EMBASE

Brown Bag Workshops 2013
USU Learning Resource Center
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**Who can I contact for Help?**

Contact the LRC via email: lrc.ref@usuhs.edu or phone: 301-319-4039.

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What is EMBASE?

EMBASE, a database owned by the Elsevier Corporation, is available through the LRC Electronic Resources (ER) Portal. It contains over 25 million records for biomedical literature from over 7,600 journals from 1947 to present. Includes all of MEDLINE with an additional 5 million records and 2,000 journals not covered by MEDLINE. In addition, EMBASE includes more than 800,000 conference abstracts from more than 2,500 conferences. Over 300,000 new conference abstracts are indexed and added each year.

EMBASE highlights:

- An excellent resource for researchers looking for articles with an international focus.
- The drug and disease search tools offer specialized features specific to this type of searching, e.g., adverse drug reaction or drug combination.
- Like MEDLINE’s MeSH vocabulary, EMBASE uses the Emtree controlled vocabulary to index their articles.

Source: EMBASE: Tips and Tricks for trainers – 27 Feb 2013

http://www.embase.com/info/what-is-embase/coverage
Accessing EMBASE

EMBASE is available via the LRC’s Electronic Resources (ER) portal: http://er.lrc.usuhs.edu, (Fig. 1).

- Enter embase in the search box and click Search. Click on EMBASE from the display listing. Select resources beginning with “E” and click EMBASE.
- Alternatively, under Navigation, click Browse by Category and then Indexes/Databases

Quick Search

Quick Search is the default search page (Fig. 2). Enter keywords or phrases in the search box and click Search.

- The autocomplete feature displays suggested matches to terms, phrases and Emtree terms.
- All Years is the default. Uncheck this box to enter your desired date range.
Search Tips

Extensive Search

• This feature automatically searches for the preferred Emtree terms associated with each entered term to produce a more accurate and comprehensive set of results. Click on the check box to turn off this feature.

Boolean Operators (AND, OR, NOT)

• EMBASE automatically combines terms using AND. Use the Boolean operators of AND, OR, and NOT to have EMBASE search the terms as you want, e.g., army OR navy OR marines OR ‘air force’.

Proximity Searching

Use proximity operators to search for words or phrases at any specified distance from each other.

• NEAR/n: Searches for terms which are ‘n’ words of each other, in either direction, e.g., medical near/2 school retrieves: medical and dental school as well as nursing school and medical students.

• NEXT/n: Searches for terms which are within ‘n’ words of each other in the order specified, e.g., hip next/3 prosthesis retrieves hip or knee prosthesis, hip resurfacing, prosthesis failure, etc.

• The larger the number, e.g., near/5 or next/5, the larger the number of results, which can reduce the relevance of your retrieval.

Phrase Searching

• To force EMBASE to search for your terms as a phrase, enter them in single quotes or double quotes, e.g., “heart attack” or ‘knee replacement’.

Wildcards

• Asterisk (*): Use to stand in for a variable number of characters. For example, cancer* would retrieve cancer, cancerous or cancers.

• Question Mark (?): Use to stand in for one variable character. For example, wom?n retrieves woman or women; and catheter? retrieves catheter or catheters.

Note: Phrase searching and wildcard searching cannot be combined.
Viewing and Working with Results

Search Results

When your search results are returned, you will see the number of records retrieved at the top of the page in the **Session Results** section (Fig. 3). You may use the **Session Results** to jump between the results of different searches, e.g., #1 or #2.

- Each record indicates which database it is from (EMBASE and/or MEDLINE), the abstract, index terms, and full text if available. Click **View Full Text, Abstract** or **Index Terms** to view the desired section.

  ➞ Click on these links a second time to collapse (hide).

  **Note:** If the EMBASE link does not connect to the full-text, search LRC’s ER for the journal title before you order the article through inter-library loan.

- To view the **full record**, click on the title (Fig. 4). It will display the abstract, author information, index terms, and drug terms (if the article has pharmaceutical topics).

- The **Cited by** link (will appear next to title on the Results Page or under additional information in the Full Record display) shows how many times an article has been cited in the SCOPUS database (a larger bio-science database owned by EMBASE's parent company).
Filters

Filters allow you to manage or refine your search results (Fig. 5). Each limit indicates how many articles remain in the search results once the filter is applied. For additional limits, such as age, gender and language, see Advanced Limits, p. 9.

- **Active limits** display at the top of the limits sidebar.
  - Filters need to be refreshed before the changes affect your results.
  - To remove a limit click the red X next to the limit.
- **Drug** and **Disease** filters display the drug or disease index terms applied. Click more to see all.
- **Study Type** allows you to select human-only studies, clinical studies, controlled studies, case reports, etc.
- **Publication Type** allows you to refine by specific type of article.
- **Publication Year** lets you select specific year(s) or date range.

Display Options & Managing Results

The options below allow you to control how your search results are displayed (Fig. 6).

- **Sort by** allows you to arrange results by publication date, EMBASE’s “Relevance” ranking, or the date the article was entered into EMBASE.
- The **Selected** option allows you to use the check box to select specific citations. Or you may select the first: 100, 500, 5000, or 10000.
  - Once you have selected items, use the View, Print, Export, Email, Order or Add to Clipboard links to manage the results.
  - Use Export to save selected citations to a program like EndNote.
  - Use Email to send a message to yourself or collaborators.
  - To save selected citations temporarily, use Add to Clipboard to put the citations in the temporary folder. Once you are done, you can view your Clipboard to print, email, order or export.
Session Results (search history)

The session results area provides a record of searches conducted during a single session (Fig. 7). Each search is identified with a search number (#1) and displays the search terms used and search results.

![Session Results](image)

**Figure 7:** Session Results area displays above search results.

- For each search you can view the results, edit search terms or limits, or set up e-mail or RSS alerts. For more information on alerts, see the LRC’s Research Guide, *Creating Saved Searches & Alerts*.

- Click **Collapse/Expand** to hide/show this section.

- Use the checkboxes to **Save**, **Delete**, **Print**, **Export** or **EMAIL** search strategies shown. To **Save**, you must have an EMBASE account.

- Also use the checkboxes to **Combine** searches using AND or OR, e.g., #1 or #2. Use the **Advanced** option (Fig. 8) to manually enter search numbers and combine using parentheses along with the Boolean operators AND, OR, and NOT.

![Session Results](image)

**Figure 8:** Combining searches using the Advanced button.

- Highlight a search, to expand search and retrieval options, e.g., view results, edit, copy to Advance Search or set up an email alert (Fig. 9).

![Session Results](image)

**Figure 9:** Session Results (your search history)
Advanced Searching

The EMBASE Quick Search provides fast access to results but uses automated term mapping along with keywords for less precise results. For more precise results, Advanced Search features include Emtree headings, drug searching, and disease searching.

Figure 10: Advanced Search screen

Quick Limits

Quick Limits, like filters, allow you to narrow your search results to match certain criteria, e.g., Only in English (Fig. 10).

Advanced Limits

The Advanced Limits area offers many more options for narrowing or refining your search results. Use the expand all/close all to see all options at once.

- The Evidence Based Medicine filter allows you to search for only Controlled Clinical Trials, Cochrane Reviews, or Randomized Controlled Trials.
- Other types of Advanced Limits include Publication Types, Areas of Focus, Article Languages, Gender, Age Groups, and Animal Study Types.
- To access limits, you may either use the “Advanced Search” feature or select Edit from the Actions column of the search results in the Sessions Results area.
EMTREE

EMBASE’s Emtree headings work the same way PubMed’s MeSH work: by using a controlled vocabulary to provide a way to retrieve citations on topics that may have inconsistent descriptive terminology. The link to the Emtree headings can be found at the top of the search (Fig. 11).

- To search Emtree enter a single topic in the Find Term box and run the search. The database will return the best matches for the term entered as well as their position in relation to other Emtree terms.

- Click on the desired term to view in the EMTREE hierarchical structure (Fig. 12). You may remain with the suggested entry or select a broader or narrower term.

- The Full Display shows the term’s history, synonyms, CAS Registry Numbers (with links to PubChem), and definition from Dorland’s Dictionary when applicable.

- Keep the Explosion box checked unless you’d prefer to exclude terms appearing below it on the hierarchy. Also, use the as major focus box to have term be a core concept.

Figure 11: EMTREE browser

Figure 12: EMTREE Term view
• Use the **Add to Query Builder** button to combine several terms and build a search strategy before searching EMBASE.

⇒ To add subheadings to a term, such as route of delivery, treatment options, and disease aspects, take the term to the [Disease Search](#) or [Drug Search](#) instead of directly to the Query Builder.

• When you have finished adding terms to the Query Builder, click **Search** to retrieve EMBASE articles on your topic (Fig. 13).

![Query Builder](#)

Figure 13: Query Builder

• In addition to using **Find Term** to search concepts, you may browse Emtree terms. To do this, click on the **Browse by Facet** tab in the Emtree Query Builder, 14 major categories will appear (Fig. 14).

• Follow the links to “drill down” the Emtree hierarchy to find a term or a group of terms. Add terms using the Query builder and combine with the Boolean operators AND, OR, and NOT.

![Browse by Facet](#)

Figure 14: Browse by Facet displays Emtree’s major categories

**Drug Search**

EMBASE’s Drug Search feature makes it an exceptional database for researchers interested in pharmaceuticals. This feature includes the option to select from 17 specialized Drug Subheadings and 47 Routes of Administration. The more routine limits such as language, age group, gender, and animal study type are also available.

• To access, click **Drug Search** from the Search tab. You may search for drugs by keyword or use the preferred term indicated by Emtree (Fig. 15).
⇒ Clicking **Search** will return articles matching the specified search criteria. Results created in the Drug Search menu may be combined with results generated earlier in the search session.

![Figure 15: Drug Search screen](image)

**Disease Search**

The **Disease Search** form allows you to select subheadings that define the aspects of a disease or condition you are interested in. Chose from a comprehensive listing of Disease Subheadings such as: Complication, Congenital disorder, Diagnosis, Drug resistance, Prevention, Rehabilitation, and Side effect. The more routine limits such as language, age group, gender, and animal study type are also available.

- **To access, click Disease Search** from the Search tab.
  
⇒ Once you are finished assembling your search, click **Search** to return articles matching the specified search criteria. Results created in the Disease Search menu may be combined with results generated earlier in the search session using the Search History section.

![Figure 16: Disease Search screen](image)