

# HANDS ON TRAINING ON THE USE OF PUBMED

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**FOUAD JABRI**

**ALFAISAL COLLEGE OF MEDICINE**

**(REFERENCE: [HTTP://WWW.NLM.NIH.GOV/BSD/DISTED/PUBMEDTUTORIAL/](http://www.nlm.nih.gov/bsd/disted/pubmedtutorial/))**

# OVERVIEW

- **National Library of Medicine (NLM®)**
  - Indexing the biomedical literature since 1879, to help provide health professionals access to information necessary for research, health care, and education
- **Index Medicus**
  - Printed index to articles
  - Became a database (MEDLINE)
- **MEDLINE**
  - Journal citations
  - Abstracts for biomedical literature
- **PubMed**
  - 1996, free access to the public

# OVERVIEW (CONT.)

- **What is PubMed?**
  - Web-based retrieval system
  - Developed by the National Center for Biotechnology Information (NCBI) at the NLM
  - Database of bibliographic information drawn primarily from the life sciences literature
  - Contains links to full-text articles and libraries
  - Provides access to MEDLINE
    - Citations and author abstracts from more than 5500 biomedical journals
    - Over 19 million references dating back to 1946

# OVERVIEW (CONT.)

- **One MEDLINE citation represents one journal article**
  - Title of the journal article
  - Names of the Authors
  - Abstract published with the article
  - Controlled Vocabulary search terms (Medical Subject Headings)
  - Journal Source Information
  - First Author Affiliation
  - Language in which the article was published
  - Publication Type (description of the type of article, e.g., Review, Letter, etc.)
- **Each citation has a PMID and a status tag**
  - [PubMed - as supplied by publisher]
  - [PubMed - in process]
  - [PubMed - indexed for MEDLINE] (Medical Subject Headings)
  - [PubMed]

# PUBMED'S HOME PAGE

NCBI Resources ▾ How To ▾ My NCBI Sign In

PubMed.gov  
US National Library of Medicine  
National Institutes of Health

PubMed  Search

Limits Advanced Help

Database selection menu

Search box

Limits

Link to the Advanced Search

Link to Limits

## PubMed

PubMed comprises more than 21 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites.


### Using PubMed

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[Full Text Articles](#)

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### PubMed Tools

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[Journals in NCBI Databases](#)

[Clinical Trials](#)

[E-Utilities](#)

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# UNDERSTANDING THE VOCABULARY

- **MEDLINE & Controlled Vocabulary**
- **The Medical Subject Headings (MeSH) (NOT *author-supplied keywords*)**
  - Indexing journal articles
- **The MeSH Tree Structure**
  1. Anatomy
  2. Organisms
  3. Diseases
  4. Chemical and Drugs
  5. Analytical, Diagnostic and Therapeutic Techniques and Equipment
  6. Psychiatry and Psychology
  7. Biological Sciences
  8. Natural Sciences
  9. Anthropology, Education, Sociology and Social Phenomena
  10. Technology, Industry, Agriculture
  11. Humanities
  12. Information Science
  13. Named Groups
  14. Health Care
  15. Publication Characteristics
  16. Geographic Locations

# BUILDING THE SEARCH

1. **Developing a search strategy** (plan that helps you look for the information)
  - A. Identify the key concepts
  - B. Determine alternative terms for these concepts
  - C. Refine your search to dates, study groups, etc., as appropriate

# LIMITS

<http://www.ncbi.nlm.nih.gov/pubmed/>

Multiple selections are allowed

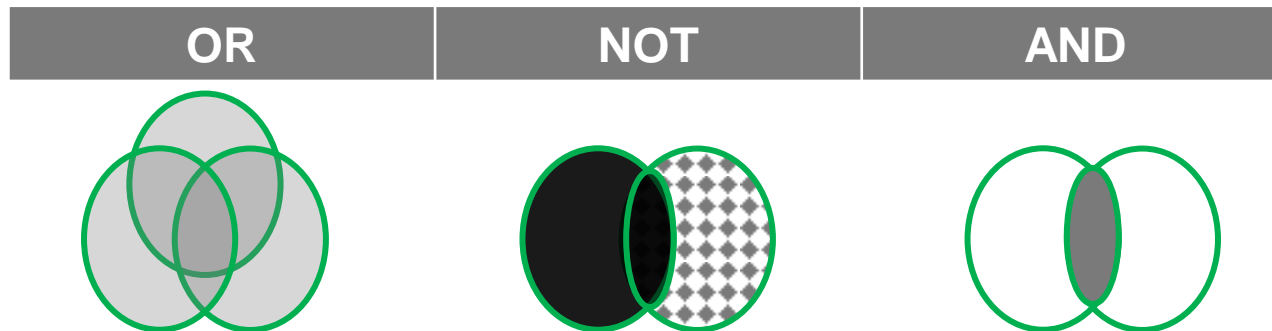
Change & Remove

- **Dates:**
  - Published in the Last OR Specify a date range
- **Type of Article (Publication Type)**
- **Languages**
- **Species**
- **Sex**
- **Subsets**
- **Ages**
- **Text Options**
- **Search Field Tags**
  - Guidelines for mumps in 6 to 12 year-old patients



# BOOLEAN LOGIC

- The logical relationships among search terms
- AND, OR, NOT
- In uppercase letters



- Example:
  - Salmonella and hamburger search result
  - Vitamin C or Zinc in common cold

# MESH DATABASE

- Build a search strategy within the MeSH database for citations about the
  - Chewing
  - **diagnosis** of bursitis in the **knee joint**
  - statistics and/or prevention and control of measles outbreaks **in children**
  - economics of community-acquired pneumonia