

Bioinformática



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Advanced PubMed Searching

Prof. Giovanni Rubert Librelotto, PhD

By the end of this session, you will be able to:

- ▶ Construct a searchable question
- ▶ Understand how to use MeSH headings and why it is useful to do so
- ▶ Minimize “false hits” and save time
- ▶ Identify other useful—but frequently overlooked—features of the PubMed database.

Identify your puzzle pieces

- ▶ Write down what you want to find!
- ▶ Underline the key concepts
- ▶ Consider how best to combine and refine the concepts



Identify Key Concepts

Is it risky for pregnant women to take antidepressants?

Risky – (Synonyms) Harm, adverse effects

Anti-depressants – Name of drug or drug(s)?

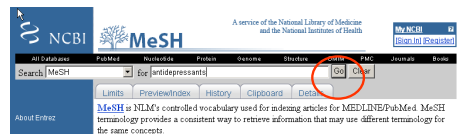
MeSH Database

- ▶ Search one concept at a time.
- ▶ Identify correct subject headings
- ▶ Select appropriate subheadings



Using MeSH

- ▶ Enter first concept and click Go



Antidepressive Agents

Mood-elevating drugs used primarily in the treatment of affective disorders and related conditions. Several MONOAMINE OXIDASE INHIBITORS are useful as antidepressants. Their appearance is a long-term consequence of their modulation of catecholamine levels. The typical compounds useful as antidepressive agents (ANTIDEPRESSIVE AGENTS, TRICYCLIC) also appear to act through brain catecholamine systems. A third group (ANTIDEPRESSIVE AGENTS, SECOND-GENERATION) is a diverse group of drugs including some that act specifically on serotonergic systems.

Year introduced: 1966

☒ administration and dosage ☐ adverse effects ☐ analysis ☐ antagonists and inhibitors
☐ blood ☐ cerebrospinal fluid ☐ chemical synthesis ☐ chemistry ☐ classification
☐ contraindications ☐ diagnostic use ☐ economics ☐ history ☐ immunology ☐ isolation
and purification ☐ metabolism ☐ pharmacokinetics ☐ pharmacology ☐ physiology
☐ poisoning ☐ standards ☐ supply and distribution ☐ therapeutic use ☐ therapy ☐ toxicity
☐ urine

Subheadings: This list includes those paired at least once with this heading in MEDLINE and may not reflect current rules for allowable combinations.

[illegible]

The screenshot shows the MeSH (Medical Subject Headings) browser interface. The 'Anxiety Disorders' term is selected in the hierarchy. A context menu is open over the term, showing options like 'Find', 'Print', 'Clipboard', and 'Search Box with AND'. The 'Search Box with AND' option is highlighted with a red circle. The interface includes a search bar at the top, a navigation pane on the left, and a main content area displaying the selected term and its definition.

[illegible]

PubMed Boolean Operators

AND

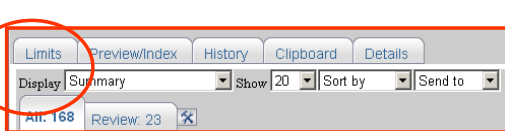
NOT

OR

Available PubMed Limiters

- ▶ Publication Date
- ▶ Author
- ▶ Language
- ▶ Gender
- ▶ Literature Type
- ▶ Age
- ▶ Journal
- ▶ Journal Subset

Limiting a search



Limiting a search

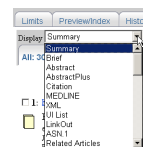


Results Formats

Summary	Abstract
Basic Bibliographic Citation (default)	Includes abstract if available
Brief	Citation
First author, first few words, PMID	Citation, Abstract & Subject Headings

Changing Results Format

- ▶ Pull down menu on display bar
- ▶ Select desired format
- ▶ Change occurs automatically

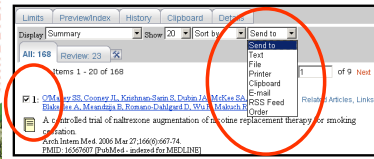


Clipboard

- ▶ Holds up to 500 citations
- ▶ Retains search for 8 hours (from IP address)
- ▶ Several searches – one print job!



Using Clipboard



Send to
Clipboard

View Clipboard



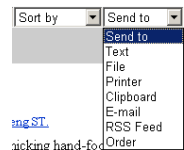
Viewing Clipboard

Note that added citation numbers turn green



Working with Results

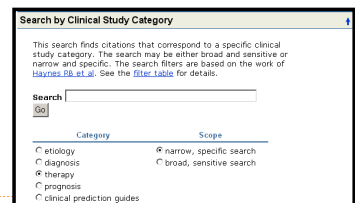
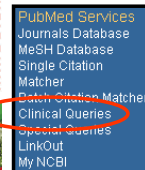
- ▶ Save
- ▶ Email
- ▶ Text



Clinical Queries

- ▶ Execute search with pre-established filters
- ▶ Filters designed to isolate good quality information
- ▶ Type all concepts in search box; include synonyms
- ▶ If nothing, do regular PubMed search

Clinical Queries



- ▶ Clinical Study Category
- ▶ Systematic Reviews
- ▶ Medical Genetics



- PubMed Services
- Journals Database
- MeSH Database
- Single Citation
- Matcher
- Batch Citation Matcher
- Clinical Queries
- Special Queries
- Linkout
- MyNCBI

Journal:

Date: / / (month and day are optional)

Volume: Issue: First page:

Author name (see [help](#)):

☐ Only as first author ☐ Only as last author

Title words:



- ▶ Single Citation Matcher
- ▶ NLM Gateway
- ▶ PubMedCentral
- ▶ MedlinePlus – News
- ▶ NCBI Bookshelf



- ▶ One-Stop research shopping
- ▶ Enter term or terms and click Search button



- ▶ Full-text resources—many quite current





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- ▶ Latest health news headlines
- ▶ Good for “back-tracking” from patient questions

NCBI Bookshelf

- Free full-text books on several topics



PubMed FAQs

- Why am I not finding anything on this new drug?
- I do fine with keyword inquiries—why should I take the time to use MeSH?
- I'm used to using OVID or some other database—why should I learn to use PubMed?
- Can I save this search?
- How does PubMed differ from OVID?

Why am I not finding this new drug?

- It may be too new to have been assigned a heading.
- Try searching the term WITHOUT using MeSH

I do fine with keyword searching; why bother learning to use MeSH?

- Relevance vs. "refuse"
- Maximizes search time
- Minimizes "false hits"



Can I save this search?

- Search strategies can be saved with My NCBI
- Free registration
- Email notification available for new search results

I'm used to using another database; why bother with PubMed?

- It's available from any computer with an Internet connection.
- Good quality information
- Free full-text is often available
- Frequently updated

WETRAAD EM NANOCIÊNCIAS

How Does Ovid differ from PubMed?

	PubMed	Ovid
MeSH Mapping	Yes	Yes
Citation Matching	Yes	Yes
Clipboard Feature	Yes	No
Links to similar articles	Yes	Yes
Citations by email	Yes	Yes
# of Available Lit. Databases	2	Several
Availability outside of Library?	Anywhere	Must be UNC or ADL

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Prof. Giovani Rubert Librelotto, PhD