

# HSLS UPDATE



**April 2013** 

## <u>CLC Genomics Workbench—Analyze, Compare, and Visualize</u> Next Generation Sequencing Data

## Attention University of Pittsburgh and UPMC researchers:

The HSLS Molecular Biology Information Service is pleased to announce the availability of unlimited licenses for CLC Genomics Workbench (http://www.clcbio.com/products/clc-genomics-workbench) from CLC bio (http://www.clcbio.com). This resource is a comprehensive and user-friendly cross-platform desktop application for analyzing, comparing, and visualizing next generation sequencing (NGS) data. CLC Genomics Workbench supports not only genomics



analyses, but also transcriptomics, epigenomics, and classical sequence analyses. Funding for CLC Genomics Workbench is provided by the University of Pittsburgh's Institute for Personalized Medicine.

Product features (http://www.clcbio.com/desktop-applications/top-features) include:

- Resequencing (http://www.clcbio.com/desktop-applications/top-features/ #resequencing)
- Workflow (http://www.clcbio.com/desktop-applications/top-features/#workflow)
- Read Mapping (http://www.clcbio.com/desktop-applications/top-features/#read-mapping)
- De Novo Assembly (http://www.clcbio.com/desktop-applications/top-features/#denovo-assembly)
- Variant Detection (http://www.clcbio.com/desktop-applications/top-features/#variant-detection)
- RNA-Seq (http://www.clcbio.com/desktop-applications/top-features/#rna-seq)
- ChIP-Seq (http://www.clcbio.com/desktop-applications/top-features/#chip-seq)
- Trio Analysis (http://www.clcbio.com/desktop-applications/top-features/#trio-analysis)

#### Reasons to try CLC Genomics Workbench:

- 1. Available for Windows, Mac OS X, and Linux platforms
- 2. Supports all the major NGS platforms: SOLiD, Ion Torrent, Complete Genomics, 454, Illumina Genome Analyzer, and Sanger
- 3. User support:
  - CLC bio Tutorials (http://www.clcbio.com/index.php?id=649)

- clcbio.tv (http://www.clcbio.tv) (case stories and training Webinars)
- User Manual (http://www.clcbio.com/index.php?id=141)
- System Requirements (http://www.clcbio.com/support/system-requirements)

Please register (http://www.hsls.pitt.edu/molbio/clcgenomics/register) to receive instructions for accessing the software, as well as high performance computing options available with the HSLS MolBio Suite (http://www.hsls.pitt.edu/molbio) and the Center for Simulation and Modeling (http://www.sam.pitt.edu/resources/index.php). For more information, send an e-mail to Ask a MolBio Librarian (http://www.hsls.pitt.edu/molbio/askmolbio).

~ Carrie Iwema

# **Director's Reflections...Public Access News**

Those interested in scholarly communication and public access will be encouraged to learn about two important federal initiatives, one from Congress and one from the White House.

On the legislative front, our own Representative Mike Doyle is a cosponsor of the bipartisan Fair Access to Science and Technology Research Act (FASTR), introduced in the House as HR 708 and in the Senate as S 350. If passed, FASTR, based on the NIH Public Access Policy, would require government agencies with annual extramural research expenditures of more than \$100 million to make electronic manuscripts of peer-reviewed journal articles based on their research freely available on the Internet within six months of publication in a peer-reviewed journal. The manuscripts would be preserved in a digital archive maintained either by the agency or in another suitable repository that permits free public access, interoperability, and long-term preservation.



Barbara Epstein
HSLS Director

From the executive branch of government, the Office of Science and Technology Policy (OSTP) directed federal agencies with more than \$100 million in research and development spending to develop plans to make the published results of federally funded research freely available to the public within one year of publication, and to require researchers to better account for and manage the digital data resulting from federally funded scientific research.

Though there are substantive differences between these two initiatives, both have a common goal to increase public access to results of research funded by taxpayer dollars. The OSTP directive states that "wider availability of peer-reviewed publications and scientific data in digital formats will create innovative economic markets for services related to curation, preservation, analysis, and visualization....These policies will accelerate scientific breakthroughs and innovation, promote entrepreneurship, and enhance economic growth, and job creation."

For a more in-depth discussion of these issues, and links to the OSTP initiative and the FASTR legislation, please refer to the February 22, 2013, *Library Journal* article, "Administration Takes Faster Action on Access to Federally Funded Research" (http://tinyurl.com/aecmuuh).

## **UpToDate** R Launches New Dermatology Specialty

UpToDate® recently announced the addition of dermatology to its list of medical specialties. The dermatology editorial team has worked to expand and enhance the quality of the dermatology content in UpToDate®. The new content covers all the major areas of dermatology:



- Medical dermatology
- Pediatric dermatology
- Procedural dermatology

To view all the dermatology sections in UpToDate®, direct your browser to Contents: Dermatology (http://tinyurl.com/bmc3vea) on the UpToDate® Web site.

\*Parts of this article were reprinted from the UpToDate® Expert User Series (http:// www3.med.unipmn.it/intranet/uptodate/news/2013/uptodate\_dermatol\_1mar2013.html).

# **HSLS Librarian Participates as a Member of an International Systematic Review Team**

Reference Librarian Mary Lou Klem, PhD, recently attended a meeting in Geneva, Switzerland as a member of a research team developing a series of systematic reviews. The team, funded by the Brocher Foundation (http://www.brocher.ch/ en), is an interdisciplinary group of health care researchers from the United States and Europe, including faculty from the University of Pittsburgh School of Nursing; Northwestern University Feinberg School of Medicine; University of Basel Institute of Nursing Science; KU Leuven Center for Health Services and Nursing Research; Azienda Ospedaliero-Universitaria Pisana; Kantonsspital St. Gallen, Switzerland; and Hannover Medical School. The goal of the group is to complete a series of systematic reviews and meta-analyses examining the relationships between selected psychosocial factors and clinical outcomes after solid organ transplantation.



Invited to join the group shortly after its inception in December 2011, Klem oversaw the design and completion of a series of comprehensive literature searches in bibliographic databases such as PubMed and EMBASE. These searches produced the "raw data" (original research studies) that the group will use to complete the systematic reviews. At the January meeting, the group reviewed their progress to date, finalized a code book that will be used to extract critical information from studies found during the literature searches, and received training from team members Susan Sereika, PhD (http://www.nursing.pitt.edu/ faculty/facultydetail.jsp?primkey=ssereika) and Sandra Engberg, PhD, RN, CRNP, FAAN (http://www.nursing.pitt.edu/faculty/facultydetail.jsp?primkey=sje1) in the theory and practice of effect size calculation. An overview of the group's work to date will be presented in April 2013 at the Joint 3rd European Symposium of the International Transplant Nurses Society and 5th Congress of the Italian Society for Safety and Quality in Transplantation (http://www.itns.org/uploads/files/itns sisgt program.pdf).

For information on how HSLS librarians can assist you in the design and completion of a systematic review, please refer to the Systematic Review Support (http://hsls.libguides.com/content.php?pid=329837&sid=2707080) Web site or send an e-mail to Ask a Librarian (http://www.hsls.pitt.edu/askalibrarian).

~ Mary Lou Klem

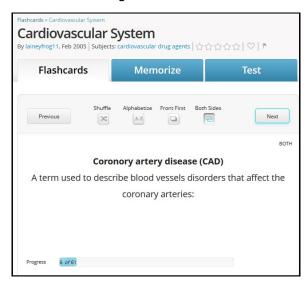
# **Cool Learning Tool: Flashcard Exchange**

Flashcard Exchange (http://www.flashcardexchange.com) is one of many free tools available to help you study. The idea is based on the principles of repetition and memorization.

You can create your own set of flashcards or use one of the many sets of flashcards made by other students.



There are 48 subject areas listed under the "Browse By Subject" Medical heading, including pharmacology, hematology, and USMLE. For any of these subject areas there are hundreds of flashcard sets available. Once you select a set of flashcards, you can view the front or back or both together. There is also a memorize and test feature with each set.



Keep in mind, however, that there is no one reviewing these flashcard sets. The flashcards are only as good as the students who developed them.

Flashcard Exchange has an app store (http://www.flashcardexchange.com/flashcards/apps) so you can use the flashcards on your iPhone, iPad, Android, Windows Phone, and Blackberry devices, allowing you to take your flashcards wherever you go. Now you can study on the bus, at lunch, or while you are waiting for an elevator!

~ Nancy Tannery

# <u>Treasures from the Rare Book Room: Bertuccio's Art of Medicine</u>

Little is known about Nicola Bertuccio (d. 1347), the author of the *Compendium sive* (ut vulgo inscribitur) Collectorium artis medicae, published in 1537. He was associated with the University of Bologna, a center in medieval Europe for the study of medicine, where dissection began to be practiced around 1300. Following the research of his teacher and predecessor, Mondino de Liuzzi, Bertuccio contributed to the revival of anatomical studies. His teachings attracted Guy de Chauliac, the author of a seminal work in surgery, *Inventarium sive Chirurgia Magna*, to come to Bologna to study surgical techniques.

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Though his life remains undocumented, his work has left a permanent mark on the study of medicine. Bertuccio was an authority in surgery, but in practice he preferred nonsurgical procedures. His most notable writing was a systematic collection of diseases and

treatments. For each ailment he discussed etiologic factors, gave the rational and empirical treatment, described the symptoms, and provided his prognosis for recovery. There is one chapter on anatomy which includes a description of the brain.

This work was very influential and remained in demand long after his death. In the 16th century, for example, four publications referred to it. Even today, it has ignited the interest of researchers and become a prime example of a treatise containing medical precautions for physician conduct.<sup>1</sup>

The copy in Falk Library has vellum binding covered with old Latin writing. It was a common practice of the past to reuse old manuscript pages for binding since vellum was expensive.

The exact provenance is not easy to establish, but the copy bears handwritten notes in Latin of an early owner, physician Johann Roland. At some point it belonged to a convent library in Vienna. It was acquired by the University of Pittsburgh Dental School Library in 1929. From there it was transferred to Falk Library.



The book can be viewed in the Rare Book Room by appointment (http://www.hsls.pitt.edu/about/libraries/falk/rarebook/contact).

1. Žalud, Zdeněk. "Velmi nám pomáhá, že naši mluvě nerozumějí: sugestivní a manipulativní prvky v chování středověkého lékaře" [It is very helpful that they do not understand our language: suggestive and manipulative elements in behavior of medieval physicians]. Kontakt 14, no. 4 (2012), 475-484, http://casopis-zsfju.zsf.jcu.cz/kontakt/administrace/clankyfile/20121214131342225654.pdf.

~ Gosia Fort

## **HSLS Staff News**

#### **News**

**Carrie Iwema**, Molecular Biology Service information specialist, earned Senior Member status in the Medical Library Association's (MLA) Academy of Health Information Professionals and was appointed to MLA's Continuing Education Committee for a three-year term.

#### **Presentations**

**Gosia Fort**, head of Digital Resource Development, presented "Medical and Scientific Medals in the Falk Library Collection," at The Western Pennsylvania Numismatic Society, in Pittsburgh, PA, on February 5, 2013.

**Melissa Ratajeski**, reference librarian, presented "Answering the 'Why Questions' of Research Data Management" (http://nnlm.gov/mar/training/boost\_recordings.html), as an NN/LM Middle Atlantic Region Boost Box Webinar on March 12, 2013.

## **Publications**

**Jonathon Erlen**, history of medicine librarian, served as a major contributor to *ISIS Current Bibliography of the History of Science and Its Cultural Influences 2011*. Chicago: University of Chicago Press, 2012.

**Charlie Wessel**, head of Research and Reference Initiatives, along with co-authors A.F. Chen¹ and N. Rao¹, published "Staphylococcus Aureus Screening and Decolonization in Orthopaedic Surgery and Reduction of Surgical Site Infections" (http://www.ncbi.nlm.nih.gov/pubmed/?term=23463284), in *Clinical Orthopaedics and Related Research*, 2013 Mar 6. Also acknowledged was HSLS reference librarian **Melissa Ratajeski** for her assistance with the bibliographic file management software.

1. Department of Orthopaedic Surgery, University of Pittsburgh.

# **HSLS Schedule of Classes April 2013**

HSLS offers classes on database searching, software applications such as Adobe Photoshop, bibliographic management, molecular biology and genetics, and library orientations. For more information, visit the online course descriptions (http://www.hsls.pitt.edu/class/desc).

Classes are held on the first floor of Falk Library (200 Scaife Hall) in Classroom 1 and on the upper floor of the library in Classroom 2. All classes are open to faculty, staff and students of the schools of the health sciences at the University of Pittsburgh. They are also open to UPMC residents and fellows.

No registration is required for any of these classes. Seating for classes is first-come, first-served, until the class is full. Classes marked with an asterisk (\*) qualify for American Medical Association Category 2 continuing education credit.

Class schedules are subject to change. Please consult the online class calendar (http://www.hsls.pitt.edu/calendar) for the most current information.

Faculty, staff and students of the schools of the health sciences will need a valid Pitt ID or e-mail account to attend these classes. UPMC residents/fellows will need to show their UPMC IDs.

#### **HSLS ORIENTATION**

## **Introduction to HSLS Resources and Services at Falk Library**

(Meet inside the Library's entrance)

Offered upon request to groups or individuals. Call 412-648-8866.

## **SEARCHING DATABASES**

Painless PubMed\* (Falk Library Classroom 1)

Friday, April 5 3:30-4:30 p.m.

Thursday, April 11 1-2 p.m.
Wednesday, April 17 9-10 a.m.
Tuesday, April 23 noon-1 p.m.

Focus on Behavioral Medicine: Searching in PsycINFO\* (Falk Library Classroom 1)

Thursday, April 4 10:30 a.m.-noon

#### **MOLECULAR BIOLOGY AND GENETICS RESOURCES**

**Pathway Analysis Tools 1\*** (Falk Library Classroom 2)

Wednesday, April 3 1-3 p.m.

Primer Design & Restriction Analysis\* (Falk Library Classroom 2)

Wednesday, April 10 1-3 p.m.

Pathway Analysis Tools 2\* (Falk Library Classroom 2)

Wednesday, April 17 1-3 p.m.

#### **SOFTWARE TRAINING**

**Adobe Photoshop** (Falk Library Classroom 2)

Tuesday, April 2 1-3 p.m.

**EndNote Basics** (Falk Library Classroom 2)

Friday, April 19 9-11 a.m.

**PowerPoint for Conference Posters** (Falk Library Classroom 2)

Monday, April 8 noon-2 p.m.

## **CUSTOMIZED CLASSES**

Customized classes (http://hsls.libguides.com/content.php?pid=329837&sid=2708887) can be developed for your department, course, or other group.