FINDING INFORMATION USING THE MSU LIBRARIES

Andrea Kepsel
Health Sciences Educational Technology Librarian
AT THE END OF TODAY’S SESSION YOU WILL BE ABLE TO...

Know how to access the library resources you need or contact a librarian for help

Develop a search strategy to find information you need to answer your research question

Identify resources to search for literature related to your topic

Locate at least 3 items that can be used in your final presentation
INTRODUCTION TO THE MSU LIBRARIES
ABOUT THE MSU LIBRARIES

Over 6.5 million unique print and electronic titles

Includes more than:
- 1.5 million ebooks
- 235,000 maps
- 1 million multimedia titles, including movies and music

Over 80 librarians
- 6 members of the Health Sciences Group

Access items online from anywhere, at any time, using your MSU Net ID
GETTING HELP

Andrea Kepsel, MLIS, AHIP
Health Sciences Educational Technology Librarian
Liaison to the College of Veterinary Medicine, the Department of Animal Science, the Biomedical Laboratory Diagnostics Program, and the Department of Biomedical Engineering

Contact Andrea
Email: akepsel@msu.edu -- BEST WAY!!
Phone: (517) 884-0898
In-person, phone, or virtual consultations (contact for availability)
Reference librarians are able to help with your questions if Andrea is not available. Just be aware they may not be experts in the health sciences.

Ask A Librarian is available through:
- Email
- Phone
- In-Person
- Chat

[http://www.lib.msu.edu/contact/askalib](http://www.lib.msu.edu/contact/askalib)
DISTANCE LEARNING SERVICES

Helpline available 24 hours a day, 7 days a week
▪ (800) 500-1554 or (517) 355-2345
▪ reachout@msu.edu

DLS Services
▪ Troubleshoot connectivity or access problems
▪ Help access electronic resources
▪ D2L support
▪ Can answer basic library questions
The MSU Article Retrieval Service (MARS) provides electronic copies of journal articles and individual book chapters that are owned by the MSU Libraries but are only available in print.

http://www.lib.msu.edu/mars/
INTERLIBRARY LOAN

The MSU Libraries offers Interlibrary Loan (ILL) services to get the items you need that we don’t own…free of charge

Never pay for the full text of articles!

More information is available on the Get It @MSU page

http://www.lib.msu.edu/about/ils
SEARCHING TIPS & TRICKS
BEFORE YOU BEGIN SEARCHING

What is the question you are trying to answer?

What are the important keywords or terms? Are there similar terms to include?

Do you have any limits to your results?
  - Examples include language, publication date, type of study

What type(s) of resource(s) do you hope to find?
  - The resources you are looking for will determine where you search

What alternatives will you consider if these resources do not exist?
  - Searches will evolve and adapt depending on what resources you find
SEARCH TECHNIQUES

Truncation *
Quotation Marks “…”
Search Connectors (AND, OR, NOT)
Limits/Filters

These basic techniques can be used in most databases
More than one technique can be used at a time
Best to start with a broad search using truncation, quotation marks, and search connectors, than apply filters to narrow your results
TRUNCATION

A symbol that searches for words with multiple word endings
* is the most popular

Examples:
- Gene* = gene, genes, genetic, genetics, genetically
- Ethic* = ethic, ethics, ethical, ethically
QUOTATION MARKS

Putting words in quotation marks “…” searches for the words as an exact phrase.

Exact phrase searching means words will be searched together exactly how they are entered (spelling matters!)

Example:
- “genetic engineering” vs. genetic engineering
SEARCH CONNECTORS

AND, OR, NOT

Used to connect the various keywords of your search statement

AND narrows your search

OR broadens your search

NOT excludes words from your search

Can be combined with parentheses to indicate which terms to search together

- Similar to math, what is inside the parentheses will be searched first
- Example: (genetic AND engineering) AND ethics
SEARCH CONNECTORS

Genetic **AND** Engineering
All terms/phrases must be present

Genetic **OR** Engineering
Only one of the terms/phrases must be present

Genetic **NOT** Engineering
The term/phrase connected by NOT will be excluded
Most databases allow you to limit your results based on different criteria

Common limits include:

- Language (English)
- Publication Date
- Peer Reviewed: limits to content from peer-reviewed sources (may not mean the item itself is peer-reviewed)
- Publication Type: Reviews are a good place to start – they provide an in-depth overview of the existing literature on a topic and usually cite many other sources
KEEP IN MIND . . .

Start broadly and use the techniques discussed to narrow your results
- It is possible to add too many criteria and end up with no results
- Make changes one step at a time so you can see how your results change

Don’t be afraid to play around with your search strategy and see what the results look like before committing to a search
- Searches will change depending on the information you find

When searching multiple databases try and keep your search as consistent as possible in each

If you find one article you may be able to use it to find others
- Look for "Related Citations" or “Similar Research”
- Read the abstract or review the subject headings for related keywords
ACTIVITY #1  Practice building a search strategy.
WHAT IS THE MECHANISM AND ASSOCIATED TOLERANCE OF NEURONAL CELL INJURY THAT RESULT FROM VARYING MAGNITUDES AND DURATIONS OF OVERPRESSURE EXPOSURE?

Using the search techniques we discussed, build a search strategy to use in databases to search for articles on this topic.

Consider:

- Keywords, alternate spellings, related topics, etc.
- Truncation or quotation marks
- Search connectors (AND, OR, NOT)
- Limits/Filters

Add your search strategy to the virtual wall at https://padlet.com/akepsel/activity1
WHAT IS THE MECHANISM AND ASSOCIATED TOLERANCE OF NEURONAL CELL INJURY THAT RESULT FROM VARYING MAGNITUDES AND DURATIONS OF OVERPRESSURE EXPOSURE?

Important Keywords:
- Neuronal, cell injury, overpressure exposure

Additional Keywords:
- Neuron, neurons, injury, blast, pressure, traumatic brain injury

Search strategies:
- neuron* AND (“cell injury” AND overpressure)
- neuron* AND blast AND “traumatic brain injury”

Limits:
- English, review articles, published in the last 5 years
ACTIVITY #2

Use the worksheet to build a search strategy for answering your research question.
DEVELOP A SEARCH STRATEGY FOR YOUR TOPIC

Complete the worksheet to develop a search strategy for your topic.

The worksheet is available on the guide at http://bit.ly/530handout
WHERE TO SEARCH
IMPORTANT RESOURCES

Summer Research Program Library Guide
http://libguides.lib.msu.edu/CVMSummerResearch

Health Sciences Digital Library
http://www.lib.msu.edu/health
TYPES OF RESOURCES AVAILABLE ON THE GUIDE

Background Knowledge
Laboratory Protocols
Databases
Writing & Citing
WHAT YOU CAN EXPECT TO FIND IN BACKGROUND KNOWLEDGE

Encyclopedias & Dictionaries

Good for:
- Comprehensive overview of a topic
- Definitions of complex terminology
- In-depth reference lists (encyclopédias)

Resource Highlight: Encyclopedia of Life Sciences
WHAT YOU CAN EXPECT TO FIND IN LABORATORY PROTOCOLS

Protocols from handbooks
Peer-reviewed journals specifically for protocols
Videos

Good for:
- Step-by-step instructions
- Protocol comparison

Resource Highlight: JoVE
WHAT YOU CAN EXPECT TO FIND
IN... DATABASES

PubMed, Web of Science, Google Scholar

Good for:
- Journal articles and conference proceedings
- Background material on your specific research question
- Review articles are a good place to start

Resource Highlight: PubMed
WHAT YOU CAN EXPECT TO FIND IN... WRITING & CITING

Citation Resources

Guide to Writing in the Medical Sciences

Good for:
- Resources for writing a scientific paper
- Learning about citation management tools
- Citation style guides

Resource Highlight: Guide to Writing in the Medical Sciences
GETTING FULL TEXT ARTICLES

Look for the buttons:  

Check the A to Z Electronic Journal List  
http://libguides.lib.msu.edu/eresources/ejournals

Search the MSU Libraries catalog https://lib.msu.edu/health/index/  
- Enter NAME OF JOURNAL  
- Look for journal in the left column of results

Place a MARS or ILL request https://lib.msu.edu/ils/
A WORD ABOUT GOOGLE SCHOLAR...

What is it?
- Broad search of scholarly literature (the “academic” side of Google)
- Covers many disciplines and sources; more than just articles

How is it different from databases?
- Databases such as PubMed are human-curated, subject-specific, and have structured data input
- Google Scholar is computer-generated, not limited by subject, and lacks a standardized structure for inputting information

Google Scholar can enhance a search when used alongside databases and other library resources, but it should not be the only place you look.
ACTIVITY #3

Take a minute to identify the type of information you need and where you think you will find it.
WHERE DO YOU PLAN TO SEARCH FOR INFORMATION ON YOUR TOPIC?

Please complete the poll at https://pollev.com/andreakepsel096
MANAGING YOUR SEARCH

How do you keep track of all your “stuff”? 

KEEPING TRACK OF EVERYTHING

When you are searching the literature you will be gathering lots of different types of information

This includes…

- The search strategies you are using
- Where you are searching
- The number of results
- Articles to read
- Citations

How do you stay organized?
Search Strategies

Spreadsheets are my favorite way to start
- Create columns for database searched, keywords used, filters applied, # of results, date searched, and titles of articles selected

Alternatives: Word document, notebook

Many databases allow you to create a free account and save successful searches
- My NCBI in PubMed
- Can set up an alert to notify you when new results are added to a search
CITATIONS

Can mark article citations and ‘save’ to a temporary location while searching

- Will only keep them while actively using the database

A personal account in many databases will allow you to save citations long term

Email

- Some databases include links directly to the article information in the message

Spreadsheet or Word Document

- Copy citation information, but not the link that appears in your browser search bar

Citation Management Software

- EndNote, Mendeley, Papers, Zotero
- Recommend trying one or more out
ARTICLES

Full text articles can be downloaded as PDFs directly from the databases.

Save PDFs to a single location on your computer, cloud drive, or USB drive.

Give PDFs a meaningful name when saving:
- download.pdf
- 1-s2.0-S0014482715001937-main.pdf
- blood brain barrier as target in TBI treatment.pdf

Always a good idea to have a backup location for storing files.
ACTIVITY #4

Search 2-3 resources and locate at least one item from each that you can use for answering your research question.
BEGIN SEARCHING FOR INFORMATION

Use the search strategy you developed earlier to start looking for information in the databases and other resources.

Search 2-3 resources, including at least one database (PubMed or Web of Science)

As you search, please complete the spreadsheet available at http://bit.ly/530activity4

- Each person should use one row on the spreadsheet
- Complete the information in each of the columns to compare results from each resource you search
DID YOU FIND AT LEAST 1 ITEM THAT HELPS ANSWER YOUR RESEARCH QUESTION? 2 ITEMS? 3?
FEEDBACK ON TODAY’S SESSION

Please complete the short evaluation at http://bit.ly/530feedback
QUESTIONS?

I will remain in this room until just before noon for questions and individual help if needed.

Please remember you may contact me any time with questions at akepsel@msu.edu.