Scopus

Scopus is a database of research literature citations. It indexes 20,000 peer-reviewed journals (plus open-access journals, conference proceedings, trade publications and patents) in Life Sciences, Health Sciences, Physical Sciences and Social Sciences.

Scopus and Web of Science (another similar cross-subject database that we’ll have a look at after Scopus) index a wider range of journals than Medline and Embase, but don’t have standardised subject headings classifying the articles.

If you have any queries or suggestions regarding this tutorial, please contact the Medical Sciences Liaison Team in the Walton Library: 0191 208 7722 / medliaison@newcastle.ac.uk.

Getting Started

Open a web browser and go to https://www.ncl.ac.uk/library/

Scroll down and click on Databases, e-journals, e-books link on the right hand side of the page.

Click on Scopus from the list shown of commonly-used databases.

SCOPUS OFF-CAMPUS:

If you’re not using a Newcastle University network computer, you can access Scopus via a web browser started via the RAS (http://ras.ncl.ac.uk).

Scopus offers four search methods: Documents, Authors, Affiliations, Advanced. Leave it as Document Search (the default).

Document searching

Suppose you were searching for review articles about dopamine published in the last few years.

In the Search box, type: dopamine

Leave the field choice as Article Title, Abstract, Keywords.

Don’t search yet. Below the search boxes are the options for applying limits.

For the Date Range, select: 2009 to Present.
For Document Type select: Review.
Click the search button.

Search Results

Scopus doesn’t use subject headings, so when you search for terms it brings up results immediately.
Down the left are the options for refining the results (ignore them for the moment).
The Scopus results include the following article information:
Article Title, Author(s), Year, and Source
The final column, ‘Cited by’, indicates how many times the article has been cited by other articles in the database. Clicking the number will take you to the records for those citing articles.

Sorting & Refining Results

The ‘Sort on’ options, just above the results on the right, can be used to sort the results according to a variety of criteria.

Note – Sorting criteria: ‘Date (newest)’ sorts reverse chronologically; ‘Relevance’ sorts according to search term frequency in the document records, ‘Cited by’ sorts by number of times the documents have been cited by other documents, and you can also search by author or source.

The ‘Refine’ options on the left provide analysis of the results in different categories, and the option to use this analysis to limit results.

So, for example, the ‘Author’ refine category lists the authors of the results (in order of how many each has written). You can select any number of author names (for a fuller list you can hover at the bottom of the list and click ‘View more’), then either limit results to documents they’ve written or exclude those results.

Using the Refine Results option for Source Title, select two journals: Neuroscience and Biobehavioral Reviews and Neuropharmacology and click the button to limit to results from these journals.

Once you’ve refined the results to those two journals only, use the ‘Sort on’ option above the results to sort the results according to ‘Cited by (highest)’

Question 1
Who is the first author of the most-cited article?

Click the title of this reference to view the complete detailed record for it.
The detailed record displays all authors and their affiliations, the article abstract and keywords, a list of the references cited by the article and info about articles that have cited it.

*Question 2*
Looking at the abstract, what other keywords are being used?

**References and Citing Documents**

Citations can be a useful way to find further relevant material on Scopus - the detailed record offers options to view both References (at the bottom of the record - older articles which the article you're currently examining referred to) and Cited by Documents (at the side - newer articles which referred to the article you’re currently examining). You can also view Related Documents (at the side - other articles which use some of the same references as the article you’re examining).

These can be excellent ways of finding further relevant material, but always take care to understand what results you are locating.

*Question 3*
How many references did this article cite?

**Search Techniques**

Click Search at the top of the page to return to the search page.

You can search across more than one field at the same time (so if you wanted to search for a subject term and an author in one search you could).

Click the ‘+’ on the right of the search field box and you’ll see that another search box has been added. Click it again and another box will be added - and so on.

Click Reset form to get rid of the extra search boxes and clear all your search parameters.

Often, you will need to search for a range of terms – to cover multiple topics and the various different ways that each topic can be described.
If you do have more than one keyword, you can use ‘AND’, ‘OR’ and 'AND NOT' to build up your search, finding results containing:

- one word AND another word
- one word OR another word
- one word AND NOT another (note that Scopus uses ‘AND NOT’ rather than just ‘NOT’)

**AND, OR, AND AND NOT EXAMPLES:**

- ‘Coronary AND thrombosis’ will find results containing both words (regardless of order or proximity)
- ‘Coronary OR thrombosis’ will find results containing either of the words (or both)
- ‘Coronary AND NOT thrombosis’ will find results containing ‘coronary’ but not ‘thrombosis’

**AND OR and AND NOT** can be used when typing in your search terms. You can also use the drop-down list to link to terms in the second search box - but this isn’t necessary unless you want to search different fields with the second set of terms. (e.g. simultaneously searching for both some subject terms and author names).

You can click ‘Search Tips’ (above the search field boxes on the right) to get useful information about search techniques. Most notably:

- *Brackets* can be used to group concepts together before applying AND, OR or AND NOT. (If brackets are not used, then the search phrase is calculated with ORs first, then ANDs, then AND NOTs.)
- Scopus is not case sensitive.
- **Multiple word phrases**: Scopus naturally assumes ‘AND’ between separate words in a search, so if you’re searching for a multiple word phrase, you should use double quotation marks. (e.g. "heart attack")
- **Plurals**: a search for a singular term should find results with both singular and plural forms of the term.
- **Wildcards**: An asterisk ‘*’ can be used to represent a variable number of any letters (from zero upwards) when you want to search for several similar terms, starting with the same root. e.g. ‘oncolo*’ finds ‘oncology’ or ‘oncologist’ or ‘oncologists’ or ‘oncological’ etc
- And a question mark ‘?’ can be used to represent any ONE letter, which is useful for alternate spellings. e.g. ‘analy?e’ finds ‘analyse’ or ‘analyze’
- **Proximity searching**: ‘W/’ then a number can be used instead of just ‘AND’ to stipulate that both words must appear within a certain number of words of each other, e.g. ‘coronary W/3 thrombosis’ – this will find results where ‘coronary’ appears within three words (either way round) of ‘thrombosis’.
Suppose you were looking for articles about the use of neuroimaging techniques to investigate schizophrenic disorders. 
First, think about what terms you would need to cover. Make a list of terms

Then think about how you could cover those terms in the most efficient ways, plus how you would you need to combine the terms. Write down how you might search:

Okay…

Perform a search for ‘schizo’ and (neuroimaging or tomography or “magnetic resonance”)

Although you could add extra search boxes for this search, you don’t need to. You can just type it all into one box, because you are searching for all terms in the ‘Article Title, Abstract, Keywords’ fields.
Leave limiting options as the default (i.e. no limits).

What this search is doing:

‘schizo’ will locate results containing any word that begins with ‘schizo-‘ (such as ‘schizophrenia’ or ‘schizophrenic’).
“magnetic resonance” is in quote marks to specifically find results with that phrase (with the words together rather than just both words individually).

neuroimaging, tomography and magnetic resonance are all alternative terms for the same concept (i.e. the results only need to contain one of them), so they’re combined with ‘or’ and bracketed together.

The neuroimaging terms are combined with ‘schizo’ using ‘and’ so that the results will contain both a term relating to schizophrenia and a term relating to neuroimaging.
The brackets are not actually essential in this case (since Scopus works out ‘or’ combinations before ‘and’ ones), but if they were used differently, the results would be different. For example: (schizo* and neuroimaging) or tomography or “magnetic resonance” would locate results that contained:
  - both a term beginning with ‘schizo-’ and ‘neuroimaging’
  - or ‘tomography’ (regardless of whether it also contained a ‘schizo-’ term)
  - or ‘magnetic resonance’ (regardless of whether it also contained a ‘schizo-’ term)

*If you're not sure about any of this, please ask!*

**Question 4**
Looking at the refining options on the left (though you don’t need to actually do any refining), which author has published most articles from within the results?

**Search History and Combining Searches**

Return to the Search page and look towards the bottom of the page for the search history.

All your previous searches are listed in the Search History table. Each is numbered: #1, #2, etc.

You can use the Combine box at the top right of the Search History (not the main search box) to combine searches from the history.

For example, it would have been possible to have searched for each term in the previous search individually before combining them appropriately afterwards.

Suppose you wanted see if any of the reviews about dopamine that you found initially also discussed schizophrenia and neuroimaging.

Combine the dopamine search with the schizophrenia/neuroimaging search using ‘AND’ and the appropriate search numbers – for example #1 AND #3.

(Take care to use the correct set numbers - remember you want the unrefined dopamine search that is limited to 2009 onwards and reviews but hasn't been limited to the particular journal titles)

**Question 5**
How many results have you found?
Locating Articles

To see if an article in your results list is available electronically (or in paper format in the library), use the ‘Find @ Newcastle’ function.

Use the Refine options to limit to results to material published in 2016 and locate the article:

- Using human brain imaging studies as a guide toward animal models of schizophrenia by Bolkan et al.

Click the ‘Find@Newcastle’ icon for this reference. The Library Search window will provide links to e-journal providers if the article is available online through University subscription (or free access).

In this case, you should see that the article is available via Elsevier ScienceDirect. (Sometimes articles may be available through multiple providers, and although interfaces differ, they should all provide access to the article).

Click the link button.

You’ll be taken to the article being displayed in HTML Full Text with the option to download it as a PDF file.

Have a look through the article.

**Question 6**

Looking at the Conclusions of the article, which brain areas does the article state have been consistently implicated in the Schizophrenia disease process?

Close the e-journal tab and return to Library Search.

If an article isn’t available electronically, when you click the ‘Find@Newcastle’ link, it may show print holdings so you can see if it is available in paper format.

In this case, it is available electronically. But what if it wasn’t? Click the ‘Newcastle University’ icon to go to the library homepage and search Library Search for **Neuroscience**. The top result should be the print subscription. The volumes held should be visible.

**Question 7**

What is the earliest volume that the library has in stock?
You’ll see that all the print holdings for this journal are now in the Research Reserve (the library store) – if you need to request an article from that stock, just take a note of the shelfmark and submit a request to the Desktop Delivery Service at dds.ncl.ac.uk – the Research Reserve staff will scan it and send you a PDF.

Compare the bibliographic details (year, volume, etc) of the article you were looking for (on Scopus) to the volumes held in the Research Reserve.

**Question 8**

Would the article be there?

Return to Scopus (and close all tabs other than Scopus).

**Author searching**

Click Search to return to the search page.

When searching for papers by a particular author, it is best to use the 'Author Search'. Click on Authors.

Suppose you were interested in finding papers by Dr Clare Guilding:

In the Last Name search box type: Guilding and in the ‘First Name’ box type in the initial C and Search.

The search will locate author records that match these criteria. The number of results for each author is indicated with a number in the Documents column.

You should be able to see that one record is fairly obviously the correct one.

Click the name for the relevant record.

Scopus uses an algorithm based on author name, subject area and affiliation to decide whether to attribute articles to a particular author record, but minor discrepancies in details may mean some articles are not attributed to the main record for a particular author; however, you can link additional records together if you need to.

Click view potential author matches near the top of the page.

This finds other similar records which might represent the same person as the record you’re viewing. It should be fairly clear from the information displayed that no others need adding, so close this box.

Scroll down to view the article records (and choose to View in search results format)

**Question 9**

Use the Sort on options to determine in which journal the most-cited article was published:
Saving your Search Results

Always save useful references to ensure that you have all the information you need to obtain the articles or write a bibliography.

First mark relevant references - you can choose to mark all the references or select references individually.

Click the tickboxes to select several articles in the result list then, at the top of the list, click Add to List.

You could now complete further searches and add more references to the list.

When you’re ready to use the results you’ve added to the list, click the Lists link at the top of the page.

From the options just above your results, click the tickbox to select all of the results on your list. Then you can output your results. You have several options:

• EXPORTING TO ENDNOTE - to export your references to EndNote, click Export, select RIS format. Choose the amount of information to export (Citation and abstract is usually a good choice) and click Export. When prompted, choose to Open the created file, then select your EndNote library.
• DOWNLOAD – this function attempts to automatically locate and download PDFs. It can be an incredibly quick way of obtaining a lot of material, although it isn’t always able to get everything that is available, so using the ‘Find @ Newcastle’ function for individual articles is most reliable.
• PRINTING - to print your references, select More > Print, select your Output Format:, and click Print.

Do something with the results:

If you have a test EndNote library, then try exporting to that.

Otherwise, try e-mailing the references to yourself:

Select the envelope icon to email. Enter your e-mail address in the ‘To’ box. You can choose to edit other details as preferred. Leave the format as HTML.

Ensure your Output format is Citations only. Click Send.

You will be informed the e-mail has sent. Click Return. (Go and have a look at the email.)
Personal accounts - You can set up a personal account to let you save searches on Scopus. You can save search results and lists, but you can also save the actual searches so you can re-run them or set them as 'alerts' (so that when new material is added to Scopus that matches your searches, you’ll be e-mailed).

To set up a personal account, click Register in the top right. Once you’ve set up an account and logged in, you can select Save from the options above search results.

**Switching databases – Web of Science**

There are a variety of other facilities available from Scopus - use Scopus' own Help by clicking the Search tips link near the top right of the page to get more information. It also includes some interactive tutorials for some topics.

We’re now going to look at Web of Science.

Web of Science is a web-based platform providing access to several information search and analysis resources. This includes Web of Science Core Collection, a large cross-subject database of references, from around 8700 journals.

Return to the Library homepage: http://www.ncl.ac.uk/library

Click Databases

Click Web of Science

Ensure that near the top of the page it states that you search specifically the Web of Science Core Collection.

Useful Tip - OTHER DATABASES:

Switching to ‘All Databases’ enables you to search across more material but with reduced search functionality (compared with searching the Core Collection).

**Searching Web of Science**

Rather than providing formal instructions for Web of Science, since its main functions work a lot like Scopus, it’s probably simplest (and most satisfying) for you to practice with the interface yourself to familiarise yourself with it.

It’s worth being familiar with both databases as it’s usually quite easy to switch between the two and run similar searches without much additional effort to potentially find many extra results.
See if you can complete a similar search to the one you did in Scopus, finding review articles published since 2009, covering the use of neuroimaging to investigate the link between dopamine and Schizophrenia.

You can use the same functions - AND, OR, NOT (note: 'NOT' rather than 'AND NOT'), brackets, truncation, and refining of results (and article type limits need to be applied by refining).

There's a button in the top right of the page to access your Search History (and you can make combinations by selecting rather than having to type combinations).

If you have any problems, please ask for assistance.

Keep searching till you're happy that your search is equivalent to that which you conducted on Scopus.

How do the results compare with Scopus?

This concludes the tutorial.

Web of Science also has useful help of its own - access it by clicking the link in the top right of the page.

ANSWERS TO QUESTIONS

Question 1 – Seidler, R.D.

Question 2 – aging, cognition, exercise, motor performance, plasticity etc.

Question 3 – 175

Question 4 – Weinberger, D.R.

Question 5 – 311

Question 6 - the meso-striatal dopamine system, the thalamo-prefrontal circuit and the hippocampal formation

Question 7 – 64

Question 8 – no, the article is from v321 in 2016 but we stopped getting it after v123 in 2004. Incidentally though – if you check the second record on Library Search (which is for the online subscription), you'll see we've bought the archive for this journal and have online access right back to v1 in 1976.

Question 9 - European Journal of Neuroscience

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