Medline is an electronic database which indexes articles in medical, dental and biomedical journals. Its coverage includes approximately 5600 international journals. Medline indexes articles published since 1946 and is updated monthly.

Embase is an electronic database which indexes approximately 6100 journals from 90 countries. It is European in origin, indexes articles published since 1974 and is updated monthly. The subject coverage on Embase is particularly strong in the areas of drugs and toxicology.

The aim of this workbook is to help you to find references on Medline and Embase. After working through this sheet you should be able to:

- Sign on to Embase and Medline
- Search by keyword, subject, author and journal
- Display references in different formats
- Combine and limit searches
- Select and email references
- Find full-text journal articles
- Check availability of references

Always read these notes and the screen carefully as you work through the exercises.

Comments and Queries

If you have any queries following the workshop, or any suggestions for how it could be improved please contact the Medical Sciences Liaison Team, on ext 87722 or email medliaison@ncl.ac.uk.
Exercise 1  Access Medline via the Ovid interface

Objective: to sign into Medline
Notes: Medline is available via the internet from the University Library homepage

1.1 To login to Medline

Go to the University Library homepage at:

http://www.ncl.ac.uk/library/

Click on Databases, e-journals, e-books in the Subject support box on the left hand side of the page

Choose Medline from the databases listed.

Choose accessing the database ‘on campus connection’

Select the Medline database which covers 1996 to present, e.g. Medline (R) without Revisions 1996 to Week (latest date) 2018 by clicking on in the box to the left and click on OK.
Exercise 2  Searching Medline

Objective: to carry out a simple search on Medline and look at the references you find
Notes: this database contains predominantly references to journal articles

What information has been published about the gastrointestinal tract in the last few years?

2.1 Search

Click in the search box to begin.

Type the words gastrointestinal tract then click on Search

Medline matches (maps) this term to its list of subject headings

Click on Gastrointestinal Tract

Medline now shows you the tree structure of the subject index, with broader and narrower terms. We want articles on all aspects of the gastrointestinal tract so we want to include all the narrower terms in our search. Medline calls this exploding

2.2 Exploding a search term

Ensure that there is a tick in the box next to Gastrointestinal Tract and also tick in the box to the right, under the Explode heading

Now click on Continue

Next you are offered a list of subheadings to add to, or qualify, your search. You can add the ones you want by clicking in the appropriate boxes.

We want all references, so click the box next to Include All Subheadings, then Continue
The search will now be completed. You are returned to the original search screen and the results of your first search appear in the Search History window.

Medline uses a shorthand in the Search History box to show you how you performed this search. The exp shows that you exploded the term, and the / at the end shows you included all subheadings.

2.3 Display the results of your search

We will look at the first few references

Scroll down to see the results of your last search

The first 100 references are displayed

This is how the references are displayed:

Author(s). Title of article/editorial/letter. Journal title. Volume (Part):page no.s, Year, Month.

Scroll back up to the top of the page.
Exercise 3  Focusing your search term

Objective: to find articles where your topic is a key element
Notes: Subject headings can be major or minor - Focus restricts your search to articles where your search terms are "major"

What information has been published specifically on transducin?

3.1. Search by phrase

Click in the search box and type transducin and click on Search

This maps directly to the Subject Heading Transducin

Click on Transducin

Scroll down the page to where Transducin is highlighted.

You will see that there are no narrower terms in this subject tree so you do not need to explode the search. If there were narrower terms, they would be indented and listed underneath, or you would see a + symbol next to the heading.

Ensure that the box to the left of Transducin is selected, and click in the box under Focus to restrict our search to references where Transducin is the main focus of the article

Scroll up and click on Continue

Include All Subheadings in your search and Continue

You will be returned to the main search page.

The * in front of Transducin shows that you focused your search.
Exercise 4  Search by keyword

Objective: to search using a keyword
Notes: sometimes subject searching does not work satisfactorily as Medline cannot 'map' your search to something useful. This is when a Keyword search should be used

What has been published recently on bungee jumping?

4.1 Keyword Search

Enter the term bungee jumping and Search

Medline is unable to map this to a useful Subject Heading. Scroll down to the end of the list of subjects and you will see bungee jumping.mp. Search as Keyword

Click on the box next to this to perform a keyword search

Click on Continue at the top of the screen

Medline will now look for this term in the titles and abstracts of the references contained on the database

You are returned to the Search History screen where you will see the results of your search

4.2 Truncating a keyword

At the Main Search box enter the term bungee jump$ and search for this as a keyword.

This will find articles containing the term bungee jump, bungee jumper, bungee jumping etc.

Complete the search as you did in the exercise above.

How has this affected the results of your search ________________________________

This is called truncation, and the dollar sign ($) or the asterisk (*) are the truncation operators in Medline.
Exercise 5  Limiting your search

Objective: to limit your search to include factors other than subject
Notes: you may want to limit your search to include publication date, document type or publication language

Limit the range of the previous search to articles published since 2001 in English

5.1 Limiting your search

Click on the Limits underneath the search box.

Click on the Additional Limits to see more options

Your latest search is at the bottom of the search list. It is highlighted in a darker colour, indicating that this is the active search

Click in the box next to English Language

Change the publication years to 2001 to 2015

Click on Limit A Search

What effect has this had on your search results? ________________________________
Exercise 6  Displaying references in different formats

Objective: to change the display format for the references you have found
Notes: varying details for each reference can be displayed

6.1 Displaying references

Scroll down to use the list of references found in your previous search,

We will look at them in more detail

Choose one of the references which is shown to have an abstract

Click on Complete Reference to the right of the article details.

The details of the reference are now displayed including an abstract or summary of the content of the article and all the keywords and subject headings used to index it.

You will see a Find@Newcastle icon to the right and this will automatically take you to the full-text of the article if the University Library subscribes to an electronic version. We will look at this in a later exercise.

Click on the Back to Search Results to return to the main search page.
Objective: to break the research question down into searchable elements

Notes: this is an essential first step before carrying out any search

Have any original articles been published on the cause of metabolic disease in premature babies?

There are several elements to this question and it is good practice to break it down into those elements before you begin your search. The table below shows how you might do that:

<table>
<thead>
<tr>
<th>Subject 1</th>
<th>Premature babies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject 2</td>
<td>Metabolic disease - cause</td>
</tr>
<tr>
<td>Publication type</td>
<td>Original articles (not reviews)</td>
</tr>
</tbody>
</table>

7.1 Subject searches

Search for your first subject, premature babies

Select the appropriate Subject Heading, and Explode if necessary

(Hint: use the Scope note to see if this term is used for your search words)

Now search for the second subject Metabolic disease, Explode if necessary

Stop at the list of Subheadings, you need to include the idea of ‘cause’ in your search, the sub-heading ‘Etiology’ would be a useful one to apply in this case

Click in the box next to Etiology and Continue

The results of this search will appear in the Search History
7.2 Combining searches

You need to combine your two searches together to find articles where both subjects appear.

Find your last two searches from the list and click in the boxes alongside each search.

Click on the appropriate combine button at the bottom of the box – **And** or **Or** to combine. You will need **AND** for this search.

7.3 Limit search to original articles

In order to locate original articles you will need to identify and eliminate the review articles from your search results.

Limit this search to **review articles**

Remove these review articles from the results of this search by typing in the search box, the set number of your penultimate search followed by **not**, followed by the number of your last search, e.g. **8 not 9**, this will eliminate the review articles from your search results.

**Display** the results to see if they are relevant to the question.
Objective: to sign into Embase

8.1 Change to Embase

Click on Change above the search box.

In the new box, scroll down and click in the box to the left of Embase (1996 to 2018 week (latest))

Click on OK

You are now signed into Embase.
Exercise 9  Combining Searches

Objective: to search using a combination of a keyword and subject
Notes: Keyword searching is often very useful for proper names, such as drug and therapeutic terms

Has anything been published on the use of Dermagraft in the treatment of diabetic foot ulcers?

9.1 Search

<table>
<thead>
<tr>
<th>Subject 1</th>
<th>Dermagraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject 2</td>
<td>Diabetic foot ulcers</td>
</tr>
<tr>
<td>Date</td>
<td>2000-</td>
</tr>
<tr>
<td>Publication type</td>
<td>None specified</td>
</tr>
</tbody>
</table>

Begin by searching for Dermagraft

Embase is unable to map this to a helpful, specific Subject Heading

Scroll down the list of subjects and you will see dermagraft.mp (Search as Keyword)

Select this and Continue

(Embase will now look for the exact word in the title, abstract, heading word, trade name and manufacturer name fields)

Then search for diabetic foot ulcers

Hint: if you are unsure which subject heading is the most appropriate, look at the Scope Note to the right hand side of the term.

Select the Subject Heading you think will be most useful, Explode and Focus if necessary, include all subheadings

Combine these searches.

Don’t forget to apply the date limit!
Exercise 10  Selecting and emailing records

Objective: to select references you are interested in and email them to yourself
Notes: for the purposes of this exercise you can email the marked references from the previous search to yourself

10.1 Display and mark records

Click to display the results of the last search. Tick the box to the left of the references you want to email. Click four references for the purposes of this exercise.

10.2 Emailing references

Click on Email in the toolbar at the top of the results.

In the To: box type in your email address

Tick one of the boxes from the Select Fields to Display drop-down menu in order to include the information that you want.

Tick the box at the bottom of the screen to Include Search History

Click on Send Email

You will then receive an email confirmation message

(You can do exactly the same with Medline references)

Scroll up to the top of the page.
Exercise 11  Searching by author and journal title

Objective: to search for references by a known author (or joint author) or for articles in a known journal

Notes: you must use the correct format for the author’s name and in the case of journals, the full title, not an abbreviation (BMJ and JAMA are exceptions only when searching Medline or Embase)

What articles has Prof MD Rawlins had published in the British Journal of Clinical Pharmacology since 2000?

11.1 Search by author

Above the search box, click the Author button.

Enter Rawlins MD and click on Search

At the list of authors, select the one you want (it is the first, which is already ticked), and click the Search for selected terms box.

11.2 Search by journal

Click the Journal button above the search box.

Enter the journal title, British Journal of Clinical Pharmacology and click Search

Tick in the box next to your title and click the Search for selected terms box.

11.3 Combine the searches

Combine the journal results with the previous search for the author MD Rawlins using AND.

Now limit the results of the search to 2000 to 2009

From the results, what is the title of Prof Rawlins’ 2004 paper?

____________________________________________________________
Objective: to discover whether the reference you require is held in Newcastle University Library in print and/or via electronic journal subscriptions

Notes: This feature is called ‘Find@Newcastle and links you directly into the electronic journal article, where available, or into the Library catalogue.

12.1 Electronic journal collection

The following reference should appear in your search results of your previous search.


Click on the link for this reference

You will see from the next screen that this article is available in full text via PubMed Central. Click PubMed Central to go to the journal.

Navigate to the article using the year, volume, issue and page information above. Click on the PDF link to download the full text article.

According to the discussion, how many large observational studies were used to show important differences in the risk of UGI bleeding between individual NANSAIDs

12.2 Saving full text articles

If you want to save the full text of an article you must do so when you have the full text document open on screen.

To save the reference you are looking at click File then pdf and select a suitable space on your own h: drive to save it to.

Close the pdf and other screens until you are back at the Library Search View Online screen.
12.3 Library Search or Library catalogue

Not all articles from this publication will be available via electronic journal subscriptions. If this is the case we may still subscribe to the print version.

At the View Online box, click Request Options to see Newcastle University Library print holdings

You will see from the catalogue record for this journal that we have the print version from volume 1 to 2008, what year was volume 1 published?

_______________________________

Look at Location for further information

What is the shelfmark for this journal title?

____________________________________________

NB. You will need to have a copy of Adobe Acrobat software installed on the PC you are using in order for you to be able to open full text pdf articles. Adobe Acrobat is available on all University cluster PCs and is freely available on the internet.

Close the Library catalogue window and return to your Embase session.

Click on the Search tab in the top left hand corner to return to your Embase session.
Exercise 13  Locating clinical trials on Embase

Objective: to search Embase for references to clinical trials
Notes: Embase gives especially good coverage of drug literature and is therefore a good database to search for clinical trials in this area.

Have any clinical trials been carried out on Donepezil as a treatment for alzheimer disease since 2004?

<table>
<thead>
<tr>
<th>Subject 1</th>
<th>Alzheimer disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject 2</td>
<td>Donepezil - clinical trial</td>
</tr>
<tr>
<td>Publication date</td>
<td>2004-2015</td>
</tr>
</tbody>
</table>

13.1 Search

Begin by searching for Alzheimer disease

Now search for Donepezil, when you reach the Subheading Display screen select Clinical Trial

Combine the results and apply the year limit

How many clinical trials have you found?

_________________________________
Exercise 14 Lociating clinical trials on Medline

Objective: to search Medline for references to clinical trials

Notes: In Medline ‘clinical trial’ is a limiting option from the Publication Types menu, therefore a search to locate clinical trials in Medline is quite different to a search to locate clinical trials in Embase

---

**Have any clinical trials been carried out on Donepezil as a treatment for Alzheimer disease since 2004?**

<table>
<thead>
<tr>
<th>Subject 1</th>
<th>Alzheimer disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject 2</td>
<td>Donepezil - clinical trial</td>
</tr>
<tr>
<td>Publication date</td>
<td>2004-2015</td>
</tr>
</tbody>
</table>

14.1 Change database

Change the database back to Medline 1996 to Week (latest) 2018

14.2 Search

Begin by searching for Alzheimer disease

Now search for Donepezil

Combine the results and apply the 2004-2015 year limit and publication type clinical trial. (You will have to click on Additional limits to find this).

How many clinical trials have you found? _____________

How does this compare with the results of the previous exercise in Embase? _____________
Exercise 15  Try a search of your own

Objective: to construct your own search and break it down into its component parts

Notes: write your topic out as a question below on the lines of ‘What information has been published’ or ‘What evidence is there that…’

15.1 What is your question?

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

Now break your question down into its main elements using the boxes below

<table>
<thead>
<tr>
<th>Subject 1</th>
<th>Subject 2</th>
<th>Population group</th>
<th>Publication language</th>
<th>Publication date</th>
<th>Publication type</th>
<th>Other limits</th>
</tr>
</thead>
</table>

Now try doing a search, using Combining and Limiting as practised earlier

How many references have you found? ________________________________

If time permits, change database and try the same search on Embase – compare the number of references found
Using Help

There is a lot of on-line help available with Embase and Medline. To access it, click on the Help box on the Main Search Page.

Logging off

From the main search page click on the Logoff icon in the top right hand corner.