Stop Googling!
How Preceptor Resources Can Help Answer Your Questions

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“What people actually refer to as research nowadays is really just Googling.”

-Dermot Mulroney
Objectives

• Identify how to access the available drug information resources through the Christy Houston Foundation Drug Information Center.

• Recognize the unique characteristics of available resources to determine which resource to use to answer questions.

• Locate the available journal club handout and PowerPoint templates.
Where can I access the resources?

http://belmont.libguides.com/preceptors
How do I obtain access?

Need a username and password?

Contact Adam Stout:

adam.stout@belmont.edu
Let see how well you know the resources…

Join at Kahoot.it

Enter Game PIN: 7879817
What resources are available?

Online Databases/Resources:
- AHFS Drug Information
- Clinicaltrials.gov
- Lexi-Comp
- Medical Letter
- Pillbox
- REMS@FDA
- STAT!Ref
- TOXNET

Package Inserts:
- DailyMed
- Drugs@FDA

“Color” Books:
- Green Book
- Orange Book
- Pink Book
- Purple Book
- Yellow Book

Mobile Applications:
- Drugs@FDA Express
- FDA Drug Shortages
- FDA NDC Directory
- FDA Orange Book

Finding Journal Articles:
- MEDLINE
- IPA
- Interlibrary Loan

Templates:
- Journal Club Handout
- Journal Club Presentation

Updates from the FDA:
- MedWatch Safety Alerts
- Press Releases
- Tainted Products that are Marketed as Dietary Supplements

FROM HERE TO ANYWHERE
AHFS Drug Information

• Collection of drug monographs
• Comprehensive evidence-based source of drug information including:
  – Therapeutic guidelines
  – Off-label uses
• Categorizes drugs using a pharmacologic therapeutic classification system
• Available on Stat!Ref and Lexicomp
ClinicalTrials.gov

• Database of privately and publically funded clinical studies
• Published by the National Library of Medicine

Searchable by:
- Condition or disease
- Specific drug
- Location of the study

Filter by:
- Recruitment status
- Eligibility criteria
- Study type
- Study results
- Study phase
- Funder type
Lexi-Comp

• Includes FDA-approved and off-label uses
• Has pronunciation feature

Organizes results into databases:
- Lexi-Drugs
- Pediatric Lexi-Drugs
- Geriatric Lexi-Drugs
- AHFS DI
- Lab Tests and Diagnostic Procedures
- Lexi-Tox
- Briggs Drugs in Pregnancy and Lactation
- Natural Products Database

Available Tools:
- Drug Interaction Checker
- Drug ID
- Calculators
- Trissel’s IV Compatibility
- Drug Reports
- Patient Education
- Lexi-Tox

FROM HERE TO ANYWHERE
Medical Letter

- Nonprofit organization that publishes critical appraisals of new prescription drugs and comparative reviews of drugs for common diseases
  - Available drug information is reliable, objective, and unbiased
- The newsletter is entitled: *The Medical Letter on Drugs and Therapeutics*
  - Does not accept advertising in the publications
Pillbox

- Free medication identification tool
- Published by the National Library of Medicine

**Can Identify by Searching:**
- Imprint
- Shape
- Color
- Size
- Score

**Can Search for a Drug by:**
- Drug Name
- Inactive Ingredient
- Label Author
- DEA Schedule
- Product Code
• Searchable database to find approved Risk Evaluation and Mitigation Strategy (REMS)
A collection of medical ebooks related to both nursing and pharmacy

- AHFS Drug Information
- Devita Cancer: Principles and Practice of Oncology
- Handbook on Injectable Drugs
- Laboratory Tests and Diagnostic Procedures
- Merck Manual
- The Review of Natural Products
- Scientific American Medicine
- Modern Toxicology
- The Washington Manual of Medical Therapeutics
TOXNET

- Resource for searching databases on toxicology, hazardous chemicals, environmental health, and toxic releases
- Published by the National Library of Medicine
DailyMed

- Searchable online database of manufacturer package inserts including OTC, brand, and generic medications
- Maintained by the National Library of Medicine
- Includes both human and animal drugs
- Only FDA-approved products / indications
- Available online; downloadable PDF
Drugs@FDA

• Provides information on:
  – FDA Drug Approvals
    - Manufacturer
    - Dosage Forms
    - Dates
    - Submission Classification
    - Review Priority
    - Drug Approval Package
  – Drug Labels
### “Color” Books

<table>
<thead>
<tr>
<th>Title</th>
<th>Publisher</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Book</td>
<td>FDA</td>
<td>Approved animal drug products</td>
</tr>
<tr>
<td>Orange Book</td>
<td>FDA</td>
<td>Generic drug availability</td>
</tr>
<tr>
<td>Pink Book</td>
<td>CDC</td>
<td>Vaccine information and the disease they prevent</td>
</tr>
<tr>
<td>Purple Book</td>
<td>FDA</td>
<td>Biological products, including biosimilar and interchangeable biological products</td>
</tr>
<tr>
<td>Yellow Book</td>
<td>CDC</td>
<td>Health information for international travel</td>
</tr>
</tbody>
</table>
1. Select database

2. Build search using Boolean operators if applicable

3. Can search MEDLINE using MESH terms

**Database Recommendations:**

**General Medical Articles**
- CINAHL Complete
- CINAHL Plus with Full Text
- MEDLINE Complete

**Psychology Specialty**
- PsycARTICLES
- Psychology and Behavioral Sciences Collection
- PsycINFO

**AND**  **OR**  **NOT**

FROM HERE TO ANYWHERE
3. Set limits in each database based on desired results.

**Limits Recommendations:**
- **Review Article**
  - Meta Analysis
  - Review
  - Systematic Review
  - Practice Guidelines
  - Guideline

- **Guidelines**
  - Clinical Trial
  - Clinical Trial Phase I
  - Clinical Trial Phase II
  - Clinical Trial Phase III
  - Clinical Trial Phase IV
  - Controlled Clinical Trial
  - Randomized Clinical Trial

- **Based on Publication Type**
  - Clinical Trials:
    - Humans
    - Age
    - Special Interest

- **Additional Limits:**

**DO NOT LIMIT TO FULL TEXT**
4. Review articles in search results
   – PDF Full Text
   – Check Bunch Library for Full Text
   – Citation (AMA Format)

BUCOP Citation Guide
https://belmont.libguides.com/pharmacy/pharmacycitationguide
Can’t Find the Full Text?

Bunch Library Interlibrary Loan (ILLiad)

First Time Users - Click here to create your Username & Password.
IPA
(International Pharmaceutical Abstracts)

- Pharmacy journals
- Abstracts of presentations at major pharmacy meetings
- Articles dated: 1970 to present
- Search using KEYWORDS
## Journal Club Instructions

**Advanced Pharmacy Practice Experience**

<table>
<thead>
<tr>
<th>Section</th>
<th>Summary</th>
<th>Critique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title/Citation</td>
<td>Include the article citation according to the AMA Manual of Style</td>
<td>Is the journal affiliated with an organization or sponsor(s)? If so, what? Is it peer-reviewed? What is the journal's reputation? What is the impact factor of the journal? (be sure to compare the impact factor to a well-known journal such as the New England Journal of Medicine) What are the credentials of the authors (academic degrees, board certification, and discipline of study/practice)? Did the authors and/or investigators disclose any conflicts of interest? Do the title and abstract accurately reflect the article content and allocation of subjects? If not, why? Explain?</td>
</tr>
<tr>
<td>Background/Funding Source</td>
<td>Identify the source of funding</td>
<td>After reviewing disease states, medication(s), and any other area of the article with which you may be unfamiliar, respond to the following questions: State whether or not the author's background/introduction is accurate, balanced, objective, and evidence-based. Justify your statement(s). Did the investigators provide a sufficient rationale for conducting the study? Why or why not?</td>
</tr>
<tr>
<td>Study Objective</td>
<td>State the study objective</td>
<td>State whether or not the study objective was clear, concise, and/or testable Is the stated objective or hypothesis consistent with the research question that needed to be addressed? In general, were the study methods clearly explained? Could the study be replicated?</td>
</tr>
<tr>
<td>Study Design</td>
<td>State the type of study design that best describes the article/trial</td>
<td>Was this the appropriate type of study design to answer the study question? How could the study results be strengthened or weakened by this study design? Justify your answers. Randomization/Blinding: Were appropriate steps taken with respect to randomization and blinding? Were these steps appropriate? Were specific randomization techniques used included in the article (i.e. random number table, computer random number generator, etc)? Were specific blinding techniques used included in the article (i.e. identical tables, distribution of medications were conducted in a central location, etc)? If blinding was not present in the study, do you feel the investigators could judge the outcome appropriately without being blinded? Would the results of this study be biased due to the lack of blinding?</td>
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### Article Title

**Students Names**

### Background / Funding Source

- **Funding:** Identify the source of funding
- **Background:**
  - State whether or not the author's background/introduction is accurate, balanced, objective, and evidence-based. Justify your statement(s). Did the investigators provide a sufficient rationale for conducting the study? Why or why not?

### Study Objective

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  - State whether or not the study objective was clear, concise, and/or testable. Is the stated objective or hypothesis consistent with the research question that needed to be addressed?

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### Study Subjects

- Induction Criteria
  - Provide a bulleted list of the specific criteria
- Ejection Criteria
  - Provide a bulleted list of the specific criteria
- If there is a list of criteria, type in the most important, and ignore the others. Be sure to check the supplementary notes (if applicable) for additional criteria.
Quick Reference Tool for Pharmacists

Available electronically on the Pharmacy Preceptor Page
Have a Drug Information Question?

Email: druginfo@belmont.edu
Phone: 615-460-8382
Monday – Friday
8:00am – 4:30pm
(Closed Weekends and Holidays)
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