OVERVIEW

- Research Guides
- Review tips on accessing UBC Library resources and using Summon
- Demonstrate structured searching in Medline Ovid
  - PICO, search terms, combining, limits, accessing fulltext
- RefWorks
- Quick look at Pubmed
- Questions
## EXAMPLE OF STRUCTURED SEARCH

<table>
<thead>
<tr>
<th></th>
<th>Search Term</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Osteoarthritis, Knee/</td>
<td>11638</td>
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<tr>
<td>2</td>
<td>knee osteoarthritis.mp.</td>
<td>11711</td>
</tr>
<tr>
<td>3</td>
<td>1 or 2 [P knee osteoarthritis]</td>
<td>11711</td>
</tr>
<tr>
<td>4</td>
<td>exp Exercise/</td>
<td>127443</td>
</tr>
<tr>
<td>5</td>
<td>exp Exercise Therapy/</td>
<td>32377</td>
</tr>
<tr>
<td>6</td>
<td>Exercise Movement techniques/ or Tai Ji/ or Yoga/</td>
<td>2687</td>
</tr>
<tr>
<td>7</td>
<td>exercis*.mp.</td>
<td>270080</td>
</tr>
<tr>
<td>8</td>
<td>4 or 5 or 6 or 7 [I Exercise]</td>
<td>307668</td>
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<tr>
<td>9</td>
<td>3 and 8 [Knee OA and exercise]</td>
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<tr>
<td>10</td>
<td>Pain/</td>
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<tr>
<td>11</td>
<td>pain.mp.</td>
<td>506195</td>
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<tr>
<td>12</td>
<td>10 or 11 [O Pain]</td>
<td>506195</td>
</tr>
<tr>
<td>13</td>
<td>9 and 12 [OA and Exercise and Pain]</td>
<td>749</td>
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<tr>
<td>14</td>
<td>Limit 13 to &quot;All Aged (65 and over)&quot;</td>
<td>499</td>
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<tr>
<td>15</td>
<td>Limit 14 to &quot;Review Articles&quot;</td>
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</table>
PICO FRAMEWORK

Use PICO to help break down your question into distinct concepts that you can then build into a search strategy

P  **Patient / population / problem** (who or what eg. ailment, population)

I  **Intervention / exposure** (treatment, test, procedure, medication, or illness or injury if studying the effects of an illness on a population)

C  **Comparison** (there aren’t always multiple alternatives, or you might be looking at something vs. nothing)

O  **Outcome** (the outcome you’re looking at might be to relieve or eliminate symptoms, prevent recurrence, lower mortality, find a correct diagnosis)
IDENTIFY YOUR SEARCH TERMS

What evidence has been published about whether the use of Wii improves balance in children with acquired brain injury?

USING THE PICO FRAMEWORK

Among (P) does (I) or (C) effect (O)

Among children with acquired brain injuries does the use of Wii improve balance?
ACCESS TO DATABASES

UBC Library homepage

- www.library.ubc.ca then Indexes and Databases

Research Guides

- Rehabilitation Sciences
- Physical Therapy
- Occupational Science and Occupational Therapy
**Database record**
The complete set of information about an item arranged in fields. In an article index the fields include citation details such as title, author, date as well as additional information such as abstract, subject headings, date added etc.

**Example from Medline OvidSP:**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
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<tbody>
<tr>
<td>Record Owner</td>
<td>From MEDLINE, a database of the U.S. National Library of Medicine.</td>
</tr>
<tr>
<td>Status</td>
<td>MEDLINE</td>
</tr>
<tr>
<td>Authors</td>
<td>Lindquist IS, Engstrom M, Richardson B</td>
</tr>
<tr>
<td>Authors Full Name</td>
<td>Lindquist, Ingrid, Ingardt, Margareta, Richardson, Barbara</td>
</tr>
<tr>
<td>Institution</td>
<td>Department of Neurobiology, Care Sciences and Society, Division of Physiotherapy, Karolinska Institutet, Stockholm, Sweden. <a href="mailto:Ingrid.Lindquist@ki.se">Ingrid.Lindquist@ki.se</a></td>
</tr>
<tr>
<td>Title</td>
<td>Learning to be a physiotherapist: a metasynthesis of qualitative studies.</td>
</tr>
<tr>
<td>NLM Journal Name</td>
<td>Physiotherapy research international : the journal for researchers and clinicians in physical therapy</td>
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<td>Publishing Model</td>
<td>Journal available in: Print</td>
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<td>NLM Journal Code</td>
<td>91-73922, ees</td>
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<td>Journal Subset</td>
<td>IJW</td>
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<td>Country of Publication</td>
<td>United States</td>
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</table>

**MeSH Subject Headings**
- Allied Health Personnel / ed. [Education]
- Attitude Of Health Personnel
- Cohort Studies
- Human
- Longitudinal Studies
- Physical Therapy [Specialties] / ed. [Education]

**Abstract**
BACKGROUND AND PURPOSE: The health system is increasingly engaging in a wider concept of health which includes lifestyle conditions and well-being as well as disease. This challenges physiotherapy educators to take an active role in preparing students for modern healthcare. Few studies have explored the experience of learning to be a physiotherapist from the student perspective to help illuminate the learning process. The aim of this study was to gain a higher level of theoretical understanding of the biographical process of students' learning to be a physiotherapist across the curriculum.
CITATION MANAGEMENT USING REFWORKS

• Save your references and PDFs
• Organize into folders and subfolders
• Annotate PDFs
• Share your folders (within UBC)
• Automates in-text citations and Bibliography/Reference page

• Find RefWorks using Library Website search
• Select New RefWorks to set up an account
CONTEXT: SEARCH FLOW PROCESS

1. Define Topic
2. Identify Main Concepts
3. Choose Databases(s)
4. Build Search Strategy
5. Run Search Strategy
6. Analyze Results

- Search terms
  - Keywords
  - Subject Headings
  - Truncation
  - Boolean Logic
  - Limits

- Take a note of the subject headings

Decision:
- Can I build a better search strategy?
  - Yes
  - No

- Get articles
TIPS FOR BUILDING A SEARCH STRATEGY IN STEPS

1. Search each concept separately using
   • Subject headings
   • Keywords

2. Combine
   • Related terms (e.g. all P concepts) with OR
   • Different elements (e.g. P & I) with AND

3. Limit according to
   • Person criteria: Age, gender, ethnicity
   • Publication criteria: Date, Language, Study Type

4. Review and Refine

5. Save search history
TIPS TO IMPROVE SEARCH & BE EFFICIENT:

- Use PICO to stay structured and logical
- “Reverse engineering” for more MeSH, subject headings
- Use the thesaurii tools:
  - Trees and Scope notes
- Check the Boolean logic
- Reference chasing
ADDITIONAL DATABASES

CINAHL (EBSCO):

• Covers nursing and allied health from 1982 to present. The database has over 1,250,000 records.
• Indexes 2700+ journals, as well as selected books, pamphlets, and dissertations
• Subject headings

EMBASE (also on Ovid)

• International (more European-focused) biomedical database
• 5,000 + journals from 70 countries
• Strengths in drug-related and rehabilitation sciences subjects

Research Guide has many more resources!
Questions?