# Intro to Searching OVID Databases

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# Intro to Searching Biomedical Databases

OVID

- 1 Objectives
- OVID Databases and Why to Use Them
- Background Knowledge for Searching the Literature
- Searching OVID
  Databases
- 5 Finding Full Text
- 6 Reminder & References





1. Objectives



#### **OBJECTIVES**

#### At the end of this workshop you should:

- > Know how to access the electronic library resources available in the CIUSSS West Central Montreal.
- > Be more familiar with the different OVID Databases available to you in the CIUSSS West Central Montreal.
- > Better know why you would search in each of them.
- > Be able to formulate an answerable search question.
- > Be able to successfully conduct a search in a biomedical database using the OVID interface.
- > Know how to get help using biomedical databases if you need it.





# 2. OVID Databases and Why to Use Them



### Getting to the databases

- ➤ Go to the JGH Health Sciences Library Website

  Homepage (shortcut: jgh.ca/hsl)
- Then, scroll down to select your desired database under CIUSSS West Central Montreal e-resources, e-resources restricted to onsite JGH access, or Free Online e-resources

## CIUSSS West Central Montreal e-resources

- A to Z Drug Facts
- CINAHL Complete
- CINAHL Education (CE for Nurses and allied health professionals)
- EBM Reviews ALL (OVID)
- EBM Reviews ACP Journal Club (OVID)
- EBM Reviews Cochrane Central Register of Controlled Trials (OVID)
- EBM Reviews Cochrane Clinical Answers (OVID)
- ♠ EBM Reviews Cochrane Database of Systematic Reviews (OVID)
- EBM Reviews Cochrane Methodology Register (OVID)
- EBM Reviews Database of Abstracts of Reviews of Effects (OVID)
- EBM Reviews Health Technology Assessment (OVID)
- EBM Reviews NHS Economic Evaluation Database (OVID)
- Embase (OVID)
- Kaplan & Sadock's Comprehensive Textbook of Psychiatry (OVID)
- Medical Reference e-Books (in French)
- MEDLINE (OVID)
- Online Care Methods
- Ovid Discovery-Lite
- e-journals LWW Total Access Collection (OVID)
- PsycARTICLES (OVID)
- PsycINFO (OVID)
- Rx Vigilence





#### What is OVID?

- > OVID is an interface that can be used to search various different databases
- This means that as long as you know how the interface works you can easily search many different databases
- You still need to know which one to look in to find what you are looking for



# Deciding where to search

In order to find relevant literature to answer a question, it is essential to look in the right place.





# Pre-search questions to ask yourself

- ➤ What kind of question are you asking?
  - Background vs. Foreground
- ➤ What is your subject matter?
  - Different resources are specialized in different subject areas
- ➤ How much time do you have?
  - Do you have realistic expectation about what you can do in your timeframe
- How much and what kind of evidence do you need?
  - Do you need a quick summary or a do you need to do a deep dive into original research?





# **OVID Discovery Lite**

• The "Google" like search bar for our OVID resources!

CIUSSS

MONTREAL

• Use it to run a quick search in all CIUSSS OVID resources

# EBM Reviews: Ovid's Evidence Based Medicine Reviews collection



#### EBM Reviews: ALL

- > ACP Journal Club
- Cochrane Clinical Answers Database
- Cochrane Database of Systematic Reviews
- Cochrane Central Register of Controlled Trials
- Cochrane Methodology Register Database
- > Database of Abstracts of Reviews of Effects
- Health Technology Assessment Database
- > NHS Economic Evaluation Database



#### ACP Journal Club

- ➤ Made up of 2 journals:
  - > ACP Journal Club: a publication of the American College of Physicians
  - Evidence-Based Medicine: a joint publication of the American College of Physicians and the British Medical Journal Group.
- Includes enhanced abstracts and commentary on preselected high quality articles.
- Aims to help clinicians quickly understand and apply the best evidence in their practice.
- > Is linked to the OVID MEDLINE Database.





#### Cochrane Clinical Answers Database

- Cochrane Clinical Answers (CCA) provides easily readable answers to clinical questions and links to relavant Cochrane reviews.
- > Can be used as a point of care informational tool.



# Cochrane Database of Systematic Reviews

- > Includes the full text of the Cochrane Reviews and protocols of ongoing reviews.
- > Is updated weekly.
- Cochrane Reviews are high quality systematic reviews.



# Cochrane Central Register of Controlled Trials

- Is a bibliographic database of definitive controlled trials jointly created by the National Library of Medicine (USA) who produces MEDLINE and Elsevier (the Netherlands) who produce EMBASE.
- Contains over 300,000 bibliographic references from 1991 present of controlled trials in health care.
- Trials are identified by contributors to the Cochrane Collaboration in MEDLINE and EMBASE following quality standards ensuring that only true randomized controlled trials or controlled clinical trials are included.



# Cochrane Methodology Register Database

- The Cochrane Methodology Register is a database of 9,000 bibliographic references to controlled trials from 1995-2012 relevant to the methods of systematic reviews of healthcare and social interventions.
- The database includes journal articles, book chapters, conference proceedings, conference abstracts and reports of ongoing methodological research.
- Records are identified primarily through hand searching by the UK Cochrane Centre.





#### Database of Abstracts of Reviews of Effects

- ➤ Was produced from 1991 2015 by the National Health Services' Centre for Reviews and Dissemination (NHS CRD) at the University of York, England.
- > Is no longer being updated.
- > DARE is a full text database containing critical assessments and structured abstracts of systematic reviews from a variety of medical journals.
- Its records cover topics such as diagnosis, prevention, rehabilitation, screening, and treatment.
- > Is linked to the OVID MEDLINE Database.





# Health Technology Assessment Database

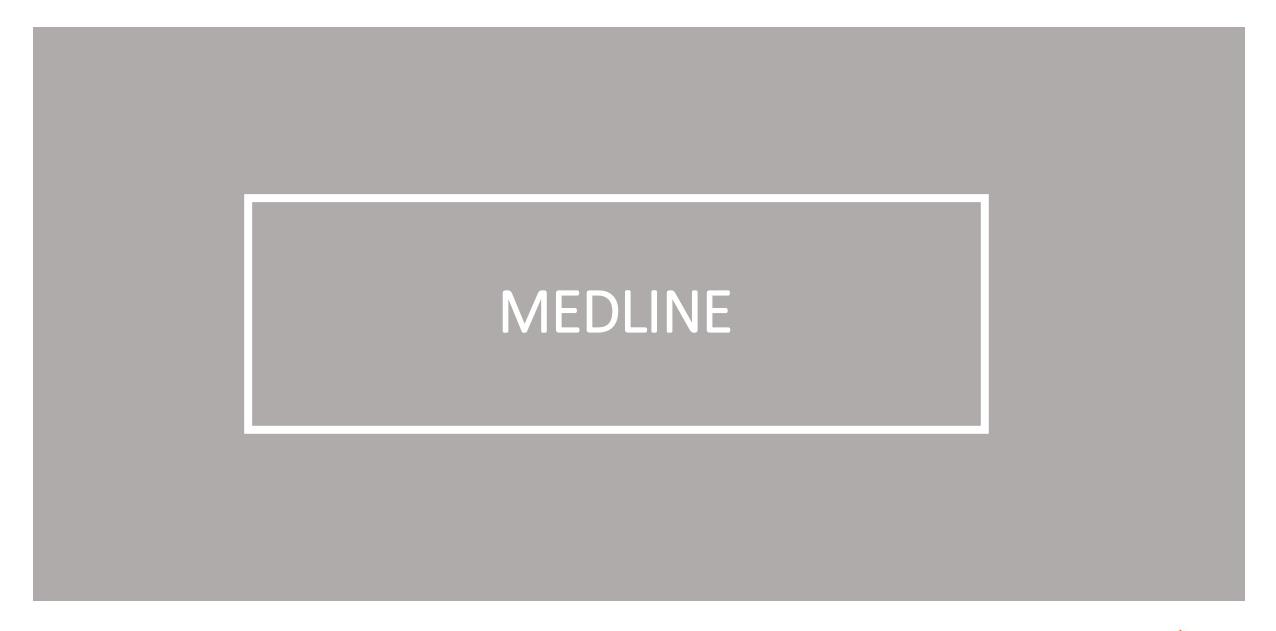
- Produced by the Centre for Reviews and Dissemination (UK) in collaboration with INAHTA (Sweden).
- ➤ Brings together details on health technology assessments (studies of the medical, social, ethical, and economic implications of healthcare interventions) from 2001-2016.
- Included research: systematic reviews and ongoing and completed research based on trials, questionnaires and economic evaluations. Can overlap with content in Database of Abstracts of Reviews of Effect (DARE) and in the National Health Service Economic Evaluation (NHS EED) database.



#### NHS Economic Evaluation Database

- The National Health Service (UK) Economic Evaluation Database provides costbenefit analyses about healthcare interventions.
- Contains 17,000 records from between 1995 and 2015, but is no longer being updated.
- The database aims to assist decision-makers by systematically identifying and describing economic evaluations, appraising their quality and highlighting their relative strengths and weaknesses.







## Why search in MEDLINE via OVID?

- > The topic is a medical topic
- You prefer the OVID interface over the PubMed Interface for searching Medline (matter of personal preference and ease of searching)
- Key concepts map easily to subject headings
  - Terms commonly used in medical practice
  - You can easily combine the terms using AND & OR

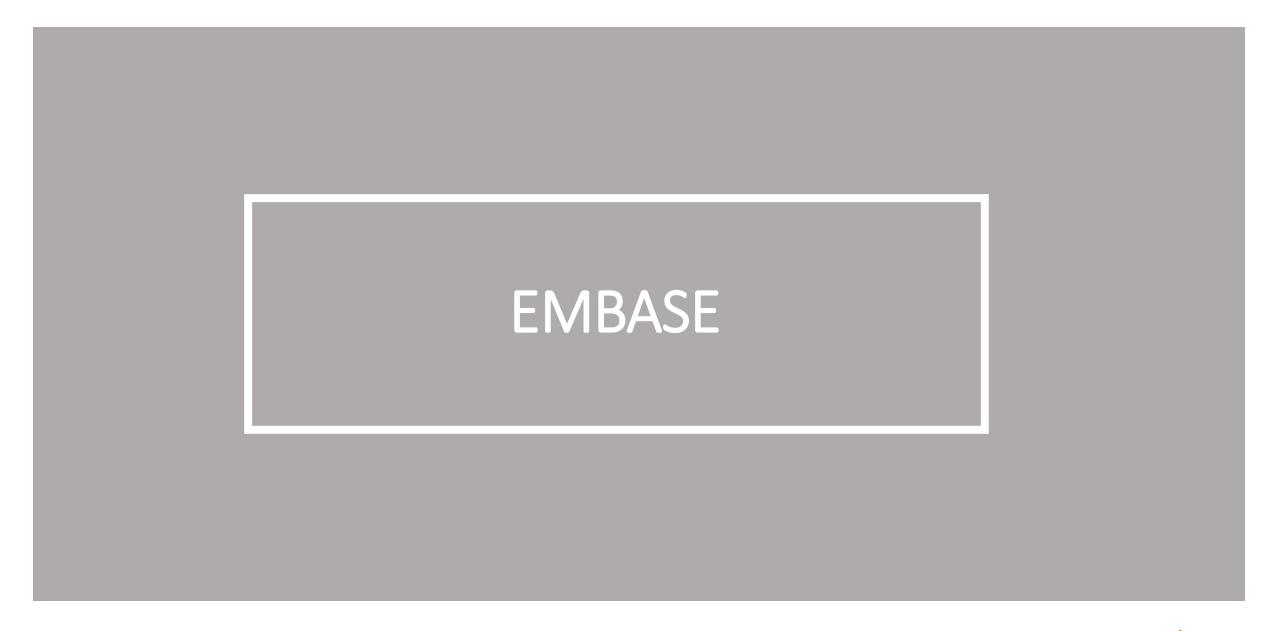


#### What is MEDLINE via OVID?

- When you search MEDLINE via OVID, you are searching the MEDLINE component of PubMed using the OVID interface which is produced by Wolters Kluwer Health.
- ➤ MEDLINE is the Peer Reviewed part of PubMed which is indexed using MeSH.

Producer	National Library of Medicine, U.S. / Wolters Kluwer Health
Coverage &	1950 to present, updated daily
Updating	5600+ journals indexed
Full text	available if subscription to journal is held by your institution
# of references	30 million +
	1 million + added every year
Languages	60+
Content	■Contains journal articles covering the full range of evidence from
	•All life sciences, clinical, research, allied health, and related fields -
	medicine, nursing, dentistry, rehabilitation sciences, veterinary medicine,
	health care administration, and preclinical sciences, etc.
Search Options	■Subject headings (MeSH) and subheadings, AND, OR, limit by date, type
	of publication, age group, etc.
	Subheadings, Keywords, Truncation using *, Adjacency
Languages Content	1 million + added every year  60+  Contains journal articles covering the full range of evidence from experimental studies to systematic reviews, with editorials and review articles as well.  All life sciences, clinical, research, allied health, and related fields - medicine, nursing, dentistry, rehabilitation sciences, veterinary medicine health care administration, and preclinical sciences, etc.  Subject headings (MeSH) and subheadings, AND, OR, limit by date, types







# Why search in EMBASE via OVID?

- > The topic is a medical or pharmaceutical topic
- Core topics: Pharmacology and toxicology; General clinical medicine; Genetics, biochemistry & molecular biology; Neurology & behavioral medicine; Microbiology & infectious disease; Cardiology & hematology; Psychiatry & mental health; Oncology; Healthcare policy & management; Allergy & immunology; Pediatrics; Endocrinology & metabolism; Obstetrics & gynecology; Biomedical engineering & medical devices; Anesthesiology & intensive care; Gastroenterology; Respiratory medicine; Nephrology & urology; Dermatology; Geriatrics & gerontology
- Key concepts map easily to subject headings
  - Terms commonly used in medical practice
  - You can easily combine the terms using AND & OR





#### What is EMBASE via OVID?

Producer	Elsevier B.V.
Coverage & Updating	1950 to present, updated daily 8500+ journals indexed
Full text	Available if subscription to journal is held by your institution
# of references	30 million + +17000 records per week
Countries	90+
Content	<ul> <li>Bibliographic records with citations, abstracts and indexing derived from biomedical articles in peer reviewed journals.</li> <li>Conference Abstracts.</li> <li>Especially strong in its coverage of drug and pharmaceutical research, pharmacology and toxicology.</li> </ul>
Search Options	■Subject headings (EMTREE) and subheadings, AND, OR, limit by date, type of publication, age group, etc. ■Subheadings, Keywords, Truncation using *, Adjacency







# Why search in PsycINFO via OVID?

- > The topic is a psychological, social, behavioral, or health sciences topic.
- The database includes material of relevance to psychologists and professionals in related fields such as psychiatry, management, business, education, social science, neuroscience, law, medicine, and social work.
- > Key concepts map easily to subject headings
  - You can easily combine the terms using AND & OR



# What is PsycINFO via OVID?

Producer	American Psychological Association (APA)
Coverage & Updating	1806 to present, updated bi-weekly Almost 2500 journals indexed
Full text	Available if subscription to journal is held by your institution
# of references	4,727,543
Languages	29 languages
Content	■Journal articles ■Books (Book records—3% of PsycINFO; Book chapter records—8% of PsycINFO) ■Dissertations (12% of PsycINFO)
Search Options	■Subject headings (Thesaurus of Psychological Index Terms) and subheadings, AND, OR, limit by date, type of publication, age group, etc. ■Subheadings, Keywords, Truncation using *, Adjacency



3. Background Knowledge for Searching the Literature



#### Scenario

- > Your patient an 18 year old man who has suffered a severe concussion during Football practice.
- > You would like to verify what kind of vocational rehabilitation program could help him with his return to university.

Where would you search? How would you search?



# Anatomy of a Well Built Clinical Question

Patient, Population, or Problem) Whom is the question about?

(Intervention or exposure) What intervention are you considering in the patient or population? Define

(Comparison) If necessary, define what you are comparing your intervention or exposure to.

Outcome) Define your desired outcome

> Try putting your question into a PICO Format



# **EXAMPLE:** Foreground question

Question: You are looking for literature on vocational rehabilitation programs to help young adult patients with severer concussions return to school.

Population (youth with severe concussions)

Intervention (vocational rehabilitation)

Comparison /

Outcome (return to school)

Where to search for an answer: In biomedical databases (like MEDLINE)



# Identifying Key Concepts without PICO

Look at your question. Remove all extra words:

You are looking for literature on vocational rehabilitation programs to help young adult patients with severe concussions return to school.



You are looking for literature on vocational rehabilitation programs to help young adult patients with severe concussions return to school.



# Keywords

- > Keywords are words that appear in the record.
- > They are usually words in the title or abstract of the article and are in the authors vocabulary.
- > You will only find your keyword if it is in the article's record exactly as you have entered it (exact spelling, no plural, no synonyms...).
- > You can use truncation \* (example: cancer\*=cancer, cancers, cancerous, etc.)
- In most databases you can search for keywords by using the Textword field or by searching "ALL fields".

#### **Examples of Keywords:**

Cancer, Cancers, Cancerous, Tumor, Tumour, Tumors, Tumours, Carcinoma, Sarcoma, Neoplasm, Neoplasms, Neoplastic (...)





# Subject Headings

- > Subject headings are controlled vocabularies used to index contents in different databases.
- Each Biomedical Database has it's own Subject Headings.
- Subject Headings are organized into trees (hierarchically)
- ➤ MeSH is the name of the controlled vocabulary used in MEDLINE.
- MEDLINE articles are indexed with MeSH by librarians at the National Library of Medicine in the US.
- > Emtree is the name of the controlled vocabulary used in EMBASE.
- The Thesaurus of Psychological Index Terms is the name of the controlled vocabulary used in PsycINFO
- ➤ If the indexing is perfect, when you search a subject heading, you will find all the articles about this topic.

**Example of MeSH:** Neoplasms





Which should I use?



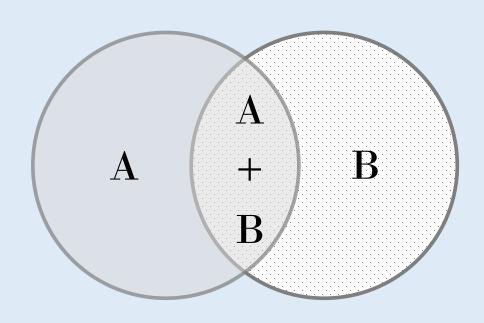
#### **BOTH**



- > Searching using only Subject headings is not ideal:
  - Indexing is never perfect as it usually done by humans.
  - There may not be a subject heading for your concept.
    Example: Concepts like "72 hours" or a very rare disease may not have a corresponding subject heading.
- > Searching using only keywords is more imprecise.
- > Searching using subject headings and keywords together works like building blocks:
  - Take one concept at a time and build your search.
  - Searching with both subject headings and keywords will give you the best chance of getting as many relevant results as possible without having too many irrelevant results.



#### BOOLEAN OPERATORS



Use Boolean operators to combine your concepts (Subject headings/keywords)

**AND** = A+B (both concepts must be included - use to build your final search, based on the PICO if you have one)

OR = A, A+B, B (either of selected concepts are included - use to combine Subject heading/keyword synonyms)

**NOT** = A only (use to see what has been excluded from one search combination compared



## SEARCH ALGORITHM FOR BIOMEDICAL DATABASES

Subject Heading

OR

Keyword

AND

Subject Heading

OR

Keyword

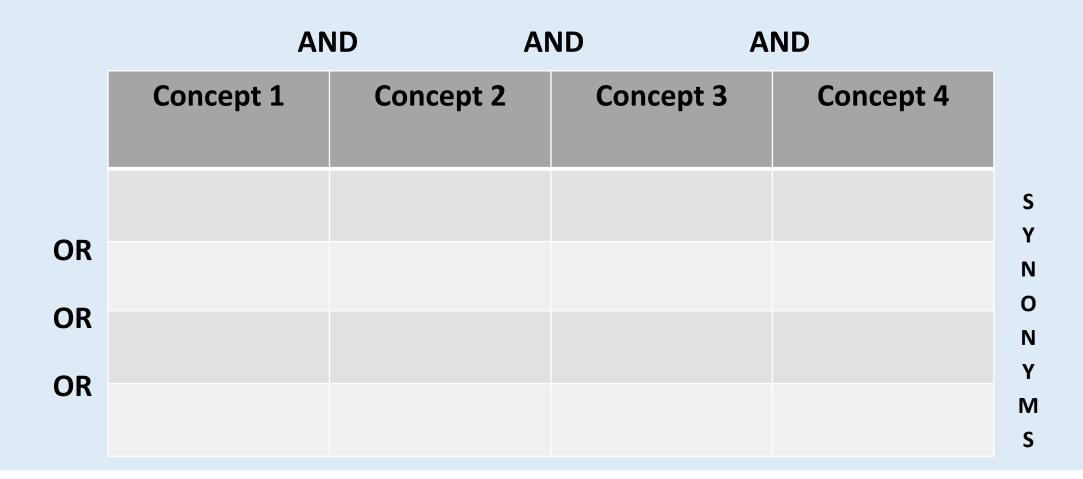


Results





## Concept Map







## EXAMPLE: Concept Map

#### **AND**

	Concept 1	Concept 2	
\D	Concussion	Vocational Rehabilitation	S Y N
)R )R	Brain Concussion	Vocational Rehabilitation Program	O N Y
			M S



# 4. Searching OVID Databases: Example of MEDLINE



## Map Term to Subject Headings

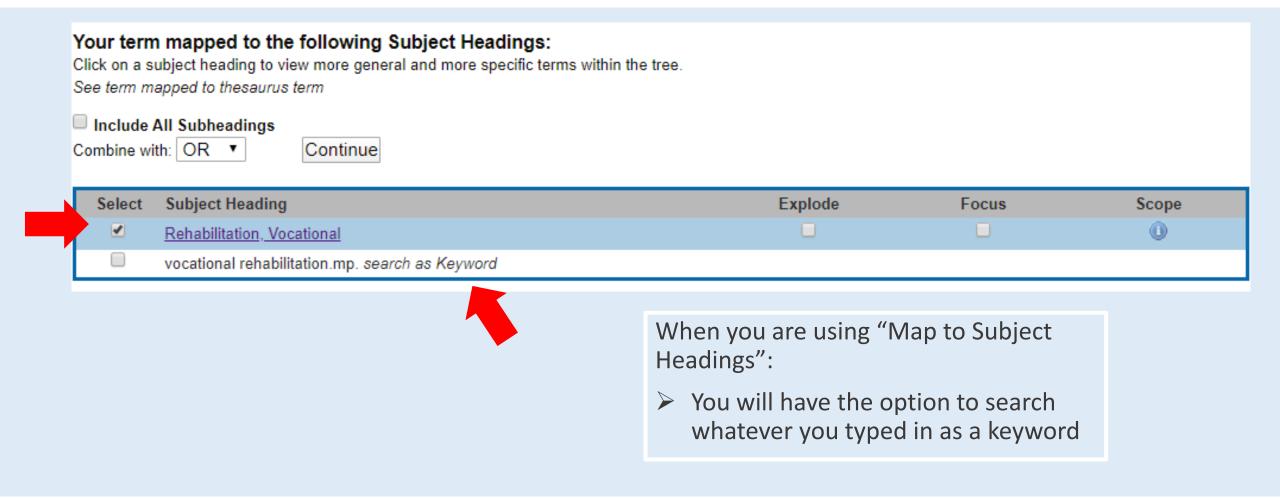
- Use keywords to "map" to Subject headings
- In other words...
  - 1. You type in your keyword: "vocational rehabilitation" and click on Search
  - 2. Database suggests the best Subject Heading: Rehabilitation, Vocational







## SUBJECT HEADINGS & KEYWORDS







## Explode, Focus, & Scope

Select	Subject Heading	Explode	Focus	Scope
•	Rehabilitation, Vocational			0
	vocational rehabilitation.mp. search as Keyword			

- Explode: click this box if you want to include in the search all the concepts that are narrower (this will expand your search)
- Click on the Subject heading to see where it falls on the tree
- Focus: click this box if you want to find only articles in which the indexer has designated this subject heading as being a major concept in the article (this will limit your search)
- Scope: click here to view the scope note.
- You should do this if you want to determine if a subject heading is the right one for your search (or which proposed subject heading is most appropriate)

Scope Note for: Rehabilitation, Vocational

MeSH HEADING: REHABILITATION, VOCATIONAL

SCOPE: Training of the mentally or physically disat

YEAR of ENTRY: 67(66)

#### REFERENCES: See Related:

EMPLOYMENT SHELTERED WORKSHOPS

#### Used For:

rehabilitation, vocational rehabilitations, vocational vocational rehabilitation vocational rehabilitations





## Using the Search History

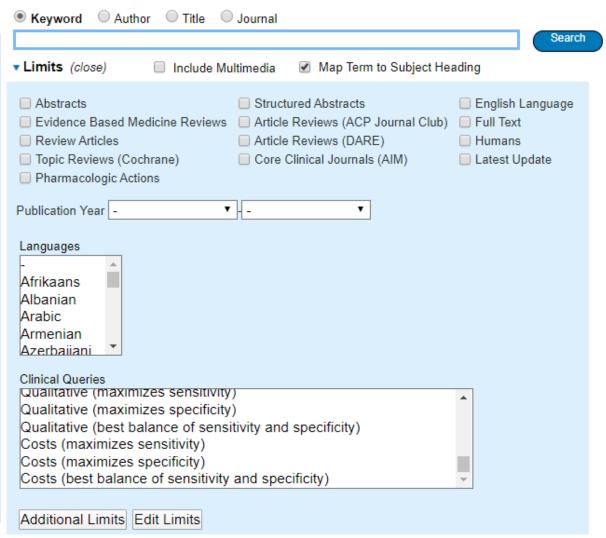


The order searched in





## Refining the Search

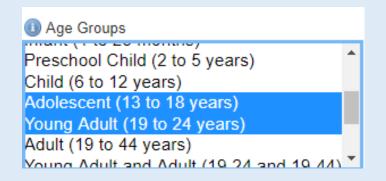


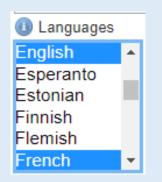
- > Situated below the search bar
- Click on "Additional Limits" to see more possible Limits

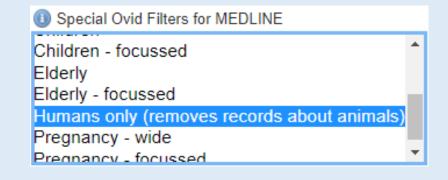


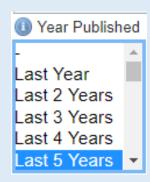


## Refining the Search - Continued









In our example we could refine our search as follows:

- > Age Groups: Adolescent & Young Adult
- ➤ Language: English & French
- Special OVID Filters for MEDLINE: "Humans Only"
- Limit to: Last 5 years (= Publication date 2015 to 2020)





What to do when you are stuck?



## Broadening the Search

Question: You are looking for literature on vocational rehabilitation programs to help young adult patients with traumatic brain injuries return to school / work.

**P**opulation (youth with traumatic brain injuries)

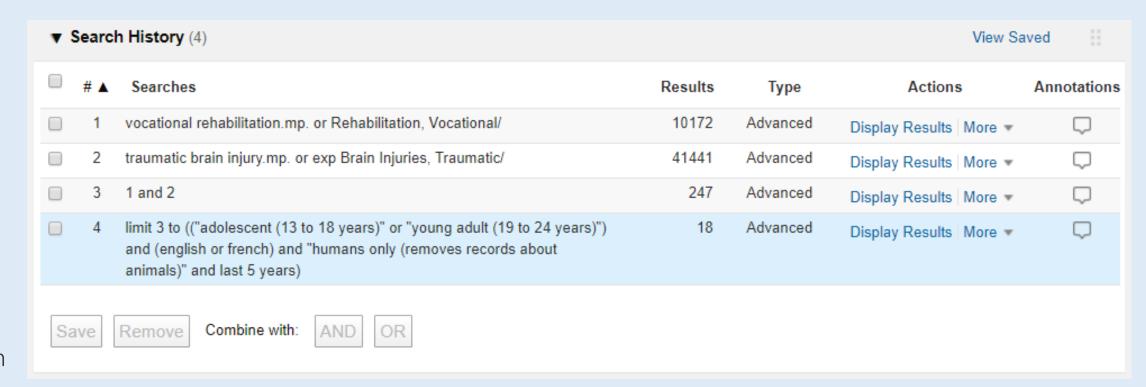
Intervention (vocational rehabilitation)

Comparison /

Outcome (return to school / work)



## Broadening the Search



The order searched in





## If you find a relevant article use it as a lead to find more

- Look at the subject headings used to index the article reformulate your search
- Find synonyms in the title or abstract
- > Snowball:
  - Use the "Find Similar" function in OVID



- Look at the references
- > Try another database
- Try to learn more about the topic and use the same vocabulary as researchers in the subject area
- > This is an iterative process



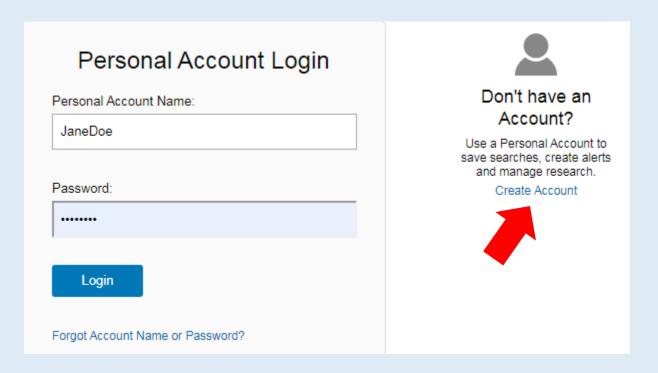


# Personal OVID Account



## Create a Personal Account for OVID Databases

- > To save your searches
- To set up search alerts to stay informed of the latest developments on topics of particular interest to you
- Click on my account to login or to create an account for the first time
- ➤ If you are creating an account for the first time, click on "Create account" on the login page













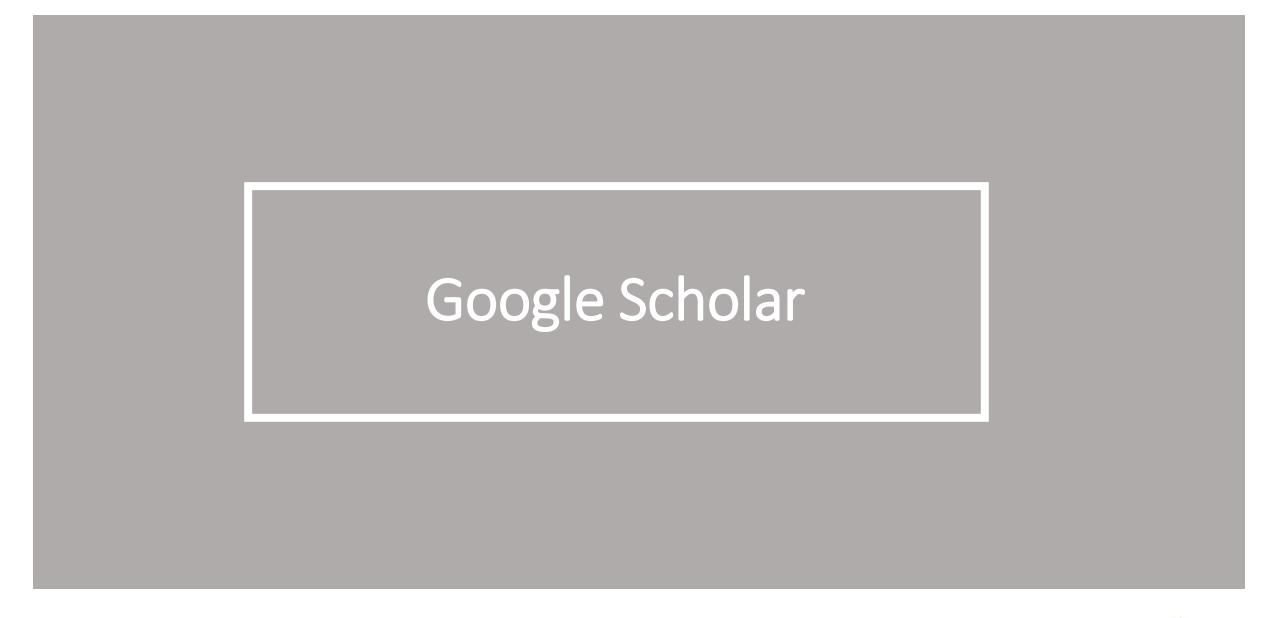
## Steps to locate Full Text

#### @CIUSSS locations other than JGH:

- Check if the full text is in OVID
- Check if the full text is in CINAHL
- Check if the full text is open access:
  - in Google Scholar (by pasting the title of the article into the Google scholar search box), or
  - using the chrome extension Unpaywall (more information in the following slides)
- > Request an Interlibrary Loan:
  - Send and email to David Farley Chevrier @ <u>david.farley-chevrier.clethb@ssss.gouv.qc.ca</u>









## Look Up Your Article to Find Open Access Full Text

Note: copy paste your title into the search bar or type it in





## Google Scholar - Continued

1) Verify that the article that comes up corresponds to the article you are looking for (same title, authors, publication year, journal...)

- 2) If Google can find the full text for free on a [pdf] or [html] link will appear beside the article
- 3) If relevant, click on the link beside the article to obtain the full text

2&3



[PDF] uclan.ac.uk

Early, specialist vocational rehabilitation to facilitate return to work after traumatic brain injury: the FRESH feasibility RCT

K Radford, CJ Sutton, T Sach, J Holmes... - Health technology ..., 2018 - clok.uclan.ac.uk Background Up to 160,000 people incur traumatic brain injury (TBI) each year in the UK. TBI can have profound effects on many areas of human functioning, including participation in work. There is limited evidence of the clinical effectiveness and cost-effectiveness of vocational rehabilitation (VR) after injury to promote early return to work (RTW) following TBI. Objective To assess the feasibility of a definitive, multicentre, randomised controlled trial (RCT) of the clinical effectiveness and cost-effectiveness of early, specialist VR plus usual ...

DD Cited by 4 Related articles All 21 versions №



### Versions of an article

Sometimes if no link shows up beside the Article in Google Scholar, if you check other versions of the article you may be able to find a link to full text.

#### Early, specialist vocational rehabilitation to facilitate return to work after traumatic brain injury: the FRESH feasibility RCT

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☆ 99 Cited by 4 Related articles All 21 versions >>>



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☆ 99 Cited by 4 Related articles >>

#### [нтмь] Early, specialist vocational rehabilitation to facilitate return to work after traumatic brain injury: the FRESH feasibility RCT

K Radford, C Sutton, T Sach, J Holmes, C Watkins... - 2018 - ncbi.nlm.nih.gov
Background: Up to 160,000 people incur traumatic brain injury (TBI) each year in the UK. TBI
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TBI can have profound effects on many areas of human functioning, including participation in work. There is limited evidence of the clinical effectiveness and cost-effectiveness of ...

#### [PDF] Early, specialist vocational rehabilitation to facilitate return to work after traumatic brain injury: the FRESH feasibility RCT

UK Aylesbury - Health Technology Assessment, 2018 - pdfs.semanticscholar.org
Background Up to 160,000 people incur traumatic brain injury (TBI) each year in the UK,
resulting in cognitive, social and psychological problems that interfere with daily activities,
including the ability to work. This has a significant societal impact in terms of lost productivity ...
99

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#### Chrome Extensions

- For helping you find legal full text of articles: <a href="Unpaywall">Unpaywall</a>
- > On a journal article page (from a journal site or PubMed amongst other places):
  - Adds a grey closed lock symbol to the right scroll bar of your webpage if the article is not in the unpaywall database
  - Adds a green open lock symbol to the right scroll bar of your webpage if the article is freely and legally available from the unpaywall database
  - If you click on the green open lock symbol it will take you directly to the full text







6. Reminder & References



#### REMINDER

**SAYING YOU DON'T NEED A LIBRARIAN BECAUSE YOU HAVE** THE INTERNET IS LIKE **SAYING YOU DON'T NEED A MATH TEACHER BECAUSE** YOU HAVE A CALCULATOR.



#### REMINDER

➤ A Librarian is available to provide one-on-one instruction and help:

@ JGH: Kendra Johnston, 514 340 8222 x22453
kendra.johnston.ccomtl@ssss.gouv.qc.ca
@Constance Lethbridge: David Farley Chevrier, 514 487 1891 x220
david.farley-chevrier.clethb@ssss.gouv.qc.ca

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- 3. Straus, S. E., Glasziou, P., Richardson, W. S., & Haynes, R. B. (2018). Evidence-Based Medicine E-Book: How to Practice and Teach EBM. Elsevier Health Sciences.
- 4. Guyatt, G., Rennie, D., Meade, M., & Cook, D. (Eds.). (2002). Users' guides to the medical literature: a manual for evidence-based clinical practice (Vol. 706). Chicago: AMA press.
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# THANK YOU



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