Citation searching & Current Awareness
Scientific Information Management

EMMA-LISA HANSSON, LTH SPRING 2018
Agenda

- Current awareness
- Citation analysis – a short introduction
- Citation searching assignment
What is current awareness?

• Activities to keep you up to date with trends and new developments in your particular fields of study.

• A way to find new opportunities and to identify possible collaborators or competitors.
Purposes of current awareness

• Development in your own research field
• Monitor your competitors
• Monitor funding opportunities
Rich Site Summary, or more commonly **Really Simple Syndication**

Allows users to access updates to online content in a standardized, computer-readable format. These feeds can, for example, allow a user to keep track of many different websites in a single news aggregator

- Databases – searches
- Journals – table of contents, popular articles, most cited
- Outlook mail has RSS function
RSS in outlook

**English**

- On the Tools menu, click Account Settings.
- On the RSS Feeds tab, click New.
- In the New RSS Feed dialog box, type or press CTRL+V to paste the URL of the RSS Feed.
- Click Add.
- Click OK.

**Swedish**

- Klicka på Kontoinställningar på Verktygsmenyn.
- Klicka på Nytt på fliken RSS-feeds.
- Skriv eller klistra in URL-adressen för en RSS-feed i dialogrutan Ny RSS-feed.
- Klicka på Lägg till.
- Klicka på OK.
Alerts

- Databases - searches
- Citation indexes - author citation, document citation
- Journals – new issues, table of content
- Inbox email 🔄
Alerts in mailbox (Outlook)…
Conferences

• Academic conferences worldwide
  An online calendar of academic and professional conferences worldwide
  www.conferencealerts.com

• Web of Conferences, managed by EDP Sciences
  An open access platform devoted to the publication of scientific conference proceedings. The platform offers high quality services for the publication and dissemination of conference proceedings in the areas of Physics & Astronomy, Engineering & Technology, Health Sciences, Biology, Chemistry, Mathematics and Computer Sciences.
  www.webofconferences.org/

• www.conference-service.com/conferences/index.html
Current awareness tools and channels

• **Journal TOCs – table of contents** (By subscribing to a table of contents (ToC) alert for a journal you will receive an e-mail with the table of contents each time a new issue is published.)

• **Professional networks, organisations, groups**

• **Social media: Facebook, LinkedIn, blogs, Twitter** *(altmetrics)*

• **Bookmarking:**
  - **Bibsonomy** *(BibSonomy helps you to manage your publications and bookmarks, to collaborate with your colleagues and to find new interesting material for your research.)*
  - **CiteULike** *(citeulike is a free service for managing and discovering scholarly references)*

• **Supervisors, peers, colleagues, collaborators**
Funding opportunities - Research professional

• Global online database of research funding opportunities.
• Possible to create alerts, save and e-mail searches.
• Employees and students at LU may access the database by registering as a user (must be connected to the LU campus network)
Grants from the Swedish Research?

• Open Access – free accessibility to research findings
• Researchers financed by the Swedish Research Council must publish with open access, which means that anyone using the Internet can freely read and download the research results. Researchers can archive previously published articles in openly searchable databases, or they can publish directly in Web-based journals that practice open access.
PRISMA

• Application system for research grants from Formas, Forte and Vetenskapsrådet.
  (Formas is a Swedish Research Council for sustainable development. Forte is a research council and a government agency under the Swedish Ministry of Health and Social Affairs. Vetenskapsrådet, The Swedish Research Council is a public agency under the authority of the Ministry of Education and Research)

• In Prisma people can apply for research grants. Reviewers do their review tasks in Prisma and the administrating organisations (the organisation that administers the funds of an approved project and is responsible under the terms and conditions) has organisation accounts in which they can manage the organisation's applications, sign documents and report back.

https://prisma.research.se/
Springer Compact

• Springer Compact is a national agreement that provides reading access to approx. 1700 Springer Journals, as well as allowing Lund University researchers to publish Open Access in these journals, the APC cost is covered by the agreement. [https://www.lub.lu.se/en/services-and-activities/publishing-registering/open-access/springer-compact](https://www.lub.lu.se/en/services-and-activities/publishing-registering/open-access/springer-compact)

(An article processing charge (APC), also known as a publication fee, is a fee which is sometimes charged to authors to make a work available open access in either an open access journal or hybrid journal. A hybrid open access journal is a subscription journal in which some of the articles are open access)

• More on Open Access at 6th March!
Research Portal

- Lund University research repository. In the Research Portal you will find information about:
  - Our researchers
  - Research outputs (e.g. publications), with full text if available
  - Research projects (description of project, participants etc.)
  - Research related activities and awards
  - Organisational units (faculties, departments, research groups etc.)
ORCID

• Open Researcher and Contributor ID

• Provides a registry of unique researcher IDs that other services can use in order to minimize research administration and solve the name ambiguity problem in research communication.

• ORCID information integrates with Scopus and WoS. Claim publications from a single account

• orcid.org
DISTINGUISH YOURSELF IN THREE EASY STEPS

ORCID provides a persistent digital identifier that distinguishes you from every other researcher and, through integration in key research workflows such as manuscript and grant submission, supports automated linkages between you and your professional activities ensuring that your work is recognized. Find out more.

1. REGISTER
   Get your unique ORCID identifier. Register now! Registration takes 30 seconds.

2. ADD YOUR INFO
   Enhance your ORCID record with your professional information and link to your other identifiers (such as Scopus or ResearcherID or LinkedIn).

3. USE YOUR ORCID ID
   Include your ORCID identifier on your webpage, when you submit publications, apply for grants, and in any research workflow to ensure you get credit for your work.

MEMBERS MAKE ORCID POSSIBLE!

ORCID is a non-profit organization supported by a global community of organizational
Lets get Organized (papers, habits & yourself)

- Set of time to read once a week
- Think through exactly what you're looking for
- Read during summer
- Read title and abstract and decide carefully what to read thoroughly
- Check alerts and RSS feeds every morning
- Don't subscribe to too many alerts
- Realize (and accept) you can't read everything
  - Write main ideas or concepts on front page of printed paper
- Save in groups in reference management tool
- Print or save interesting articles to read later
- Prioritize top journals in your research area
- Journal club to share and discuss papers
- Download articles of interest from TOCs
- Tweet or blog about an article every week
Citation searching – A short introduction

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Citation indexes and citation searching
What is citation analysis?

Citation search is a way of measuring the relative importance or impact of
• An author
• An article
• A publication

Measuring is done by counting the number of times that the above has been cited by others.
Pearl growing

• The process of using one information item to find more information.
• Start with a good document or author – the ”Pearl”

“Citation pearl growing is the act of using one relevant source, or citation, to find more relevant sources on a topic”
http://en.wikipedia.org/wiki/Pearl_growing

• “Subject Pearl Growing is a strategy used in an electronic database that has subject or keyword descriptors. By clicking on one subject, the searcher is able to find other related subjects and subdivisions that may or may not be useful to the search.”
http://en.wikipedia.org/wiki/Pearl_growing
How to and who uses citation search?

• Who is citing my articles? How many times have I been cited? (Professor)

• How do I know if this article is important? (Student)

• Which journal should I publish in? (Researcher)

• What are the best journals in the field of Anthropology? (PhD student)
Move through time…

- Citation pearl growing - Work forward and backwards in time…

Picture: https://images.webofknowledge.com/images/help/TCT/h_citation_map.html
Reasons for performing a citation search

• Find the original work on which an idea or research is based
• Find reactions to a research work
• Find authors working in a similar research field
• Follow up further developments in the research field
• Map trends in the research field
• Find the impact of one author’s work on others’ work
• Not dependent on controlled vocabulary/key words

Source: Rumsey, How to find information: A guide for researchers, 2008
Citation index

Definition of citation index:
"A citation index is a kind of bibliographic database, an index of citations between publications, allowing the user to easily establish which later documents cite which earlier documents".

Citation analysis
Some historical background

- 1873, “Shepard’s Citations” was the first citation system, created by Frank Shepard (law)

- 1960, Eugene Garfield’s Institute for Scientific Information (ISI) introduced the first citation index for papers published in academic journals called ”Science Citation Index (SCI)”

- During the 1970s and 1980s ”Science Citation Index” developed from print to digital form

- 1997, ISI launched ”Web of Science”, the web-based interface of ”Science Citation Index”
Journal impact factor

• The **journal impact factor (JIF)** of an academic journal is a measure reflecting the average number of citations to recent articles published in the journal. It is frequently used as a proxy for the relative importance of a journal within its field, with journals with higher impact factors deemed to be more important than those with lower ones.

• The impact factor was devised by Eugene Garfield, the founder of the Institute for Scientific Information.

• Impact factors are calculated yearly starting from 1975 for those journals that are indexed in the *Journal Citation Reports*.
Journal impact factor

• In a given JCR year (e.g. 2017), the impact factor of a journal is the average number of citations to those papers that were published during the two preceding years (2016 & 2015)
Alternative journal metrics

- **SJR** – SCImago Journal Rank
  The SJR indicator is a free journal metric, based on an algorithm similar to PageRank. Used in the database "Scopus".

- **SNIP** – Source Normalized Impact Per Paper
  Created by Henk Moed, University of Leiden. Measures contextual citations impact by weighting citations based on the total number of citations in a subject field. Used in the database "Scopus".

- **Eigenfactor score**
  Created by Jevin West and Carl Bergstrom at the University of Washington. Eigenfactor scores are calculated by http://eigenfactor.org. The Eigenfactor score is intended to measure the importance of a journal to the scientific community, by considering the origin of the incoming citations, and is thought to reflect how frequently an average researcher would access content from that journal.

- **CiteScore** (Scopus) CiteScore calculates the average number of citations received in a calendar year by all items published in that journal in the preceding three years.
Comparison Scopus / WoS

• Scopus is a large interdisciplinary database from Elsevier, with particular strengths in science and technology. The bibliometric & citation features use the whole of the Scopus database.

• Web of Science (previously known as Web of Knowledge) is a collection of databases maintained by Thomson Reuters.

In comparison to Web of Science, Scopus has a bigger scope but Web of Science is more complete when it comes to citations prior to 1996. Scopus doesn't use the JIF, but rely on other bibliometric tools such as SJR, SNIP and Citescore. Another difference is that Scopus covers articles in press.
What about Google scholar?

- Broader in coverage but also includes publications which aren’t strictly scientific
- Less reliable citation data
- International and multi-lingual coverage
- Limited search features
- Updated monthly
## Comparison databases

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<th>Strengths</th>
<th>WoS</th>
<th>Scopus</th>
<th>Google scholar</th>
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<tr>
<td></td>
<td>• Deeper back-files</td>
<td>• User friendly search interface</td>
<td>• More comprehensive picture of scholarly impact as it indexes non-traditional sources not covered by WOS and Scopus.</td>
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<td>• While controversial, its journal citation reports, impact factors, and h-index are most widely used.</td>
<td>• Broader coverage of journals</td>
<td>• Includes peer-reviewed papers, theses, books, abstracts, and articles from academic publishers, professional societies, preprint repositories, universities, and other scholarly organizations</td>
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<td>• More focused on U.S. research</td>
<td>• More internationally focused than WoS</td>
<td>• Better coverage of newer materials than both WOS and Scopus</td>
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<td>• Offers citation mapping for visual presentation</td>
<td>• Includes more Open Access titles</td>
<td>• International and multi-lingual coverage</td>
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<td>Weaknesses</td>
<td>• Overlap WoS/Scopus is big proportion of journals</td>
<td>• Citation tracking is limited to the relatively narrow time span of 1996+</td>
<td>• Limited search features.</td>
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<td>• Not very strong in Social Science and Arts &amp; Humanities coverage</td>
<td>• Inflated citation counts due to inclusion of non-scholarly sources.</td>
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<td>• Weeding irrelevant hits is time consuming</td>
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<td>• No way to determine what sources, and time spans are covered.</td>
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