ 31.4 million citations (1947-November 2020), plus another around 0.38 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 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

Search	Enter the terms (in english). <u>Author:</u> Brown J <u>Truncation</u> (root of the word): mutat* <u>Quoted expression:</u> "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".
Log in	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: Sorted by: Publication date ↓≟   Display options ● (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: Save Email Send to (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   Results of searches on this page are limited to specific **clinical research** areas.

MesH Database   appendicitis/complications   [MeSH Terms]   ("has a complication": perforation)
                        appendicitis/etiology   [MeSH Terms]   ("has an etiology": schistosomiasis)

Books	http://www.ncbi.nlm.nih.gov/books

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

OMIM	http://www.ncbi.nlm.nih.gov/omim

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

Gene	http://www.ncbi.nlm.nih.gov/gene

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.