

Postgraduate Medical Education academic half-day: Searching for literature using library resources

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Libraries and Cultural Resources

2024-2025

The University of Calgary, located in the heart of Southern Alberta, both acknowledges and pays tribute to the traditional territories of the peoples of Treaty 7, which include the Blackfoot Confederacy (comprised of the Siksika, the Piikani, and the Kainai First Nations), the Tsuut'ina First Nation, and the Stoney Nakoda (including Chiniki, Bearspaw, and Goodstoney First Nations). The City of Calgary is also home to the Métis Nation of Alberta (Districts 5 and 6).





agenda



UCALGARY LIBRARY WEBSITE

PREDATORY PUBLISHERS

DATABASES, RESEARCH
QUESTIONS + PICO

OVID MEDLINE

SYSTEMATIC REVIEWS:
a brief intro

Library website & getting set up

Libraries & Cultural Resources

Chat, catalogue, interlibrary loan, databases <https://library.ucalgary.ca>

Sage Research Methods

Qualitative research guidebooks <https://methods-sagepub-com.ezproxy.lib.ucalgary.ca>

Research Guides

All-in-one-Medicine-guide <https://libguides.ucalgary.ca/medicine>

Scholar's Toolkit <https://libguides.ucalgary.ca/guides/toolkit>

Covidence

Screen title/abstract/full text papers <https://app.covidence.org/organizations/Q4VXa/signup>

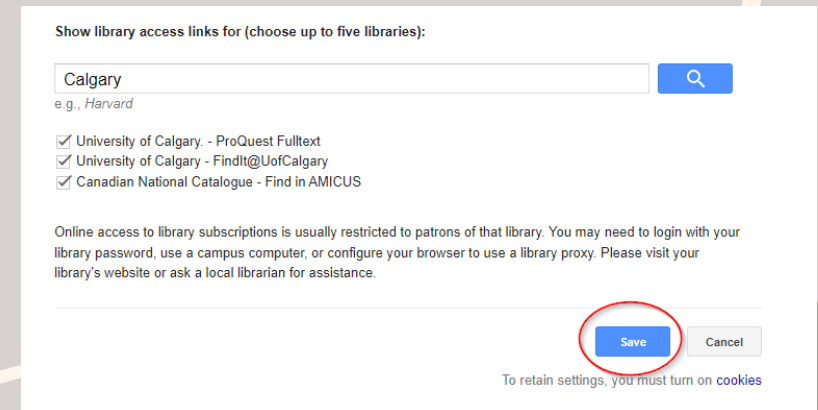
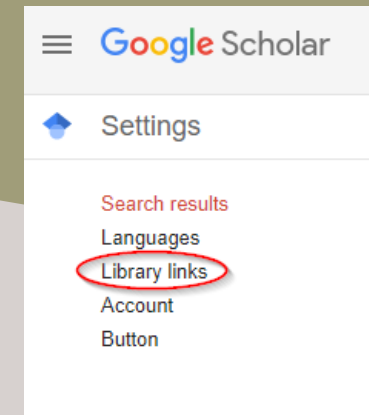
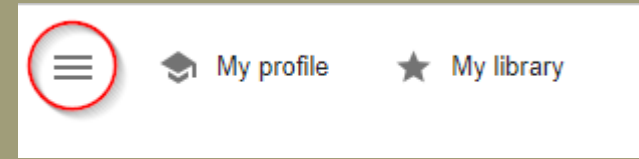
Citation Manager

Zotero <http://libguides.uvic.ca/zotero>

Endnote <https://libguides.ucalgary.ca/guides/endnote>

Google Scholar & Paywalls

1. Top left icon
2. Click on Settings
3. Click on Library Links
4. Type in Calgary and select both UCalgary options
5. Save
6. Repeat if you clear your history & cache



Predatory Publishing

DEFINITION

"Predatory journals and publishers are entities that prioritize self-interest at the expense of scholarship and are characterized by false or misleading information, deviation from best editorial and publication practices, a lack of transparency, and/or the use of aggressive and indiscriminate solicitation practices."
(Grudniewicz et al., 2019)

CONFERENCES & PUBLICATIONS

- <https://libguides.ucalgary.ca/guides/scholarlycommunication/predatory>
- <https://eos.org/opinions/the-alarming-rise-of-predatory-conferences>

OBSERVATION EXERCISE

- Social Theory & Health
- International Journal of Neurobiology

What am I looking at?

LIBRARY CATALOGUE

Where the (e)books are; good for finding a *known* article title, book title, journal title, database name

ARTICLES

The results from your database search. Articles are published within journals. Can be peer-reviewed or non-peer reviewed, and classified as opinions, editorials, research, review, letters etc.

JOURNALS

Academic publications with a topic/subject of focus. These are indexed in a database but are not the results of a search.

OPEN ACCESS

Online dissemination practice of materials that removes cost and other access barriers

<https://libguides.ucalgary.ca/guides/scholarlycommunication/oafund>

Databases

Where we go to conduct our search to find articles

PEER REVIEW

Academic check and balance process. Use Ulrichsweb to search for journal titles to see if a title is peer-reviewed.

<https://ulrichsweb-serialsolutions-com.ezproxy.lib.ucalgary.ca/>

Tips for selecting databases

SEARCH SEVERAL DATABASES

- No database indexes all literature on a topic
- Overlap between databases is to be expected

CONSIDER DATABASE COVERAGE

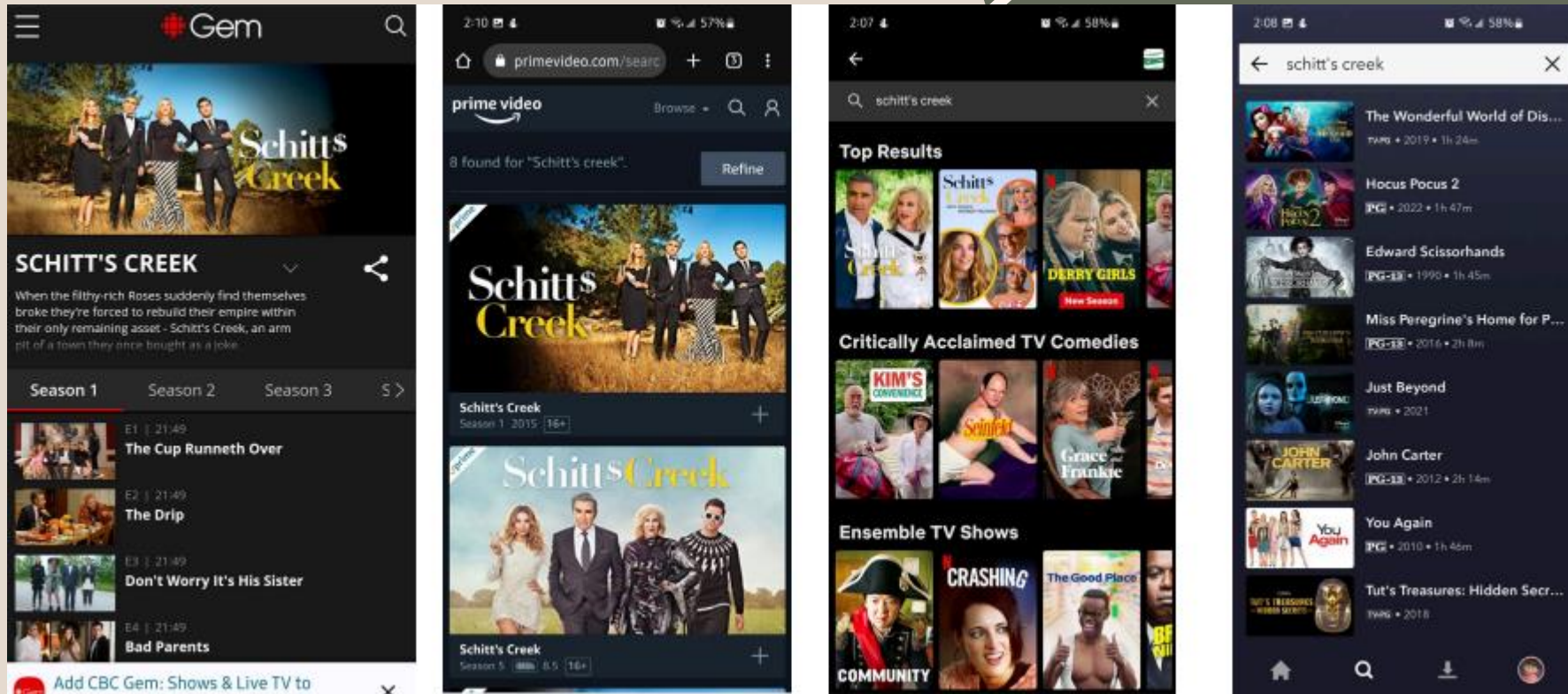
- Academic disciplines (read the About section on a publisher website)
- Types of documents (journals, conference proceedings)
- Publication dates, geographical location

SUGGESTIONS

- Medline
- Embase
- Cochrane Library (trials and reviews)
- CINAHL (nursing/public health)
- Web of Science (interdisciplinary)
- Scopus (interdisciplinary)
- APA Psycinfo (psychiatry/psychology/mental health)

Academic databases are like streaming services

- Most require a paid subscription (UCalgary Library)
- Lots of options
- Some are subject specific, others are general



The Searching Process

Establish a topic of inquiry

What literature do you need to familiarize yourself with? **Find seed papers!**

Be aware of established science, emerging topics, changing practice when determining if the juice is worth the squeeze.

Re-frame it as an answerable question

This is essential, as screening the literature is easier if you can go back to your research question and ask yourself, does this paper address my question, or is it merely related or completely off-topic?

Identify concepts and search terms

PICO: **Patient/problem, Intervention/exposure, Comparison, Outcome**

Focus on identifying distinct concepts if PICO doesn't work. What would the ideal article have within it to be helpful to you?

Locate sources and search

Choose databases/grey literature (content that isn't traditionally academically published) and create your search, choosing one source to build your master search before going to other databases (this will likely take a couple tries) **Keep a file open to record your searches (text, not screenshot)**

Export and synthesize

Send your results to Covidence or a citation manager

When writing a literature review, you're identifying themes and connecting your position to what the literature supports or doesn't support (negative results are important).

Boolean Operators (AND, OR, NOT)

Searching for literature is a little like ordering a pizza.

You don't (typically!) tell Dominos that you want "any pizza", you place an order with the toppings you want to eat.

For example:

- If you want a vegetarian pizza, and are flexible with the toppings, you must accept a pizza with green peppers **OR** onion **OR** olives **OR** mushrooms
- If you want a ham and pineapple pizza, you order ham **AND** pineapple. This means you expect both toppings on the pizza. If you put ham **OR** pineapple, you might receive a pizza with only ham, only pineapple, or both.
- If you want pizza that has pepperoni and bell peppers, you would expect: pepperoni **AND** ("green peppers" **OR** "red peppers").
- In database searching, ORs are typically synonyms and expands the results due to the flexibility of what can be retrieved
- The more ANDs you add, the harder the database must work to find articles with your requirements

Academic databases process commands. We are writing a script (computer science lite) so that it can spit out the results from the command we've given it. Some are smart (like Google Scholar and Pubmed) and do some background algorithmic work to anticipate what you're looking for. Others, like Medline, use only your strategy as written out. Both have benefits and applications where they are most advantageous.

Medical Subject Headings vs Key Terms: A Food Label Analogy

- Medical Subject Headings (MeSH) are added to papers indexed in Medline and Pubmed
- Subject Headings are added to almost every article in other databases (Embase calls theirs “Emtree”, others, “thesaurus”)
 - These are controlled
 - Think of them like the official words on an ingredient list
- Keywords/key terms are essentially “free text”
 - Think about the last time you had to quickly scan/read a pdf...



Supplemented Food Facts Info-aliment supplémenté

Per 1 pack (30 g)
pour 1 paquet (30 g)

	% Daily Value* % valeur quotidienne*
Calories 120	
Fat / Lipides 5 g	7 %
Saturated / saturés 2.5 g	13 %
+ Trans / trans 0 g	
Carbohydrate / Glucides 12 g	
Fibre / Fibres 6 g	21 %
Sugars / Sucres 2 g	2 %
Protein / Protéines 8 g	
Cholesterol / Cholestérol 0 mg	
Sodium 130 mg	6 %
Potassium 100 mg	3 %
Calcium 50 mg	4 %
Iron / Fer 2 mg	11 %

*5% or less is a little, 15% or more is a lot
*5 % ou moins c'est peu, 15 % ou plus c'est beaucoup

Supplemented with / Supplémenté en[†]

Caffeine / Caféine 55 mg

[†] Includes naturally occurring and supplemental amounts
[†] Comprend les quantités naturelles et supplémentées

Ingredients: Soy protein isolate, Chicory root fibre, Unsweetened chocolate, Vegetable glycerin, Cocoa butter, Dates (dates, rice flour), Almonds, Pumpkin seeds, Natural flavour, Tapioca starch, Cocoa powder, Soy lecithin, Gluten-free oats, Sunflower oil blend (sunflower oil, mixed tocopherols, rosemary extract), Sea salt, Green tea extract.

Contains: Soy, Almonds. **May contain:** Peanuts, Other tree nuts, Sesame, Milk, Egg.

Ingrédients: Isolat de protéine de soya, Fibre de racine de chicorée, Chocolat non sucré, Glycérine végétale, Beurre de cacao, Dattes (dattes, farine de riz), Amandes, Graines de citrouille, Arômes naturels, Amidon de tapioca, Poudre de cacao, Lécithine de soya, Avoine sans gluten, Mélange d'huile de tournesol (huile de tournesol, mélange de tocophérols, extrait de romarin), Sel de mer, Extrait de thé vert.

Contient : Soya, Amandes. **Peut contenir:** Arachides, Autre noix, Sésame, Lait, Oeuf.

MADE IN CANADA FROM IMPORTED AND DOMESTIC INGREDIENTS FOR:
/ FABRIQUÉ AU CANADA À PARTIR
D'INGRÉDIENTS IMPORTÉS ET CANADIENS POUR:
WELLNESS NATURAL INC., 3163 Winston Churchill Blvd,
PO Box 26012, Mississauga, ON, Canada, L5L 5S0
©2024 Wellness Natural Inc.



Database	Controlled Vocabulary	Common Keyword Fieldcodes
Medline Ovid Database Guide	MeSH (Medical Subject Headings) Example: “trauma” maps to: exp "Wounds and Injuries"/	.tw,kf = title/abstract/author supplied keywords (<i>recommended</i>) .ti = title only .ab = abstract only .mp = all fields (use sparingly) Trauma*.tw,kf
Embase Ovid Database Guide	Emtree Example: “trauma” maps to: exp injury/	.tw,kf = title/abstract/author supplied keywords (<i>recommended</i>) .ti = title only .ab = abstract only .mp = all fields (use sparingly) Trauma*.tw,kf
APA Psycinfo Ovid Database Guide	Subject Headings Example: “trauma” maps to: exp Trauma/	.tw,id = title/abstract/key concept (<i>recommended</i>) .ti = title only .ab = abstract only .mp = all fields (use sparingly) Trauma*.tw,id

Pediatrics

How does real-time ultrasound compare to standard radiograph in guiding placement of peripherally inserted central catheters in newborns?

P – newborn

I – real-time ultrasound

C – radiograph

O – Peripherally inserted central catheter placement

Ovid MEDLINE(R) ALL <1946 to October 17, 2023>

<https://ezproxy.lib.ucalgary.ca/login?url=https://ovidsp.ovid.com/ovidweb.cgi?T=JS&NEWS=N&PAGE=main&SHAREDSEARCHID=opN7XEfdteNAbbbTjW8NdQ51C2XkA0zrs8opbGhPryQ6TUuAh23LonpdJxZ6ek3e>

Ovid MEDLINE(R) ALL <1946 to October 17, 2024>

1	exp Infant/	1289703	
2	infant*.tw,kf.	528686	
3	exp Infant, Newborn/		694865
4	newborn*.tw,kf.		206991
5	neonat*.tw,kf.	333245	
6	preterm*.tw,kf.	102745	
7	premature*.tw,kf.		163774
8	1 or 2 or 3 or 4 or 5 or 6 or 7		1732589
9	exp Ultrasonography/	502018	
10	real-time ultrasound.tw,kf.	2822	
11	RTUS.tw,kf.	54	
12	9 or 10 or 11	502819	
13	exp Radiography/	1230755	
14	radiograph*.tw,kf.	287067	
15	13 or 14	1373572	
16	exp Catheterization, Peripheral/		13742
17	Peripherally inserted central catheter.tw,kf.		1413
18	PICC.tw,kf.	1924	
19	16 or 17 or 18	15007	
20	8 and 12 and 15 and 19		52

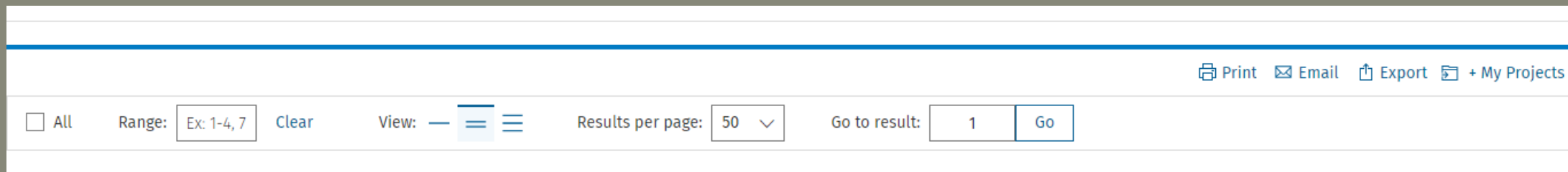
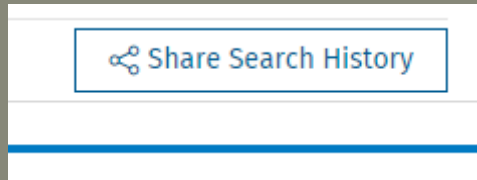
Quick Tips for OVID Databases

- Resist the urge to select multiple choices UNLESS you are certain they adhere to your eligibility criteria
 - It's easier to edit a search
 - Resist choosing your keyword.mp (that will bring back the word that shows up in anywhere in a document!)
- “Scope Note” provides a scope/definition
- “Explode” will included narrower terms present if you click on the term
- “Focus” means it the database will only bring back papers where the specific MeSH term has been identified as a main focus (there can be 3-15ish MeSH terms per paper)
- At the beginning of a search, I recommend researchers choose “Include all subheadings” but this is user discretion, and you can select only what you want
- Adjacency will find two concepts with any number of words to each other (adj2, adj10 etc)
- Truncation (denoted by the asterisk *) will replace suffix variances • Learn* (learn, learner, learned, learning)
- The question mark (?) will identify characters that may or may not be present in a word • P?ediatric

Saving, Sharing, Exporting

CREATE AN ACCOUNT AND SAVE YOUR WORK

- OVID will time out in 15 minutes of inactivity
- Consider using project management best practices (identify the database, the date and version of the search)



Systematic/Scoping Reviews

Assess the timeline

[ThingLink Scenario "Welcome!"](#)

Can take anywhere from 6 months to 2 years.

Determine the feasibility to learn the methodology, the database searching, citation management, analysis and writeup

Is an evidence synthesis needed?

Has there been a scoping or systematic review published on your topic in the past year or two?

Can you find exemplar seed papers addressing your research paper (is there enough out there to synthesize?)

Create a Teams site/Google doc for the entire project

Everyone on the project has access and can be added and removed.

Document should have sign-ins and passwords.

If you leave a project, re-assign logins to the PI

Resource & learning commitments

Projects need at least 2 members for title/abstract/full text screening.

Prepare to do the searching independently, as the citations are your dataset.

Prepare a project protocol

Upload to PROPSERO or BMJOpen

Upload to Ucalgary PRISM if doing a scoping review

The background features a light grey base with several abstract shapes: a large reddish-brown shape on the left, a large olive-green shape on the right, and a white outline of a leaf-like shape on the right. In the top left, there is a faint, grey illustration of a leafy branch.

thank you

Caitlin McClurg

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