Introduction to the Health Sciences Library System

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Support for the Health Sciences

- Dental Medicine
- Medicine
- Nursing
- Pharmacy
- Public Health
- Health and Rehabilitation
- UPMC (resources/residents & fellows)
Agenda

- Services
- Regional Medical Library
- Molecular Biology
- Unique Tools
- Data Catalog

HSLS
Research and Instruction Services
Liaisons

- Curriculum committees
- Course-integrated instruction
- Specialized instruction
  - Data management
  - Scholarly Publishing
- Student orientations
- Research and search assistance
- Advanced searching
  - Co-investigators on systematic review publications and grant-funded projects
- Secondary faculty appointments
  - Dental Medicine
  - Nursing
  - Public Health
  - CTSI (Medicine)
HSLS FlashClasses

- [http://www.hsls.pitt.edu/flashclass/descriptions_main](http://www.hsls.pitt.edu/flashclass/descriptions_main)
- Open to entire Pitt community and UPMC residents/fellows

**Literature Searching**
- Painless PubMed
- Trim Your Search: Focusing PubMed
- Best Behavior: Searching Behavioral Health Resources

**Data Management**
- Crafting a Data Management Plan
- Data Visualization for Beginners
- Electronic Lab Notebooks: Intro to LabArchives
- Future Proof your Data: Planning for Reuse
- Locating and Citing Research Data
- You Do WHAT with Your Data?

**Instructional and Visual Design**
- Free Images and More and How to Cite Them
- Infographics: Sharing Information Visually
- PechaKucha Basics for Presentations
- Presentation Zen: Effective Visuals and Design
- Advanced PowerPoint for Presentations
- PowerPoint for Conference Posters

**Author’s Toolkit**
- Copyright and Fair Use in Education
- Journal Matchmakers: Deciding Where to Publish
- ORCID Author IDs: Boost Your Discoverability
- Showcasing Your Research Impact

**Citation Management**
- EndNote Basics
- Mendeley Basics
- Advanced EndNote: Savvier Management

**Special Topics**
- Getting Systematic About Systematic Reviews
- Box Basics
- Create it Yourself With 3D Printing
- Searching for Dollars: Grant Seeking for Funds
Advanced Searching Services

• What is a systematic review?
  • A scientific investigation that focuses on a specific question and uses explicit, planned scientific methods to identify, select, assess, and summarize the findings of similar but separate studies...*

• Last year:
  • 43 projects at some stage
  • Co-authorship on 12 publications
    • First time authorship in JAMA

*Taken from 2008 report: Knowing What Works in Health Care: A Roadmap for the Nation, the Institute of Medicine (IOM)
IACUC Support

Replace
Replace animal studies with other methods

Reduce
As many trials as required, as few as possible

Refine
Minimize stress of study animals

3R

History of Medicine

• Over 10,000 rare books and special collections supporting research in historical aspects of health professions

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**History of Medicine: Featured Book**

**Myographia nova**

Browne, John, 1642-approximately 1700
Myographia nova, or, A description of all the muscles in humane body, as they arise in dissection.
New York : Editions Medicina Rara, 1971
Falk Library Call Number: q QM21 8882 (1697) 1971

Myographia nova written by the surgeon of the king Charles II, John Browne originally appeared in 1681 under the title A Complete Treatise of the Muscles. It was a very popular book though its originality was questioned. It plagiarized William Molins' *Mysokotomia* and copied plates from *Tabulae anatomicae* by Gulio Casseri. After Browne met with criticism, he changed slightly the text and published it in 1697 as *Myographia nova*. (More information available from the entry at The Magistrer Medico-Historical Library).

Setting aside the original or "borrowed" question, Browne’s work has fantastic illustrations which show well in this limited edition facsimile.
HSLS Data Catalog
What is a Data Catalog?

• A **discovery tool** to highlight and aggregate data created at the University; whether the data is:
  • openly available from a repository such as Zenado
  • available with restrictions for download on a laboratory web site
  • only available on a lab server
• Each dataset is curated and described in detail with rich metadata to increase findability and usefulness by researches
• The catalog may or may not provide direct access to the data it describes
• Different than d-scholarship
Benefits of a Data Catalog

• **Low-barrier** way for researchers to share information about their data

• Fewer obstacles/barriers in comparison to depositing data in a repository

• Increase the local and global visibility of research data generated at Pitt

• Facilitate collaboration across university departments and institutes and with researchers outside of Pitt

• Record of institutional/departmental activity
National Partnership w/ Academic Health Sciences Libraries

• Code developed by New York University (NYU) Health Sciences Library

• HSLS received a small amount of start-up funding from the National Library of Medicine (NLM)

• Participating research institutions: NYU, Pitt, Univ of Maryland, and in discussions w/ others

• NLM’s strategic plan to make data findable and accessible

Quote from NYU project team:
“work with other institutions so that they too can create catalogs for datasets relevant to their researchers. If others implement the Data Catalog’s code, it would facilitate the creation of a cross-institutional data catalog that would enable greater data discovery through federated searching”

MolBio Information Service
Bioinformatics Service @ Health Sciences Libraries

1994: University of Washington
2002: University of Pittsburgh

2006 ...

University of Florida, Gainesville
Washington University, St. Louis
Northwestern University, Chicago
University of Southern California, LA
University of California, San Francisco
Harvard University
University of Rochester
MolBio Information Service

- Software Licensing
- Bioinformatics Training Workshops
- Consultations
- Web Tools
19 Commercial Software Packages
Fall 2017 MolBio Info Service Training Workshops

- **Cancer Transcriptome Sequence (RNA-Seq) Analysis:** CLC Genomics Workbench
  - September 6th
  - November 1st

- **RNA-Seq Analysis:** CLC Genomics Workbench
  - October 11th
  - December 6th

- **Literature Mining:** InfoBoosters, Molecular Databases, & F1000Workspace
  - September 13th

- **Genome Navigation:** UCSC Genome Browser
  - September 20th

- **Pathway Visualization:** ePath3D, ChemDraw, & Cytoscape
  - October 18th

- **Variant Detection & Analysis:** CLC Genomics, Ingenuity Variant Analysis, & more
  - October 4th

- **Pathway Analysis:** NIH DAVID, IPA, KPA, & more
  - November 29th

- **Gene Regulation:** TRANSFAC, ENCODE, & more
  - November 8th

- **Chromatin Profile (ChiP-Seq/ATAC-Seq) Analysis:** CLC Genomics Workbench
  - November 15th

- **Introduction to Unix for Running Command Line Bioinformatics Tools**
  - December 13th

**Wednesdays 1 – 4 pm**

Falk Library Classroom 2

to REGISTER & see descriptions: http://www.hsls.pitt.edu/calendar
"How To" Talks by Post Docs

Pitt Health Sciences Library System • 13 videos • 186 views • Last updated on Apr 7, 2017

"How-To Talks by Postdocs" are a collaboration between the HSLS Molecular Biology Information Service (MBIS), the Center for Postdoctoral Affairs in the Health Sciences, and any postdoc at the University of Pittsburgh conducting biomedical research... more

1. Using Mass Spec to Explore Small Molecules by Dr. Bushra Amin
   by Pitt Health Sciences Library System
   55:45

2. How To Create a Quality Scientific Poster by Dr. Itziar Pinilla Macua
   by Pitt Health Sciences Library System
   41:22

3. How to Assess Preclinical Stroke Models by Mohammad Iqbal H Bhuiyan, PhD
   by Pitt Health Sciences Library System
   37:05

4. A Molecular Cloning Primer by Dr. Caitlyn Barrett
   by Pitt Health Sciences Library System
   47:54

5. How to Edit a Genome Using CRISPR/Cas9 by Dr. Swapna Desai
   by Pitt Health Sciences Library System
   45:56

6. How to Purify Recombinant Proteins by Dr. Prerna Grover
   by Pitt Health Sciences Library System
   44:18
Unique Tools for Discovery developed by HSLS

• Federated search tool examples:
  • E-Book Full Text: keyword search of 1,000+ electronic books
  • search.bioPreprint: search preprint databases
  • search.DataJournals: searches full-text of open access data journals
HSLS Web Redesign
Regional Medical Library
National Network of Libraries of Medicine (NNLM)

• Funded by the National Library of Medicine through competitive 5-year grant
  • Component of NLM’s outreach program to reduce/eliminate health disparities
  • Promote access to and use of health information by health professionals and the public

• Coordinated through 8 Regional Medical Libraries (RML)
  • University of Pittsburgh: RML for the Middle Atlantic Region (DE, NY, NJ, PA)

• Supports collaboration, training, and funding opportunities for health information outreach
Examples of NNLM National Initiatives

• Public Libraries
• *All of Us*
• Substance Misuse
• Research Data Management
Clinical eCompanion

• Uses the same technology behind HSLS’ federated search tools to point primary care physicians to freely available and evidence-based information (clinical and patient education)