University of Wisconsin Milwaukee
UWM Libraries
October 12, 2018

Undergraduate Students
Fall Into Research
Discover Your Scholarly Community

Web of Science
Agenda

- 2:30pm-3:30pm | Undergraduates
  - How does Web of Science fit into the larger research landscape?
  - What is citation indexing?
  - Tips for effective topic searching
  - Finding your research advisor’s work in Web of Science
  - Setting up search alerts to stay up to date on a topic
  - Kopernio: browser plug-in for one-click access to research articles
  - Identifying key players and centers of excellence in a research area
How does Web of Science fit into the larger research landscape?

There are various ways in which the Web of science fits into the larger research landscape. In one scenario -- it plays a fundamental role in the process of discovery, innovation, and invention. A good view of this is presented within a brief video found on the Clarivate Analytics home page – www.Clarivate.com or also, at this time, here -- https://vimeo.com/252160957

You could say Web of Science started here...

Citation Indexes for Science:

*A New Dimension in Documentation through Association of Ideas*

Eugene Garfield, Ph.D.

THE ASSOCIATION OF IDEAS is at the heart of what Web of Science can do. At its foundation Web of Science is about discovery — but part of this is its ability to maximize the power of research and scholarship through meaningful connections among information, people, and organizations. We’ll explore this.

...and Web of Science is not just hard “science”!

Social Sciences, Arts, Humanities are included as well.
What is Citation Indexing?

There are two “indexes” at work within Web of Science discovery, though these work as one. 

Web of Science – Source Record Index
Records contain the information you see when you do a topic search for example and view results.

Web of Science -- Cited Reference Index
A massive compilation of all of the author bibliographies from all of the source articles indexed in Web of Science.

References


Tips for Effective Topic Searching

• Don’t be too limiting at first with your search terms, you can always refine along the way. Web of Science will include an “AND” (see below) between terms if you simply enter them as a plain string of terms.

• Use wildcard characters to cover more ground efficiently.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Retrieves</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>Zero or more characters</td>
<td>hydroxy* = hydroxylase hydroxydopamine hydroxyethyl</td>
</tr>
<tr>
<td>?</td>
<td>One character only</td>
<td>en?oblast = entoblast endoblast</td>
</tr>
<tr>
<td>$</td>
<td>Zero or one character</td>
<td>eight$ = eight eighth eighty</td>
</tr>
</tbody>
</table>

Phrase Searching

Exact matches for phrases can be found by searching on terms enclosed in quotation marks. Wildcard characters can be used inside quotation marks.

“electromagnetic field” = electromagnetic field
“electromag* field” = electromagnetic field electromagnet’s field

Near/

Finds terms in the same field; user specifies proximity. Default is 15 words if user does not specify a number.

electromag* near/3 field = electromagnetic field electromag magnetic radiation field field pattern in electromagnetism electromagnets created a strong field

Same

Terms must occur within the same sentence. Use in Address field only.

AND

All search terms must occur to be retrieved.

TOPIC: aspartame AND cancer*
Retrieves documents that contain both aspartame and cancer*.

OR

Any one of the search terms must occur to be retrieved. Use when searching variants and synonyms.

TOPIC: aspartame OR saccharine OR sweetener*
Retrieves documents that contain at least one of the terms.

NOT

Excludes records that contain a given search term.

TOPIC: aids NOT hearing
Retrieves documents with aids, excluding any which also contain hearing.
Tips for Effective Topic Searching

- Take advantage of Web of Science Citation pathways for discovery!
  - Within your TOPIC search results click on Times Cited, Cited References, and Related Records within articles of great interest to you and follow these to additional relevant Information.
- Make use of what you see in full records, terms within titles, abstracts, and keywords and add those that are significant to your Topic search terms.

Please – utilize the assistance that Web of Science provides in the interface itself.
Finding your research advisor’s work in Web of Science

- Try to find just how your advisor presents their name in publications. Be sure to use the appropriate search format for Author Name, seen here.
- If known, selecting the span of years in which they have published as this can greatly reduce any conflicts with authors of the same name.
- Refining results by the Institutions where your advisor has worked is another way to work toward an accurate set of results.

You may be able to find this information on your advisor’s UWM page.

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**Do Dominant Firms Provide More Training?**

By: Bilanakos, Christos; Green, Collin P.; Heywood, John S.; et al.

**JOURNAL OF ECONOMICS & MANAGEMENT STRATEGY** Volume: 26 Issue: 1 Pages: 67-95 Published: 2017

[Free Full Text from Publisher] [View Abstract]

**How does a mixed ownership firm license a patent?**

By: Gelves, Juan Alejandro; Heywood, John S.

**ECONOMIC MODELLING** Volume: 59 Pages: 278-284 Published: DEC 2016

[Full Text from Publisher] [View Abstract]
Setting up search alerts to stay up to date on a topic

Web of Science

Save search / create search alert

Name: Urban-Spatial...

Description: Enter a description

Email alerts

j.dougherty@upenn.edu

HTML

Author, Title, Source

Daily alert

Search query: TOPIC: (urban and spatial and (pattern* or map* or scal*))

The RSS feed will be available after creating the alert.
Kopernio provides one-click access to legal PDFs

Kopernio is a browser plug-in that delivers the best available PDF at your point of need, based on your library’s subscription.

• Individuals can install and use Kopernio for free.
• “Next generation” link resolver that finds PDFs as you browse the internet.
• Integrates with Google Scholar and Pubmed.
• Records usage in your library’s usage reports.

Learn More: https://kopernio.com/
Library Guides
Identifying key players and centers of excellence in a research area

Use “Analyze Results”!
There are several routes one may take, though the most common is typically through a Topic search – key terms, often refined to recent years to ensure current activity and know the authors are actively publishing, often refined to particular disciplines.

Analyze Results by Author will allow you to very quickly see those publishing most frequently in this area, in this case over just the past few years.

You can select one or more authors and click View Selected at the bottom of the page to review each paper in detail.
Identifying key players and centers of excellence in a research area

To look for authors with a track record of influential work – their papers have been cited most -- sort results by Times Cited and, for example, save the top 25 papers (or more of course) to a Marked List. Analyze Results is also presented within a Marked List, and this content may then be analyzed, and the authors of these recent, top cited papers reviewed.
Identifying key players and centers of excellence in a research area

As you see in Web of Science, there are a lot of options for Analyzing Results beyond Authors – one of the most popular is Organizations-Enhanced – this will highlight the universities and organizations where the authors of this published information reside, typically indicating the presence of a program in this area.

It may just be about knowing where the people are that are writing about topics that are important to you.