# Health Sciences Library System (HSLS)
## University of Pittsburgh
## www.hsls.pitt.edu

## Annual Report - FY 2005-2006
## (July 1, 2005 – June 30, 2006)

The Health Sciences Library System (HSLS) supports the educational, research, clinical, and service activities of the health sciences community of the University of Pittsburgh and the University of Pittsburgh Medical Center (UPMC) through development and provision of innovative information resources and services.

HSLS includes *Falk Library of the Health Sciences*, *Western Psychiatric Institute and Clinic (WPIC) Library*, the *James Frazer Hillman Health Sciences Library* and the *Hopwood Library: A Health Resource Center for Patients and Families* at UPMC Shadyside, and the *Blaxter Medical Library*, the *Family Resource Center*, and the *Moulis Children's Library* at Children's Hospital of Pittsburgh (CHP). The HSLS staff includes 26.6 FTE librarians, 38.9 FTE support and technical staff, and 6.3 FTE student assistants. The HSLS serves more than 55,000 primary clients, including health sciences faculty, staff, students, residents, and employees of UPMC hospitals.

The accomplishments and activities described in this Annual Report are organized in accordance with goals identified in the *HSLS Long Range Plan, 2006/07-2010/11*.

**GOAL 1: Acquire knowledge-based information resources in appropriate formats to meet the needs of the health sciences community at the University of Pittsburgh and the University of Pittsburgh Medical Center.**

HSLS continues to offer a premier collection of print and electronic resources and medical education technology to the community of HSLS users. The journal and serial literature is now available primarily in electronic format, with only about 500 titles available in print. The electronic journal collection now includes 3,943 titles, and electronic book holdings increased to nearly 4,300 titles.

Newly licensed electronic resources include:

- **X-Pharm** – a full-text database of pharmacology reference information about molecular targets, agents, related disorders and the principles that govern their interactions. Produced by Elsevier MDL.

- **Medical Letter on Drugs & Therapeutics** – peer-reviewed drug information focusing on topics such as mechanism of action, pharmacology, clinical studies, adverse effects, drug interactions, dosing and product pricing. Accompanying electronic resources include **Treatment Guidelines from The Medical Letter, Adverse Drug Interactions Program, Drugs of Choice, Handbook of Antimicrobial Therapy** and patient education brochures.

- **PathwayStudio** (formerly PathwayAssist) – interprets experimental high-throughput expression results in the context of pathways, gene regulation networks, and protein interaction maps. Software includes ResNet, a proprietary database of more than 1 million functional relationships automatically extracted from scientific literature. Produced by Ariadne Genomics.

- **Pathway Architect** – interprets experiment results in the context of pathways, gene regulation networks, and protein interaction maps. Using curated and automatically created databases, Pathway Architect identifies relationships among genes, small molecules, cell objects and processes; builds networks; and creates publication-quality pathway diagrams. Produced by Stratagene.

- **Ingenuity Pathways Analysis** - enables biologists and bioinformaticians to identify the biological mechanisms, pathways and functions most relevant to their experimental datasets or genes of interest.

- **Sequencher** – a DNA sequence analysis software package that facilitates analysis of complex sequence data, viewing DNA sequencing information and processing sequence data. Produced by Gene Codes Corporation.

- **Exam Master** -USMLE and board preparation and review tool that provides access to thousands of basic and clinical sciences questions. Individual passwords allow students to take practice exams and track their scores.

- **PsycBooks** – Includes full text of 600+ books published from 1806 to the present by the American Psychological Association (APA) and its publishing partners; 50 classic books in psychology dating from the early 19th century; 1,500+ entries from the APA/Oxford University Press *Encyclopedia of Psychology*.

- **Global Health** – includes the Public Health and Tropical Medicine database, and the human health and disease information from CAB Abstracts. Particular subject strength in medical entomology, human nutrition, vector control and medicinal plants.

- **www.antimicrobe.org** – content focusing on pathogens and antimicrobial agents

- **Cell Press** journal titles – complete backfiles to volume 1

Due to very low use and sufficient coverage by other resources, licenses for the Ovid databases **Sports Discus** and **MANTIS** (alternative medicine) were discontinued in January 2006.

**Site licensing of bioinformatics resources through the library** is a very cost effective way for the University to provide access to these essential tools in all research labs. For example, in the past year HSLS added several commercial software packages to its licensed bioinformatics tools collection, including Stratagene's Pathway Architect, and Ingenuity Pathways Analysis. The library paid $49,000 to acquire these two packages. Individual labs and research groups would be charged $5,000 (Pathway Architect) or $8,000 (Pathways Analysis) to purchase these packages just for their own researchers.

To date, there are at least 26 registered Pitt users of Pathway Architect and 32 users of Pathways Analysis.  Even if some of these users are in the same lab, it is clear that library-based site licensing has saved the University more than $200,000.

The past year began a significant change in how HSLS builds collections, with the establishment of a **comprehensive subject-based monograph approval plan** covering all four libraries, and a participatory librarian selectors group to provide coordinated collection building throughout HSLS.  While much of the work of setting up the new structure took place in 2006, the results will not be evident until 2007.

## GOAL 2: Provide effective access to local and remote information to meet the needs of a diverse user community.

HSLS maintains a strong local infrastructure to ensure that print and electronic resources are available and reliable.  A notable achievement this year is the introduction of a new **streamlined account registration process**, developed by the HSLS Information Technology department.  With a valid Pitt or UPMC e-mail address, users can now register for an account and use it within minutes to access library resources remotely or to use computers in any HSLS library.  Forgotten passwords can be retrieved instantly by clicking on the "Forgot Password?" link on any log-in page.

The account system's simple design masks an underlying complexity that places each account in an appropriate group based on the user's affiliation and location.  The system includes a data feed of all UPMC employees, a Vivisimo search of the University's "Find People at Pitt" system, and a database table of fellows and residents.  A complex algorithm was developed to check each of these data sources to identify names and emails as well as other keywords.  In addition to the account sign-up tools, an account administration system for library staff was created.  The system underwent rigorous quality assurance and usability testing before its public introduction.  To date, over 2,100 patrons have successfully registered for accounts in the new system.

The content of the **HSLS Molecular Biology Web Portal** was updated with more than 1,200 links to publicly-available bioinformatics software and databases. These bioinformatics resources often represent the most current knowledge, but information about these are scattered in various biomedical journals and Web sites.  Vivisimo clustering software, which groups the search results into categories created on the fly, is incorporated into HSLS' one-stop molecular biology information gateway, further increasing its usefulness to researchers.  The Assistant Information Specialist in Molecular Biology presented a paper about this portal at the National Library of Medicine, and is preparing a publication for the annual database issue of the journal *Nucleic Acids Research*.

A cross-departmental team of HSLS librarians are nearing the conclusion of a yearlong effort to **update and redesign the library's Web site**.  The goals of the project are to improve usability and navigation, and to make it easier for users to quickly identify the information they need.  Because the HSLS user population is so diverse, the design team's first step was to ask users' opinions about the current Web site.  Team members conducted in-depth structured interviews with an invited cross-section of users, and also posted a brief survey on the Web site's front page for a week in late October 2005.  More than 1,000 responses to the online survey were received, with detailed positive

and negative feedback, and many suggestions for improvements.  The data gathered was used to develop a profile of the user community that the design team then translated into concrete design specifications.  After several paper prototypes were tested with both library staff and library users, an electronic prototype was developed.  It is expected that the new Web site will be introduced for beta testing by autumn 2006.

The **public computing environment** in each of the four HSLS libraries was enhanced during the past year.  With the opening of a new study lounge on the upper floor of Falk Library, user demand for circulating notebook computers for in-library use led to the purchase of seven additional units, bringing the total number to ten.  At WPIC Library, the former audiovisual area was transformed into a public computing lab with nine computers.  VLAN technology was introduced into libraries at UPMC Shadyside, Children's Hospital and WPIC, and all computers were upgraded or replaced.

The **Document Delivery** department continued to promote and expand services to internal users and external libraries.  Requests are received and articles are transmitted electronically, most within 24 hours.  The department processed nearly 53,000 lending, copying and borrowing requests in 2005-2006.  HSLS ranks second in the number of articles supplied among the 125 reporting academic health sciences libraries in the United States and Canada.   Revenue from Document Delivery services helps to underwrite library equipment purchases and renovations.

Resource Management Staff continued to improve access and **security for the rare books collections**. Additional shelving was added to Falk Library's Rodnan Room to allow the most valuable materials to be housed in a more secure area.  Because most of the high value items are oversized, these materials were moved to new oversize shelving in Rodnan.


**GOAL 3:  Develop effective strategies to enhance information literacy and use of information resources.**

**In 2005-2006, HSLS librarians and staff provided instruction, orientations or tours to over 9,500 faculty, students and staff**.  This is an increase of 8% over the previous year, when HSLS ranked third among 125 reporting academic health sciences libraries in the United States and Canada.

**HSLS offers 15 in-house workshops, 10 special topics classes and 19 different Lunch with a Librarian sessions, plus workshops by request as part of the instruction program.  Attendees at these in-house instructional activities totaled 1,281, an increase of 12% over last year.**

HSLS librarians provide **curriculum support** to the six schools of the health sciences by teaching students to recognize when information is needed, and providing them with the skills to locate, evaluate and use effectively the needed information.  Liaisons to Medicine, Dental Medicine, Pharmacy, HRS, GSPH, and Nursing gave presentations this year at faculty meetings, marketed library information to new faculty and provided orientations and instruction within the curriculum.  They also provide research support for faculty conducting research.  Representative instructional activities are listed in Appendix A.

HSLS librarians at the **Western Psychiatric Institute and Clinic** (WPIC) Library provide orientations to new faculty and staff at WPIC.  Residents in psychiatry are offered hands-on instruction in literature search strategies and the use of bibliographic databases.  Beginning this year, focused instructional sessions were offered to Advanced Practice nurses and members of the WPIC Nursing Research Council.

The **Molecular Biology Information Service** continued to expand with the addition of an Assistant Information Specialist.  One–on-one bioinformatics consultations were offered to 123 researchers, an increase of 71% over the previous year.  Bioinformatics workshops were offered on 13 topics, including 3 new topics introduced in 2005-2006:

- Introduction to biological pathway analysis resources
- VectorNTI database management
- VectorNTI molecular construction

These workshops were offered 37 times to 326 participants.

Introductory hands-on workshops on the use of commercial molecular biology software packages were offered monthly, and in-house technical support for these was also available. Their effectiveness can be gauged by the steady growth of registered software users. In June 2006, there were 265 VectorNTI users, 26 PathwayArchitect users, and 32 Ingenuity Pathways Analysis users.

An HSLS reference librarian attends the monthly IACUC meetings of the **Institutional Animal Care and Use Committee (IACUC)** and conducts literature searches in support of the program. Forty individual consultations and 76 searches were performed in support of the program.

HSLS librarians at the **Children's Hospital of Pittsburgh** offered tailored user education sessions and consults for CHP nurses, nurse educators or Occupational and Physical Therapists with appropriate search examples to highlight HSLS resources. Forty mediated searches were performed to assist CHP clinical staff, as well as 88 searches for consumers.  These provide an opportunity to interact and communicate with staff and parents to help with immediate information needs.

HSLS librarians at **UPMC Shadyside** offered orientations or training to over 600 users. These sessions included new employees and staff, UPMC Shadyside Research Council, Professional Development Committee, new resident and staff nurse orientation, UPMC Shadyside School of Nursing students, and participants in the Comprehensive Diabetes Education Program.  Central Testing and the Patient Education department have continued their partnership with the Hopwood Library sending their pre-op patients to the library to view the hospital-produced pre-op joint replacement CD.  355 patients and their family members viewed this CD in 2005-2006.

Instruction in **UPMC community hospitals** focused on "What's New at HSLS". A continuous sessions approach was designed, allowing for large one-day open houses at these hospitals, with participation as high as 40 at UPMC South Side. Ten demos were held at UPMC McKeesport, UPMC South Side, UPMC Passavant, UPMC Horizon, and UPMC Northwest, with 143 individuals participating. Instruction was also provided for PUH/MUH career ladder nurses and UPMC outpatient clinical dieticians.

In the past year HSLS librarians assisted for the first time with search strategy development for four **systematic reviews** and one Cochrane review.  These reviews are

designed to provide clinicians with conclusive evidence of the effects of health care interventions. Systematic reviews describe the authors' search strategy in detail, judge the scientific quality of each study, and weigh the evidence from multiple studies.

The **Responsible Literature Searching** interactive instructional module was recognized nationally by the American Association of Medical Colleges (AAMC) for inclusion in their peer review product, MedEDPortal.  Over 400 users completed the module last year including medical students in the Methods and Logic in Medicine class and nursing students in the Nursing Research course.

The past year saw increased librarian participation in **resident training programs**. HSLS faculty librarians are addressing Accreditation Council for Graduate Medical Education (ACGME) requirements by offering orientation and training programs for UPMC residents in many different capacities. In some cases, librarians provide a basic orientation to the library and its services and resources. In other cases, they serve as course faculty for more comprehensive informatics training programs.  Below are examples:

- **Neurology**:  First-year neurology residents gather in the Falk Library Computer and Media Center (CMC) classroom for a one-hour lecture every afternoon for the first two weeks of July. In these 10 hours, they learn about literature searching, using clinical and drug databases, advanced Web searching, EBM searching, EndNote, Photoshop, and basic information literacy skills. Residents are able to develop a rapport with instructors, ask questions, and develop skills over time.
- **Pathology**: As part of their intensive informatics rotation, third-year pathology residents receive 11 hours of training on literature searching, EndNote, PowerPoint, finding and using medical images, Photoshop, advanced Web searching, citation searching, and Internet technology. Librarians offer these courses onsite at the UPCI Cancer Pavilion over several days.
- **Podiatry**:  Podiatry residents at UPMC South Side requested a seven-hour "boot camp" training day on a Saturday in July – one of the only times they could all meet together. Topics included literature searching, citation searching, advanced Web searching, EBM searching, and searching for grant information.
- **Psychiatry**:  Librarians have worked with the curriculum director to develop an extensive training program that provides targeted instruction throughout the five-year residency period.  Residents receive eight or more hours of training and consultation, covering library orientation, basic and advanced literature searching in MEDLINE and PsycINFO, EBM searching, drug resources, PDA resources, and other information literacy skills.
- Other groups of residents that receive library orientations and training include ambulatory care, anesthesiology, family practice, internal medicine, occupational medicine, ophthalmology, pediatrics, and pharmacy.

Librarians performed **1,892 database searches by request**, a slight increase over the year before.  **Individual information consultations increased to 145**, a 57% increase over last year.

**GOAL 4: Promote awareness of library services, resources and expertise to a large, diverse, and geographically dispersed user population.**

In the past year, HSLS employed a variety of methods to publicize and promote information services. Representative activities are listed below:

- **HSLS Update**, the library newsletter, is produced six times a year. It is distributed in print and electronically.

- The **HSLS poster** was redesigned with new graphics and new listings for the Children's Hospital libraries. These posters are displayed in each HSLS library. One smaller poster is available for display at presentations outside the library. The poster was also made into bookmarks distributed at each library.

- Pitt's **University Times** featured two articles about HSLS during the year:
  - "Books, Journals and More: Getting Published – Some Advice on How to Start" (April 13, 2006 issue) featuring HSLS librarian Mary Lou Klem, Ph.D.
  - "Health Sciences Librarians Help Doctors, Patients" (December 8, 2005 issue)

- **Children's Hospital Libraries** had several promotional activities. Librarians created finding aids for to help users of the Blaxter Medical Library. They also created posters and bookmarks, and regular "In the News" displays with medical news from popular consumer sources paired with the attributed research article. New posters were produced for the Moulis Children's Library using the official Curious George movie poster with Moulis information added. Another poster featuring special floor tiles found in Children's Hospital is posted next to 17 patient elevator banks at CHP.

- **Display cases** in Falk and WPIC libraries are used to promote various health topics each month. Examples include health sciences education showcase, music and medicine, and herbals in medicine.

- To recognize its five-year anniversary, the **Hopwood Library**: A Health Resource Center for Patients and Families at UPMC Shadyside held an Open House in the fall of 2005. Invited guests and hospital staff helped to commemorate this special anniversary.

- **The Hopwood Library** also displayed and featured health topics within the library. The covers of new books are scanned and displayed on the glass panels to the entrance of the library. "Hot" topics in the news were featured in displays such as, Medicare Part D, the "obesity epidemic" and a summer reading list. A new handout was designed to promote the HSLS Consumer Health web site.

- UPMC Shadyside promoted Diabetes Alert Day in March 2006 by holding an all-day **Diabetes Information Fair**. The fair was open to patients, family members, staff, and the Shadyside community. The consumer health librarian from the UPMC Shadyside Hopwood Library, together with representatives from other key departments, was on hand to answer questions and offer information to

attendees.  The Hopwood Library promoted its extensive diabetes collection, resources, and services. Over 250 people attended the event.

- ▪ "HSLS Info-Tip" articles were authored and included in the **UPMC Extra,** available at each UPMC hospital, and the **UPMC Physician Update**.  The articles highlighted an HSLS service such as the Ask-A-Librarian feature or the electronic book search.

- ▪ **An Open house** was held to introduce the new WPIC Library Computing area

## GOAL 5:  Nurture and extend partnerships and collaboration with internal and external departments, schools, programs, and organizations.

HSLS hosted its first curated exhibit this past fall at Falk Library. ***Changing the Face of Medicine: Celebrating America's Women Physicians*** followed historical and contemporary women who have fought for access to professional opportunities in medicine, and shaped the course of medical practice, research, education, and policy. The National Library of Medicine (NLM) and the American Library Association organized the exhibit with support from NLM, the NIH Office of Research on Women's Health, and the American Medical Women's Association. A lecture series accompanied the exhibit with lectures by Hughes Evans, Associate Professor of Pediatrics, University of Alabama-Birmingham, "The Feminine Touch: Women and the American Medical Profession"; Katherine Detre, MD, PhD, Distinguished Professor of Epidemiology, Graduate School of Public Health, University of Pittsburgh, "Bypass Surgery Versus Angioplasty: Which Is Right for You?"; and  Jeannette South-Paul**,** MD, Professor and Chair, Department of Family Medicine, School of Medicine, University of Pittsburgh, "Addressing Health Disparities Through Women Advocates." Drs. Detre and South-Paul were profiled in the exhibit. Falk Library was first on the itinerary for the exhibit with slots awarded to 61 academic and public libraries around the country based on a competitive proposal process.

HSLS librarians participate in the daily **Morning Report on the General Internal Medicine** Service in UPMC Montefiore.  The Morning Report session, which includes the attending physician, chief resident, and eight medical residents, is an important educational component of internal medicine resident training programs.  Librarians are participating in a study whose goal is to prepare residents to use evidence-based information in support of patient care.  Following the discussion of a case, a clinical question is developed.  Both the residents and the librarian retrieve relevant information to answer the clinical question, and this information forms a discussion at Report two days later.  The presence of a librarian in this process serves as a reminder that quality primary literature is readily available.

HSLS librarians participated in several different initiatives to promote **evidence-based nursing practice (EBP)** at UPMC and the University:

- ▪ The WPIC Nursing Research Council meets on a monthly basis to strengthen nurses' research skills, and to discuss design and implementation of quality assurance and research projects.  Librarians have provided the group with orientations to HSLS resources, and training in information literacy skills and

basic literature search strategies.  Librarians also participate in the early stages of research design discussions by conducting comprehensive literature searches for members of this group.

- The **School of Nursing** is preparing to introduce EBP into the curricula of all undergraduate and graduate degree programs.  As part of this initiative, the liaison librarian to the School of Nursing has helped faculty to prepare EBP literature search assignments for students, and has also provided students with instructional sessions on basic searching in the MEDLINE and CINAHL databases.  In addition, the librarian serves on an internal taskforce that is developing an online "toolbox" for instructors to use as they teach students the fundamentals of EBP.

- Librarians serving on the **UPMC system-wide EBP Council** are working with nurse administrators to find ways to improve the quality and effectiveness of healthcare through translation of evidence-based research findings into clinical practice and policy.

- Librarians have provided **individualized instruction sessions** to clinical nurses from UPMC Shadyside, UPMC Presbyterian, and UPMC Montefiore hospitals, among others.  Sessions focused on topics such as formulation of concise literature search questions, and basic and advanced literature search skills in CINAHL and MEDLINE, the Cochrane Database of Systematic Reviews, and drug information databases.

**HSLS librarians are funded to collaborate with investigators in several research grants:**

- A reference librarian was appointed as a co-investigator on the **PROMIS (Patient-Reported Outcomes Measurement Information System)** project, and other librarians are also participating.  Together, they developed a protocol for conducting comprehensive literature searches to identify currently available self-report questionnaires used for assessing patient reports of emotional distress (e.g. depression, anxiety, or anger).  As part of this process, they identified and prioritized information resources that were most likely to yield instruments of interest to investigators. The librarians then developed and refined exhaustive search vocabularies for resources and conducted the literature searches.  The searches by HSLS librarians were highly productive, identifying approximately 360 questionnaires that were subsequently entered into the PROMIS databank.

- The **Dental Informatics Online Community** is a grant-funded project to develop a virtual, global community for dental informatics researchers. A librarian conducted literature searches on the needs of researchers and contributed to design of an online survey on the same topic.

- A librarian collaborates with Dr. A. Kriska from GSPH on the **Physical Activity Measurement Database Project**, funded by the Department of Defense through the UPMC Diabetes Center

- A librarian serves as a university consultant for the **Assessment Core of the Pittsburgh Mind-Body Center**, an NIH training grant jointed awarded to the University of Pittsburgh (PI: Karen Matthews) and Carnegie Mellon University (PI: Michael Schier).

- The Information Specialist in Molecular Biology and Genetics is funded as a teaching member of the **UPCI-Hampton University Cancer Biology Course**, Introduction to NCBI databases.

HSLS also received a **NLM-Centric contract from the National Network of Libraries of Medicine** to monitor server performance at the National Library of Medicine.

CHP liaison librarians have formed a collaborative relationship with the **Pediatric Gastroenterology Department** to do an impact study for their Inflammatory Bowel Disease Project. With the department's feedback, the group has identified a research population; determined appropriate categories for an information packet; and is in the process of analyzing and identifying materials to be included in the packet. The study will include a knowledge questionnaire. This questionnaire has not yet been tested, and the librarians will play a role in the validation of this instrument.

HSLS also participated in the **International Program of the National Library of Medicine**. Four librarians representing three medical and public health libraries in Vietnam visited HSLS on January 20, 2006 to learn more about academic health sciences libraries in the United States. Sponsored by the International Program of the National Library of Medicine (NLM), the librarians spent most of their two-week stay in Washington, D.C., at the NLM and the Library of Congress learning about library technical services and electronic resources. They also visited the Welch Medical Library at Johns Hopkins University in Baltimore and the National Institutes of Health Library in Bethesda, Md. While at HSLS, the Vietnamese librarians toured Falk Library and the HSLS libraries at the Children's Hospital of Pittsburgh of UPMC, and met with a cross-section of HSLS librarians representing most HSLS departments. The HSLS Director continues to consult with these librarians.

The Public Health Information Alliance (PHIA) is ongoing. PHIA**,** whose aim is to provide high quality information access for the local public health workforce, continues with **funding from the Allegheny County Health Department** (ACHD) and the University of Pittsburgh Center for Public Health Practice. The project includes access to the customized PHIA Web site, training, reference support, document delivery, and borrowing of library materials. A focus group evaluation project was conducted with analysis in progress. Group presentations and ACHD new employee orientations were held this past year.

The HSLS Public Health librarian provides reference support to the **GSPH Center for Public Health Practice**, and participated in their staff meetings and a planning retreat. The librarian assisted in writing a Robert Wood Johnson Foundation grant proposal, and provided instruction on Internet searching, CDCynergy to the Pennsylvania Department of Health

HSLS librarians assist with the projects of the **Governor's School of Excellence in Health Care**. This is a six-week residential program for 110 students in grades 10 and 11 who have demonstrated special interest and talent in health. Librarians provide information literacy instruction and one-on-one consultations with the students in support of their research projects.

HSLS received funding from UPMC to organize **the papers of Thomas Detre, MD**, former Director of WPIC, Senior Vice Chancellor for Health Sciences and first President of UPMC.  A Manuscripts Librarian was hired in August of 2005 to oversee this project. She evaluated office papers and related materials stored in 112 cartons and 32 file drawers, and retained those of lasting value. They were transferred to 134 archival storage boxes. Narrative descriptions of the materials with itemized listings were created for each group of materials and will be made available on the Internet when the project is completed by August 2006.  This work on the Detre archive has enabled HSLS to establish a structure for care and housing of manuscript collections and other unique materials.

HSLS participate in two projects of the **Library of Congress Program for Cooperative Cataloging (PCC)**.  Since 2002, HSLS has contributed serials records through the CONSER project.  In 2005, HSLS began contributing name authority records through the Name Authority Cooperative (NACO) to the national bibliographic databases of the Library of Congress and the National Library of Medicine, and through them to biomedical and research libraries throughout the world.

HSLS was approved this year for **OCLC enhance status** for audiovisual records. Enhance status allows libraries to make permanent changes to OCLC master records, the basic OCLC record for cataloging, interlibrary loan and Worldcat, and is given only to libraries that have demonstrated exceptional cataloging expertise in a particular format.  Of the thousands of OCLC member libraries, less than 30 are authorized to enhance audiovisual records.  The only other health sciences library with this privilege is the National Library of Medicine.

HSLS Librarians participate as **members of committees and organizations within and outside of the University.**  Representative activities include:

- Chair-Elect of the Leadership and Management Section of the Medical Library Association.

- Member of the Charting the Future Committee of the Association of Academic Health Sciences Libraries.

- Member of the Evidence Based Behavioral Medicine committee sponsored by the Society of Behavioral Medicine. The group, composed of health sciences librarians and clinical psychologists, is interested in publishing articles on evidence-based literature searching for clinical psychologists.

- Teaching member of the National Center of Biotechnology Information (NCBI) Advanced Workshop for Bioinformatics Information Specialists.

- National Library of Medicine Planning Panel member and sub-panel for Health Information for Underserved and Diverse Populations in the 21st Century

- Chair, Pittsburgh Regional Chapter, Medical Library Association

- Medical Library Association CE course co-developers and co-instructors of the course on health statistics, called "Number, number who's got the number, or who's counting?"  The course was offered at the Health Sciences Library Association of

New Jersey, Princeton, NJ, March 2006, and at the Annual Meeting of the Medical Library Association, Phoenix, May 2006.

- Teaching member of the National Center of Biotechnology Information NCBI Introduction to Molecular Biology Resources

- Members of the UPMC Patient Education and the UPMC Shadyside Diabetes Education Nursing Team

- Members of the University's Faculty Assembly, and Senate Community Relations Committee, Bylaws and Procedures Committee, Senate Library Committee, and Benefits & Welfare Committee.

- Oversee the activities of the C. F. Reynolds Medical History Society

- Editorial advisor for the *PittMed Magazine* for the School of Medicine.

- Focus group participant, Economic Impact Study: Regional Benefits of Carnegie Library of Pittsburgh.

- Member of the Publications Committee of the Archivists and Librarians in the History of the Health Sciences.

- Member of the Medical Library Association Task Force on the Information Specialist in Context.

- Member of the Program Committee of the Southern Association for the History of Medicine and Science for its 2006 annual meeting.

- Member of the Executive Board of the Southern Association for the History of Medicine and Science.

- Program Committee member of the Association of Mental Health Librarians

- Member of the Standards Committee of the Medical Library Association Technical Services Section


**GOAL 6: Cultivate an environment of learning for librarians and staff that encourages ongoing assessment and evaluation, creativity, innovation, and growth.  Capitalize on new opportunities and challenges as they arise.**

A primary objective is the recruitment of well-qualified faculty and staff, and proactive planning for personnel transitions, when possible.

This year saw the retirement of three long-term staff members, who collectively worked at Falk Library for 90 years:  reference librarian June Bandemer (40 years), reference librarian Alice Kuller (18 years) and acquisitions manager Cecile Roberts (32 years).  A retirement tea to honor them was held on Jun 27, 2006.

New faculty librarians recruited during 2005-2006 include:

- **Yi-Bu Chen**, Assistant Information Specialist in Molecular Biology and Genetics (Visiting). Dr. Chen completed the HSLS Library and Bioinformatics Traineeship Program in August 2005. He has a PhD in biology from Rensselaer Polytechnic Institute, and was a postdoctoral research associate and a visiting scientist at Rutgers University Institute of Marine and coastal Sciences.
- **Leslie Czechowski**, Curator of Manuscripts (funded by UPMC). Ms. Czechowski served as archivist at the University of Minnesota Libraries, for which she organized the Minnesota Orchestra Archives and led the Encoded Archival Description Implementation Project. Previous she held positions at Grinnell College and Northwestern Health Sciences University. She earned MA degrees from both the University of Minnesota and the University of Iowa.
- **Ahlam Saleh,** Reference Librarian. Dr. Saleh received MD and MLS degrees from the University at Buffalo. She completed an internship in family medicine at the University of Massachusetts Medical Center, and held various positions in University at Buffalo libraries.
- **Liping Song**, formerly Visiting Librarian at HSLS, was appointed to the permanent position of Electronic Resources Cataloging and Access Librarian. Ms. Song earned a Master of Theological Studies degree from Harvard, and a MLIS degree from Simmons College in Boston. She was an Associate Librarian Cataloger at the Whitney Museum of American Art Library in New York, and a Serials Cataloger at Harvard's Baker Library before moving to Pittsburgh.

HSLS also hosted two field placement students from the University of Pittsburgh School of Information Sciences.

HSLS librarians participated extensively in professional development activities, paper and poster presentations at professional meetings, and published in peer-reviewed journals. The activities are listed in Appendix B.

## GOAL 7: Redefine space to best accommodate the delivery and storage of information resources and services.

In 2005-2006, all four HSLS library sites underwent renovations and improvements in physical facilities. In additional, a long-term storage facility was leased and occupied at Lexington Technology Park. The changes in the library spaces this year are part of a long term review of all library space, based on changes in user behavior, emerging technologies for information delivery, and demographics of the health center community. Planning has begun for changes in staff space and additional casual seating areas for users in Falk Library, improved computing space at Children's Hospital and WPIC, and housing and public space at WPIC to support the Detre collection.

With the growth of the electronic collection, the number of print subscriptions coming to the libraries has been dramatically reduced. The display shelves for new print journal issues and for bound volumes at Falk and WPIC libraries were reorganized and consolidated this year, both to reclaim space and to facilitate browsing. It is expected that the space devoted to print journals will continue to shrink as older and less used titles are relocated to offsite storage. Shelving for recent issues will be further consolidated until only a browsing collection of key journals remains.

**LTP (Lexington Technology Park):**
With support from the office of the Senior Vice Chancellor for Health Sciences, a high density, compact book storage facility was designed, and Phase I of installation was completed in June 2006.  Approximately 100,000 items were moved from temporary housing at the University's Thomas Boulevard facility to permanent housing in the HSLS Lexington Technology Park (LTP) facility.  In Phase II, additional shelving will be added to increase the capacity to approximately 230,000 volumes.  Items are stored by size in book trays on 18" deep, movable shelving, with access via location coding embedded in the library's digital item records.  Needed materials are either sent to HSLS libraries for direct use, or articles, chapters or other excerpts can be delivered electronically directly to requesters.

**Falk Library:**
In August 2005, Falk opened a new study room on the upper floor, in the area that formerly housed the oversize books.  This study room is a departure from older areas of the library, with furniture to support a diversity of study styles.  Small tables and wireless Internet access support personal laptops and individual study; larger tables support quiet group work and room for users to spread out.  Comfortable seating is available for casual reading and relaxing.

Construction of a new administrative office suite, molecular biology office suite, hands-on computer classroom and four student group study rooms began in the spring of 2006, to be completed by August 2006.  The technical services offices that were displaced by the new construction were relocated to the mezzanine, in space that was formerly part of the Computing and Media Center.

**WPIC Library:**
With the decreased use of in-library use of audiovisual materials, the AV viewing area was relocated to make room for a significantly expanded public computing area.  Additional computers, software, and technical capabilities were installed as part of the renovation.  A new computer classroom will be housed in a former office on the upper floor of WPIC.  This will facilitate onsite library instruction for WPIC personnel.

**Children's Hospital Libraries:**
The three CHP libraries were extensively reorganized to add public seating and relieve collection crowding, and to realign space to accommodate changes in library use.  Print journals that duplicate electronic titles were removed to storage in order to open public space in the main room and free up necessary shelving.  A family seating and study area replaces former journals shelving.  High-use reference materials were moved to a more central location, as were the recreational videos.

New furniture, scheduled to arrive in August 2006, will complete the improvements.  The furniture for the redesigned CHP space was chosen to coordinate with the design for the library in the new hospital under construction in Lawrenceville.  The choice of furniture thus necessitated taking a long view about how library space will be utilized in the future.  The result should be a preview both of the new CHP look, and of the direction that library services at CHP will take into the next decade.

# Appendix A

## Representative HSLS Instructional Activities in the Schools of the Health Sciences

- **School of Medicine**
  - ❖ Library open house for 140 medical students
  - ❖ With physician faculty member, librarians co-taught an introductory session on evidence-based literature searching and appraisal at quarterly orientations for 3$^{rd}$ year medical students. A librarian also provided individual written comments to students on Clinical Guidelines assignment.
  - ❖ Librarians teach EBM skills in 4$^{th}$ year medical student elective, Evidence Based Medicine and Clinical Decision-Making Skills course
  - ❖ Librarian provided a one session overview on using PubMed to the students in the first year Logic & Medicine course.
  - ❖ Librarians teach the first half of a 2-credit course for PhD students, Intro to Biocomputing.

- **School of Pharmacy**
  - ❖ Library open house for 90 first year students.
  - ❖ Medline, International Pharmaceutical Abstracts and PITTCat workshops for first year students

- **School of Dental Medicine**
  - ❖ Library open house for 91 1st year dental students.
  - ❖ Orientation presentation to first year dental students
  - ❖ Orientation presentation to first year dental hygiene students
  - ❖ Ovid MEDLINE for first year dental hygiene students
  - ❖ Ovid MEDLINE for dental hygiene degree completion students
  - ❖ Presentation during PBL orientation to first year dental students
  - ❖ Intro to Dental Computing;  Taught Ovid MEDLINE to first year dental students, and graded and commented on their required searching assignment submission
  - ❖ Presentation by a librarian in the Methods of Analysis course for senior dental hygiene students

- **School of Nursing**
  - ❖ Introduction to literature searching
    - Undergraduate Intro to Nursing Research (multiple sections)
    - Undergraduate Nursing Informatics (multiple sections)
    - Graduate/faculty Nursing Research Seminar
  - ❖ Orientation to HSLS
    - all nursing graduate students
  - ❖ Orientation to HSLS Nursing Portal
    - undergraduate Foundations of Nursing Practice
  - ❖ Evidence Based Literature Searching:
    - graduate Nursing Theory and Practice

- **Graduate School of Public Health**
  - ❖ Orientation for new GSPH students

- ❖ Faculty seminars: short overview, grant funding, EOH seminar on the library, grant funding for behavioral health, HSLS Overview long version, search strategies overview
- ❖ Introduction to HSLS for the Occupational Medicine residents
- ❖ Lectures and hands-on instruction in basic literature search strategies and the use of bibliographic databases in Biostats, EPI, EPI (core course), Masters of Health Administration seminar, and CDCynergy in a statistics course.
- ❖ Consultations to graduate students working on theses and Center for Minority Health faculty.
- ❖ Current awareness tool about GSPH authors developed.

- **Health and Rehabilitation Sciences (HRS)**
  - ❖ Orientation for new PT students
  - ❖ Lectures and hands-on instruction in basic literature search strategies and the use of bibliographic databases to 12 classes within HRS
  - ❖ New lecture this year on Evidence Based research.
  - ❖ "The Librarian is In" session to introduce library resources and services to faculty and students.
  - ❖ Librarian assisted on a project to locate a definition for telerehabilitation that can be used on Wikipedia, an international Web-based free content encyclopedia.

- The **History of Medicine** librarian taught in the following University courses:
  - ❖ History of Medicine and Health Care
  - ❖ History of Medicine-4th year medical students
  - ❖ Historical and Sociological Perspectives in Public Health
  - ❖ Doctor/Patient Relationship course

- The **Information Specialist in Molecular Biology and Genetics** lectured in the following courses during the year:
  - ❖ Molecular Fundamentals Conference (EOH 2311) (Graduate School of Public Health)
  - ❖ Introduction to Human Biochemical and Molecular Genetics (HUGN 2034) (Graduate School of Public Health)
  - ❖ Introduction to Biocomputing (INTB 2030)
  - ❖ Introduction to Bioinformatics (BIOINF 2051)

# Appendix B

# HSLS Staff Accomplishments
(HSLS names in bold)


## PEER REVIEWED PUBLICATIONS

**Mary Lou Klem, Patricia Weiss.**
Evidence-based resources and the role of librarians in developing evidence-based practice curricula.
J Prof Nurs. 2005 Nov-Dec;21(6):380-7.
> The implementation of evidence-based practice (EBP) requires acquisition and use of a complex set of skills, including the ability to locate and critically evaluate clinically relevant research literature. In this article, we discuss information resources and tools that may be of value to educators faced with the task of teaching students to search for and evaluate research-based evidence. In addition, we discuss how health sciences librarians, with the use of new models of information instruction and delivery, can work with nursing faculty in developing curricula for training students in EBP.

**Charles B. Wessel, Nancy H. Tannery, Barbara A. Epstein.**
Information-seeking behavior and use of information resources by clinical research coordinators.
J Med Libr Assoc. 2006 Jan;94(1):48-54.
> PURPOSE: The study sought to understand the literature searching experiences and skills of clinical research coordinators at a large academic medical center. SETTING/PARTICIPANTS/RESOURCES: The Health Sciences Library System, University of Pittsburgh, conducted a survey of clinical research coordinators at the University of Pittsburgh and the University of Pittsburgh Medical Center to solicit their perceived use and knowledge of the library's electronic resources. BRIEF DESCRIPTION: The University of Pittsburgh Institutional Review Board (IRB) is a "high volume IRB" that monitors human subject research at both the University of Pittsburgh and the University of Pittsburgh Medical Center. More than 3,500 human research studies and clinical trials are active at any given time. Many studies entail more than minimal risk to human subjects, with the majority evaluating or including a drug or medical device. Clinical research coordinators are involved in most of these studies or trials. Their roles and responsibilities focus on managing many aspects of the study or clinical trial. As a first step in understanding the literature searching experiences and skills of these research coordinators, baseline data were gathered from this group in November 2004. RESULTS/OUTCOME: The data from this survey indicate that clinical research coordinators are a population who would benefit from training by academic medical center librarians in how to use electronic library resources and services. EVALUATION METHOD: A Web-based survey solicited participants' information (gender, education, job title) and role in the IRB process (job responsibilities, number studies they manage). The majority of the survey questions focused on the use of specific electronic library resources, the type of information wanted, and the types of problems encountered.

**Ammon S. Ripple**
Expert Googling: Best Practices and Advanced Strategies for Using Google in Health Sciences Libraries.
Med Ref Serv Q. 2006 Summer;25(2):97-107.

> Google is the search engine of choice for most Internet users. For a variety of reasons, librarians and other expert searchers do not always use Google to its full potential, even though it provides capabilities not possible in traditional bibliographic databases and other search engines. Applying expert searching principles and practices, such as the use of advanced search operators, information retrieval strategies, and search hedges to Google will allow health sciences librarians to find quality information on the Internet more efficiently and effectively.

**Michele Klein Fedyshin, Michelle L. Burda, Barbara A. Epstein**, Barbara Lawrence
Collaborating to enhance patient education and recovery.
J Med Libr Assoc. 2005 Oct;93(4):440-5

> Objective: The paper describes a collaborative project between librarians and health care staff to enhance patient recovery by distributing educational videos and evaluating the acceptability of this "information intervention."
> Background: On inpatient units, nurses experience decreased time to teach patients. Text handouts do not include multimedia information, and reading levels may limit comprehension. Because the postoperative period is not the optimal time for patient instruction, another format and opportunity for post-surgical instruction was needed.
> Methods: Nurses, therapists, educators, and librarians partnered to select a video designed for home viewing by discharged patients. It was added to the existing text-based educational program for coronary patients. An evaluation component was incorporated into this collaboration.
> Results: The library's role extended to all aspects of the program's implementation and management. The library's circulation system was used to coordinate borrowing with minimal loss. Ongoing preparation of the video materials for distribution and return remained a library function, and the evaluation component showed patients' positive reception of the video.
> Discussion: Patients received a greater amount of information to enhance self-care during the recovery period without consuming more nursing time. Video circulation and reuse enhanced cost effectiveness of the program, and patients benefited from the library's resources.

Ansani NT, Vogt M, Henderson BA, McKaveney TP, Weber RJ, Smith RB, **Burda M**, Kwoh CK, Osial TA, Starz T.
Quality of arthritis information on the Internet.
Am J Health Syst Pharm. 2005 Jun 1;62(11):1184-9.

> PURPOSE: The quality and reliability of Internet-based arthritis information were studied.
> METHODS: The search terms "arthritis," "osteoarthritis," and 'rheumatoid arthritis" were entered into the AOL, MSN, Yahoo, Google, and Lycos search engines. The Web sites for the first 40 matches generated by each search engine were grouped by URL suffix and evaluated on the basis of four categories of criteria: disease and medication information content, Web-site navigability, required literacy level, and currentness of information. Ratings were assigned by

using an assessment tool derived from published literature (maximum score of 15 points).

RESULTS: Of the 600 arthritis Web sites identified, only 69 were unique and included in the analysis. Fifty-seven percent were .com sites, 20% .org sites, 7% .gov sites, 6% .edu sites, and 10% other sites. Total scores for individual sites reviewed ranged from 3 to 14. Eighty percent of .gov sites, 75% of .edu sites, 29% of other sites, 36% of .com sites, and 21% of .org sites were within the top tertile of scores. No Web site met the criterion for being understandable to people with no more than a sixth-grade reading ability. .Gov sites scored significantly higher overall than .com sites, .org sites, and other sites. .Edu sites also scored relatively well.

CONCLUSION: The quality of arthritis information on the Internet varied widely. Sites with URLs having suffixes of .gov and .edu were ranked higher than other types of sites.

Miles, M.C., Janket, M.L., Wheeler, E.D., **Chattopadhyay, A**., Majumder, B.,Dericco,J., Schafer,E.A., AND Ayyavoo, V.
Molecular and functional characterization of a novel splice variant of ANKHD1 that lacks the KH domain and its role in cell survival and apoptosis.
FEBS J. 2005 272, 4091-102

Multiple ankyrin repeat motif-containing proteins play an important role in protein-protein interactions. ANKHD1 proteins are known to possess multiple ankyrin repeat domains and a single KH domain with no known function. Using yeast two-hybrid system analysis, we identified a novel splice variant of ANKHD1. This splice variant of ANKHD1, which we designated as HIV-1 Vpr-binding ankyrin repeat protein (VBARP), does not contain the signature KH domain, and codes for only a single ankyrin repeat motif. We characterized VBARP by molecular and functional analysis, revealing that VBARP is ubiquitously expressed in different tissues as well as cell lines of different lineage. In addition, blast searches indicated that orthologs and homologs to VBARP exist in different phyla, suggesting that VBARP might be evolutionarily conserved, and thus may be involved in basic cellular function(s). Furthermore, biochemical analysis revealed the presence of two VBARP isoforms coding for 69 and 49 kDa polypeptides, respectively, that are primarily localized in the cytoplasm. Functional analysis using short interfering RNA approaches indicate that this gene product is essential for cell survival through its regulation of caspases. Taken together, these results indicate that VBARP is a novel splice variant of ANKHD1 and may play a role in cellular apoptosis (antiapoptotic) and cell survival pathway(s).

**Andrea Ketchum**
Consumer health information Websites: a survey of design elements found in sites developed in academic environments.
J Med Libr Assoc. 2005 Oct;93(4):496-9.

## OTHER PUBLICATIONS

**Michelle Burda**
reviewer and contributor to the 4th edition of *A Resource Guide for Bone Marrow/Stem Cell Transplant including Bone Marrow, Peripheral Blood, and Cord Blood: Friends Helping Friends*, Southfield, MI: National Bone Marrow Transplant Link, 2006.

**Charles Wessel, Nancy H. Tannery**. Health statistics phobia, part one: the hurdles. MLA News 2006 March;384: 1, 16.

**Charles Wessel, Nancy H. Tannery**. Health statistics phobia, part two: the solutions. MLA News 2006 April;385:21-22.

**Jonathon Erlen,**.

Dissertation list. History of Science Society Newsletter. 2006 35 (2):11.

New dissertations. Nursing History Review. 2006 14: 291-296.

Dissertations in the history of pharmacy. Pharmacy in History, 2005 47(4): 151.

Dissertations in the history of pharmacy. Pharmacy in History, 2005 47(3): 121.

Dissertations. AVISTA Forum Journal Medieval Science, Technology, & Art, 2005 15(1): 78-82.

Dissertation/theses. Canadian Bulletin of Medical History, 2005 22(2): 421-424.

Recent dissertations in the history of medicine. Journal of the History of Medicine and Allied Sciences, 2005 61: 79-84.

Dissertations in the history of pharmacy. Pharmacy in History, 2005 47(2): 79-81.

Recent dissertations in the history of medicine. Journal of the History of Medicine and Allied Sciences, 2005 60: 506-512.

Organization of Historians Magazine of History, 2005 19(5): 4-5. (with Kathleen Jones)

History of medicine resources on the internet. Organization of Historians Magazine of History, 2005 19(5): 59-60.

Dissertation list. History of Science Society Newsletter, 2005 35 (3): 9.

Recent dissertations in the history of medicine. Journal of the History of Medicine and Allied Sciences, 2005 60(3): 355-361.

Dissertation list. History of Science Society Newsletter, 2005 35 (2): 21.

## EDITORS

**Michele Klein-Fedyshin**
Hospital Library Associate Editor for the Journal of the Medical Library Association

**Patricia Weiss**
*MLA News* Technology Co-Editor

**Jonathon Erlen**
Guest editor of a special issue of the Organization of American Historians Magazine of History
History of Medicine Volume 19, no 5 September 2005

## REVIEWERS

**Nancy Tannery**
BMC Medical Education
Manuscript reviewer

## PRESENTATIONS

**Deborah Silverman**
 "Developing an Automated System to Analyze the Monograph Collection in a Health Sciences Library" at a meeting of the Collection Development Section.
Medical Library Association 2006 Annual Meeting

**Renae Barger**
Understanding user needs in an online environment: what we can learn from electronic reference questions.
Medical Library Association 2006 Annual Meeting

**Jonathon Erlen**
Human experimentation in 20th century American medicine: Myths and realities.
Upstate New York Colloquium for the History of Science and Medicine, SUNY Upstate, Syracuse, NY, March 2, 2006.

**Jonathon Erlen**
Human experimentation in 20th century American medicine: Myths and realities.
Honors College, University of San Diego, January 27, 2006.

**Ester Saghafi**
Finding Information on Mental Measurement Tools  Used in Health and Mental Health Settings: Measuring Health Beyond Biometrics
Association of Mental Health Librarians (AMHL) Annual Meeting 2005.

**Yi-Bu Chen**
 "A One-stop Gateway to Online Bioinformatics Databases and Software Tools" on July 12-13, 2005 at the National Library of Medicine (NLM) Annual Informatics Training Conference, NIH Campus, Bethesda, Md.  The conference, a showcase of NLM trainees' activities and accomplishments, was attended by more than 600 people from biomedical informatics training programs from some of the nation's top universities.

**Ansuman Chattopadhyay**, **Yi-Bu Chen**, **Charles Wessel**, hosted an exhibition booth at the University of Pittsburgh SCIENCE2005 meeting October 6 and 7, 2005.  During the meeting, they answered questions from attendees regarding the HSLS Molecular Biology and Genetics Information Services, and distributed fact sheets about various bioinformatics software, databases, and training workshops offered by HSLS.

**Leslie Czechowski**
 What's new at our place: the Thomas Detre collection
Annual meeting of the Archivists and Librarians in the History of Health Sciences.

**Nancy H. Tannery**, **Charles B. Wessel** taught their Medical Library Association continuing education course "Number, Number Who's got the Number, or Who's Counting?: Health Statistics Sources" to 54 participants from the Health Sciences Library Association of New Jersey in Princeton, New Jersey on March 8, 2006.

## POSTER PRESENTATIONS

**Mary L. Klem, Ester M. Saghafi, Rebecca A. Abromitis**
Making a PROMIS and keeping it: Providing comprehensive literature
search services to an NIH Roadmap Initiative.
Medical Library Association 2006 Annual Meeting

**Jill Foust**
The Impact of Technology on the User Education Process
Medical Library Association 2006 Annual Meeting

**Michele Klein-Fedyshin**
Utilizing an Interdisciplinary Model to Promote Evidence-Based Practice
in an Acute Care Hospital
Medical Library Association 2006 Annual Meeting

**Rebecca Abromitis**
Direct-to-Consumer (DTC) Advertising of Psychiatric Drugs in Popular
Magazines: How Are Mental Disorders Portrayed?
Medical Library Association 2006 Annual Meeting

**Jonathon Erlen, Ammon Ripple**
Suffering, Justice, and Biomedical Ethics in Recent Doctoral Dissertations
American Society of Bioethics and Humanities Annual Meeting, 2005, Washington, DC

## MEETINGS ATTENDED FOR PROFESSIONAL DEVELOPMENT

Association of Academic Health Sciences Librarians and American Association of
Medical Colleges Annual Meetings, 2005
**Barbara A. Epstein**

American Library Association Midwinter Meeting, 2006
**Deborah Silverman, Malgorzata Fort**

American Public Health Association – 2005 Annual Meeting
**Barbara Folb**

Pennsylvania Public Health Association Annual Conference, 2005
**Barbara Folb**

Medical Library Association - 2006 Annual Meeting
**Ahlam Saleh, Rebecca Abromitis, Jill Foust, Charlie Wessel, Michele Klein-
Fedyshin, Nancy Tannery, Renae Barger, Mary Lou Klem, Deborah Silverman,
Barbara Epstein**

Pittsburgh Chapter of Medical Library Association Annual Meeting
**Charles Wessel, Andrea Ketchum, Alice Kuller,  Linda Hartman, Ammon Ripple, Pat Weiss, Ester Saghafi, June Bandemer, Mary Lou Klem**

American Association of Colleges of Pharmacy (AACP), 2006
Grace and Harold Sewell Fund recipient
**Ahlam Saleh**

Association of Mental Health Librarians (AMHL), Fall 2005. Annual Meeting
**Ester Saghafi**

Archivists and Librarians in the History of the Health Sciences, Annual Meeting
**Jonathon Erlen, Leslie Czechowski**

American Association for the History of Medicine, Annual Meeting
**Jonathon Erlen**

American Osler Society, Annual Meeting
**Jonathon Erlen**

American Society for Bioethics and Humanities, Annual Meeting
**Jonathon Erlen**

Society of American Archivists Conference
**Leslie Czechowski**

Mid-Atlantic Regional Educause Conference
**Phillip Bergen**

Library of Congress, CONSER committee meeting
**Liping Song, Gosia Fort**

## WORKSHOPS & COURSES ATTENDED FOR PROFESSIONAL DEVELOPMENT

Association of Academic Health Sciences Librarians "New Directors Development Symposium" 2006 (Invited partipant)
**Barbara A. Epstein**

Understanding the Nursing Literature: a Primer for working with evidence-based healthcare principles, Pittsburgh Chapter of Medical Library Association, Continuing Education Course
**Michele Klein-Fedyshin, Michelle Burda, Charles Wessel, Andrea Ketchum, Rebecca Abromitis, Ahlam Saleh, Ester Saghafi, Mary Lou Klem**

Free Health Information Online: Moving Beyond MEDLINE, Pittsburgh Chapter of Medical Library Association, Continuing Education Course
**Andrea Ketchum, Renae Barger, Barb Folb, Charles Wessel**

Ariel 4.1 Upgrade Installation and Configuration Essentials
**Renae Barger**

Doing It Right: Supporting Systematic Reviews with Expert Searching and
Project Management Skills, Medical Library Association Continuing Education Course
**Rebecca Abromitis, Ahlam Saleh**

Changing Nature of Providing Reference/Information Services, Medical Library
Association Continuing Education Course
**Michele Klein-Fedyshin**

Introduction to Spatial Epidemiology & GIS
American Public Health Association
**Barbara Folb**

15th Annual LHAS Current Controversies in Medical Ethics
**Michelle Burda**

NLM NCBI Advanced Training Workshop
**Yibu Chen**