Information Revolution:
Change Is in the Air
May 18–23 ★ Philadelphia
Medical Library Association
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MLA '07 Abstracts

A Supplement to the *Official Program*

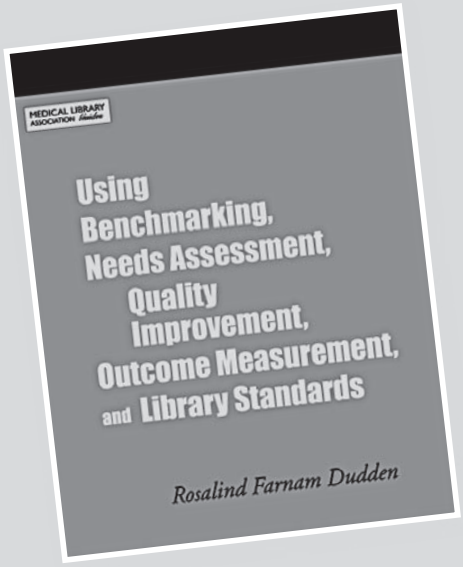
Contents

New in 2007: Room assignments and index included!

NEW

Using Benchmarking, Needs Assessment, Quality Improvement, Outcome Measurement, and Library Standards: A How-To-Do-It Manual

By Rosalind Farnam Dudden



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- quality improvement
- outcome measurement
- library standards

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Plenary Session
Wednesday, May 23, 10:30 a.m.–1:00 p.m.

Health Information Literacy: rEvolution in Roles

MLA Health Information Literacy Research Project

Sabrina Kurtz-Rossi, project coordinator, Health Information Literacy Research Project; **Carla J. Funk, CAE,** executive director; Medical Library Association, Chicago, IL; **Jean P. Shipman, AHIP,** director, Tompkins-McCaw Library and Associate University Librarian, VCU Libraries, Virginia Commonwealth University–Richmond

Objectives: Objectives of the MLA Health Information Literacy Research Project are (1) to assess health administrators and providers' awareness of health information literacy, its value and their perceived value of librarians' contributions in providing information; (2) to evaluate awareness of National Library of Medicine (NLM) resources, e.g., MedlinePlus and information prescriptions; and (3) to work with hospital librarians to develop and test a curriculum to raise awareness of health information literacy needs and available resources.

Methods: Methods include a survey distributed to American Hospital Association hospital administrator members. Health care providers will be encouraged to complete the same survey. Results will be used to understand the target groups' perceptions and use of consumer health information products and services. Findings will also be used to inform the development of a multi-format curriculum to train health care providers about health information literacy concepts and resources. The curriculum will be hosted on MLA's Website. It will be tested by seven hospital librarians who wish to provide consumer health information as part of their services. A Webinar will be held to evaluate curriculum design and identify needed changes. A Web-based course will be developed for use by other librarians and health care institutions.

Results: The MLA Health Information Literacy Research Project will increase health care providers' knowledge of health information literacy issues and raise awareness of NLM health literacy tools and resources, e.g. MedlinePlus and information prescription, available to providers and their patients. The project will also demonstrate the key roles hospital librarians can play in addressing health information literacy needs in their institutions.

Health Education Resources for English Language Learners

Margaret (Peg) Allen, AHIP, coordinator, Hmong Health Education Network; **Peter Yang,** executive director; Wausau Area Hmong Mutual Association, Wausau, WI; **Jeff Allen,** technical consultant, Continuing Education, University of Wisconsin–Stevens Point; **Mary Alice Gillispie,** coordinator, Healthy Roads Media, Healthy Roads Media, Bozeman, MT; **Blong Yang,** media specialist; **Ka Lia Moua,** Web assistant/graphics designer, Hmong Health Education Network; **Kia Her,** education assistant; Wausau Area Hmong Mutual Association, Wausau, WI

Objective: To develop culturally and linguistically appropriate health information resources for a refugee population, using a bilingual model.

Methods: Beginning in 2001, new health information resources were developed in close collaboration *with* the target refugee population, including prospective evaluation by refugee leaders, health professionals, and community health workers. Case studies will include the collaborative development process for videos, a bilingual Website, bilingual family health guide, and multimedia. Content was based on presentations to target consumer audiences. The heart health multimedia programs were developed in partnership with a leading producer of multimedia programs for immigrants and refugees. To help fill the need for audiovisual resources that can be interpreted when Hmong language media is not available, the Hmonghealth.org site links to selected MedlinePlus tutorials, the Healthy Roads Media programs at www.healthyroadsmedia.org, and other online media formats. The content management system and standard translations for typical link descriptions provides the opportunity for younger Hmong staff to participate in site development and updating.

Results: The Hmong community and their health providers valuable health information in the Hmong language. Audio and visual formats are most effective. The bilingual format is useful for providers who want to focus on a particular section, as well as for younger Hmong who do not know Hmong translations for medical terminology.

Conclusion: The *Hmong Family Health Guide*, multimedia, and other resources featured on Hmonghealth.org are suitable for culturally appropriate health literacy programs for English language learners. Current National Network of Libraries of Medicine, Greater Midwest Region, health disparities funding supports Website usability testing and enhancements, including Hmong language multimedia and audio health tips. Our next goal is to fund and pilot-test bilingual health literacy programs that will help the Hmong improve communication with their health providers, as well as a community-wide media campaign to provide core information on access to care and health promotion.

Accessing Health Information in the Rural South: A Survey of Residents in Allendale County, South Carolina

Janice May, program coordinator, Hands on Health-South Carolina; **Lillian Trettin,** assistant professor, Public Information and Community Outreach; **Nancy C. McKeehan,** assistant director of libraries, Systems; Library, Medical University of South Carolina–Charleston

Objective: Allendale County is the poorest rural county

in South Carolina. Eighty percent of its residents are African American; 2% are Hispanic. Seventy percent have a high school education or less. Our purpose was to determine how the county's disadvantaged residents access health care and consumer health information and how they would like to access information.
Methods: We designed a multiple-choice and short-answer survey to address (1) what kinds of health services residents use, (2) what kinds of public health information they need, and (3) how they access health information, including current and preferred modes of access. We were interested in determining what real and perceived barriers to health service exist in a rural area and how the Internet compares to other communication channels as a mode of delivery in a poor, rural county. Following a half-day training session, 18 local high school students conducted surveys in front of local grocery stores, the post office, and other frequented public places. Approximately 600 respondents (5.5% of the county's total population) matched census statistics proportionately in ethnic background, gender, and age. Data from 513 valid surveys was cross-tabulated using SPSS.
Results: Results indicate that low literacy, poor access to medical services, and lack of adequate transportation characterize Allendale County. Seventy-five percent of respondents indicated they preferred receiving medical information from a family doctor. However, 30% either had no doctor or visited the emergency room for care. Approximately one-third of respondents reported receiving health information from television, while another third reported receiving it from family members. With the exception of Hispanic respondents, who consistently preferred family members and the radio, preference for sources such as the Internet rose with improved education. Sixty percent of all respondents said they used the Internet, but 40% of those rarely use it to find health information. Because residents show interest in using the Internet and 26% reported using the Internet for health information, we recommend community workshops on how to access reliable Web-based health information.

Accessing Health Information in the Rural South: A Survey of Residents in Allendale County, South Carolina

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Teaching Teens to "Get Net Smart for Good Health": Promoting Critical Thinking in Health Science Classes

Lillian Trettin, assistant professor, Public Information and Community Outreach; **Janice May,** program coordinator, Hands on Health-South Carolina; Library, Medical University of South Carolina–Charleston

Objective: High school students can be a tough audience for medical librarians to reach. We compared interventions for teaching students how to evaluate health Websites to determine what strategy best equipped students to demonstrate that they understood why it is important to question the validity of health information on the Internet, not just how to do it.
Methods: For 3 years, library staff worked with 149 tenth and eleventh grade students in health sciences classes in 4 Charleston County, SC, public schools. Over 75% of the students were low-income, minority (predominantly African American). We pilot tested an Internet workshop in year 1. We revised it and added a role-playing activity in year 2. Evaluation consisted of pre- and posttests, a Website exercise, and a student satisfaction survey. In year 3, we used both a workshop and a role-playing activity

and compared the benefits of this combined strategy with those of the workshop alone. We designed a Likert-scale and short-answer survey to indicate which strategy better prepared students to demonstrate critical thinking about Web-based health sites. Students rated both the workshop and the workshop with role-playing for effectiveness. We combined that data with observations of student behavior. **Results:** An evaluation at the end of year 2 indicated that students were better able to critically evaluate Websites after participating in a more focused workshop that reinforced a few key points and included a Website comparison exercise. In year 3, an evaluation of the expanded program showed that students felt adequately prepared after the workshop for an exercise in active learning called Cybercourt. In this exercise, they prepared hypothetical courtroom scenes dramatizing the reliability of a Internet health site. Seventy-three percent of the students in Year 3 indicated that the workshop and the performance together increased their ability to evaluate sites. Twenty-three percent indicated that they preferred role-playing. In general, most students acknowledged that the workshop was necessary to mastering skill, but that they enjoyed Cybercourt. Based on observation, we concluded that role-playing provided reinforcement, but only if preceded by intensive and focused skills-building activities.

Section Programs
Sunday, May 20, 4:30 p.m.–6:00 p.m.

2007 National Program Committee

Be It Resolved: As Libraries Evolve to Electronic Access Their Need for Physical Space Decreases

Grand Ballroom, Salons K and L

4:30 p.m.
Be It Resolved: As Libraries Evolve to Electronic Access Their Need for Physical Space Decreases
Rick Forsman, AHIP, FMLA, planning director, Denison Memorial Library, University of Colorado Health Sciences Center–Denver; **Wayne Peay, FMLA,** director, Spencer S. Eccles Health Sciences Library, University of Utah–Salt Lake City; **M.J. Tooey, AHIP,** executive director, Health Sciences and Human Services Library, University of Maryland–Baltimore; **Jane Bridges, AHIP,** Mercer's Clinical Campus librarian, Health Sciences Library, Memorial Health University Medical Center, Savannah, GA
Presentation: Libraries of all types face the issue of space. If most library resources can be accessed in electronic versions, why does the library need so much space? Who goes to the library anymore? Why can't some of that space be given to the hospital or campus or research facility for other uses? In this session, four library leaders will debate these issues. Following traditional debate format, Wayne Peay, FMLA, will debate the "pro" side of the argument, that libraries do not need all the space they have been allocated. Rick Forsman, AHIP, FMLA, will argue against the resolution, attempting to convince the audience that libraries do need all the space they have. The audience will be encouraged to ask questions of the debaters and to vote on the resolution. After the formal debate, M.J. Tooey, AHIP, and Jane Bridges, AHIP, will represent academic and hospital perspectives on this issue. The two presenters will offer strategies for managing space within the larger organization and working with the administrators who allocate institutional space.

Cancer Librarians Section

Patient as Expert: Revolutionary Changes in Medical Decision Making

In conjunction with Consumer and Patient Health Information Section
Independence Ballroom

4:35 p.m.
Medical Decision Making for Cancer Patients: A Personal Perspective
Gale G. Hannigan, AHIP, director, Informatics for Medical Education, Texas A&M University–Temple
Presentation: As the science of breast cancer (and cancer in general) treatment advances, information about the specific patient seems to matter more and more. Age, pre/post menopausal status, estrogen/progestin status, her-2/neu and other biomarker status, lymph node status—all should be known and considered as treatment options are presented. Nonmedical factors and personal preferences matter, too: insurance coverage, travel time to treatment center, coverage of family and work responsibilities, tolerance for treatment, availability of and interest in clinical trial participation. Lots of information is needed to make important decisions. This talk is a personal perspective of different kinds of decisions a cancer patient may be faced with and a commentary on the role of information in making those decisions.

5:15 p.m.
A Personal Weapon in the War on Chronic Illness: Expert Patients and Their Use of Health Information
Teresa L. Hartman, head, Education Department, McGoogan Library of Medicine, University of Nebraska Medical Center–Omaha; **Diane Tobin Johnson,** associate professor, Communication, Truman State University, Kirksville, MO
Objective: Our objective is to expand the definition of "expert patient" to encompass specific personal characteristics, health-seeking behaviors, and communication strategies, including online information-seeking strategies, using theoretical constructs found in the disciplines of communication, information science, and social psychology. We would then share these findings with medical librarians seeking avenues to better serve expert patient populations.
Methods: We will use a variety of qualitative research methods appropriate for initial research, including content analysis of personal online documents (such as blogs), content analysis of in-depth interviews conducted online and by telephone, and comparison with traditional health information-seeking constructs. We anticipate that we may find that expert patients share certain personal characteristics (e.g., high self efficacy) as well as health information-seeking behaviors.
Results: We examined a series of blogs written by cancer patients and their families to distinguish traditional personal journals (patient blogs) from expert patient blogs, using criteria based on grounded theory. Blog characteristics comprise one way of identifying communication characteristics of expert patients. Based on the results, we conclude that opportunities exist for librarians to identify and assist expert patients in their efforts to reach out to other patients experiencing the trauma of major illness.

5:35 p.m.
A Consumer Health Librarian's Cancer Journey
Michele Spatz, director, Planetree Health Resource Center, Mid-Columbia Medical Center, The Dalles, OR
Objective: To illustrate how being a consumer health librarian impacted the experience of being a breast cancer patient.
Methods: As a consumer health librarian, I thought

I knew everything about providing patients and the public with useful health information. Yet, everything I knew changed when, in August 1999, at the age of forty-five, I was diagnosed with breast cancer. This paper is an exploration of the personal journey I went through to learn about my own illness. How did being a medical librarian specializing in consumer health information help me, and were there ways in which it was a hindrance? Lessons learned and the ways my illness changed my practice of librarianship are featured.

Dental Section

Turning Clinical Students into Evidence-based Clinicians: The Medical Library's Role

In conjunction with Educational Media and Technologies, Health Association Libraries, Medical Library Education, Nursing and Allied Health Resources Sections; Clinical Librarians and Evidence-based Health Care, Mental Health SIGs

Grand Ballroom, Salon D

4:35 p.m.
Weaving Evidence-based Medicine into the School of Medicine Curriculum: The Library's Role in Developing Evidence-based Clinicians

Connie Schardt, AHIP, associate director, Public Services; **Anne Powers, AHIP,** information services librarian; **Megan von Isenburg,** associate director, Public Services; Medical Center Library, Duke University, Durham, NC

Objective: This paper describes how the medical center library developed a complete evidence-based medicine (EBM) curriculum that is integrated into existing educational activities and woven through each year of the School of Medicine curriculum to build on student skills at pedagogically relevant opportunities.

Description: When the library originally introduced the concept of EBM to first-year medical students as part of MEDLINE training, we were told that this was "way over the students' heads." In 2006, seven years later, the library was asked by the school of medicine curriculum committee to develop EBM content across all four years of the curriculum. To structure and implement this new curriculum, the library examined the failures and successes in teaching students searching skills, leveraged partnerships among the EBM clinical faculty, linked curricular goals and Association of American Medical Colleges core competencies to EBM skills, and found teachable opportunities to insert EBM training. Factors relevant to the success of this process include the need for creativity in integrating a complete EBM curriculum into existing courses and the evolving attitude toward EBM at an academic medical center. Current projects include developing Web-based teaching modules and migrating the EBM curriculum to nursing, physical therapy, and physicians assistants programs.

4:52 p.m.
Helping a Dental School put the "E" in Evidence-based Dentistry

Lauren A. Maggio, coordinator, Library Education and Information Management; **Keven M. Jeffery,** information services librarian and Web coordinator; Alumni Medical Library, Boston University Medical Center, Boston, MA; **Paul Farsai,** assistant professor; **Jeffrey P. Hutter,** associate dean, Academic Affairs; Goldman School of Dental Medicine, Boston University, Boston, MA

Objective: The library designed and executed an evidence-based dentistry (EBD) training program for incoming dental students and faculty members. Integrated directly into the first-year course, "Evidence-Based Dentistry," and as a faculty continuing education opportunity, the library through case-based hands-on sessions introduced the skills necessary for searching and obtaining the dental literature necessary to answer clinical questions.

Methods: In 2006, the library joined the dental school's initiative to integrate EBD across its curriculum. To support this goal, the Library proposed partnering with the compulsory first-year course, "Evidence-Based Dentistry." Initial resistance was met as faculty members were concerned with time constraints and ways the library would support course goals. However, administrators allotted additional course hours allowing the library to present a case-based lesson plan with objectives clearly aligned with the course. The library's lesson plan, implemented in fall 2006 for students and faculty, based on a clinical case written by dental faculty, prompted the in-class application of EBD skills, including formulating a clinical question and locating evidence. Based on evaluations the library session was well received. The library is planning a similar training for 2007, to be supplemented by online tutorials cooperatively designed by the library and dental school.

5:09 p.m.
A Full Revolution: 360 Degree Library Services to Clinical Clerkship Students

Kathryn J. Skhal, clinical education librarian, Hardin Library for the Health Sciences, University of Iowa–Iowa City

Objective: In the third year of medical school, students make the transition from the classroom to the hospital. Along with the educational, logistical, and psychosocial changes this brings, their approaches to medical research must also evolve. By providing highly integrated, well-rounded support, librarians can ease this transition from assignment-based to patient-based information needs.

Methods: Library participation within four major clerkships (inpatient internal medicine, ambulatory practice, pediatrics and surgery) uses different approaches to be of the most use to the most students. For point-of-care questions, customized electronic resource centers created in conjunction with the

clerkship directors, are accessible via the course's Web presence. Presentations highlighting unique aspects of these centers during clerkship orientations provide a personal touch while reminding students of the breadth of resources available. Attending rounds or morning reports places an information professional in the health care environment. Finally, in each rotation, students must complete evidence-based exercises, dubbed the "Five Minute Clinical Challenges." The challenges are real-time exercises testing the ability to quickly find quality answers to clinical questions. The utility of this 360 degree approach will be determined by faculty survey, student evaluation, and data from the 5 Minute Clinical Challenges.
Results: The combination of electronic resource centers, live demonstrations, and library's presence in the health care settings has improved the students' facility in bibliographic searching and their comfort in approaching library staff for assistance. The results of the Five Minute Challenges revealed that resource selection for evidence-based medicine information was varied and appropriate, though their understanding of study designs is still suboptimal. Feedback has been positive from both students and clerkship directors.
Conclusions: While the techniques described here have been successful, they are only the first step in an evolving program. These experiences have led to more intensive collaborations with the clerkships, including plans for a graded searching exercise for the inpatient internal medicine rotation. In addition, this positive feedback is leading to opportunities to work with clerkships heretofore uninterested in library partnerships.

5:26 p.m.
Accessing and Assessing the Evidence: An Online Tool for Teaching Evidence-based Nursing Practice
Mary L. Klem, reference librarian, Health Sciences Library System; **Elizabeth M. LaRue, AHIP,** instructor; **Peter Draus,** assistant professor; School of Nursing; University of Pittsburgh, Pittsburgh, PA
Objective: This paper describes the development and preliminary evaluation of Accessing and Assessing the Evidence (AAE), a Web-based tool designed to assist nursing students in learning the fundamental steps of evidence-based practice.
Setting/Participants/Resources: A school of nursing and an academic library system located at a public university in the eastern United States.
Brief Description: Nursing faculty and librarians collaborated to create an online tool (AAE) that allows students to review clinical scenarios and develop answerable clinical questions for those scenarios using the problem, intervention, comparison, outcome (PICO) format. Students can compare their PICO questions to PICO questions developed by experts. They are also able to view expert literature searches that identify research articles relevant to their questions. The searches are presented in step-by-step layouts containing brief explanations of selected strategies and screenshots of the searches. The AAE also provides students with access to citations and abstracts of studies identified in the literature searches. Students can critically appraise and rank each citation/abstract for its utility in answering a PICO question. Clinical questions created by students, as well as rankings of citations, are stored in the AAE database. This allows instructors to measure individual or class performance in writing PICO questions and critically appraising research literature.
Results: Thirty-three undergraduate nursing students used the AAE to create a total of 96 PICO questions. The most frequent type of question created was therapy (54%), followed by prognosis (30%), harm (11%), diagnosis (1%), and etiology (0%). Fifty percent of students successfully identified PICO elements from clinical scenarios and constructed appropriate clinical questions. Compared to expert raters (2 clinical and 2 nonclinical faculty), students were more likely to rate selected sets of citations as not relevant to PICO questions (29% versus 23%).
Conclusion: Naïve undergraduate nursing students showed moderate success when using the AAE to construct PICO elements and questions. Students were most likely to create therapy or prognosis questions, perhaps indicating greater comfort or familiarity with these constructs. Students also tended to underestimate the clinical relevance of citations identified through an expert literature search. Further testing and development of the AAE will allow us to explore these findings in greater detail.

5:43 p.m.
Assessing the Effectiveness of an Evidence-based Medicine (EBM) Pharmacology Course
Irena Bond, librarian and assistant professor, Library and Learning Resources; **Alice Gardner,** associate professor, Pharmacology/Toxicology; **Monina Lahoz,** associate professor, Pharmacy Administration, and assistant dean, Curriculum and Assessment; Massachusetts College of Pharmacy and Health Sciences–Worcester
Objective: To assess the effectiveness of an elective evidence-based medicine (EBM) pharmacology course in developing pharmacy students' (1) general knowledge and skills in four EBM domains using the EBM method (Sackett 2000)—formulate a clinical question, conduct efficient searches, appraise the evidence, and theoretically apply it to clinical problems—and (2) specific skills in seeking and using EBM information resources.
Methods: The Fresno test will be administered to students enrolled in the elective course (intervention group) and to volunteer students enrolled in a traditional didactic pharmacology course (control group). The Fresno test assesses knowledge in four EBM domains: formulating a clinical question, conducting efficient searches, appraising the evidence, and applying the evidence to patient treatment intervention. To assess the information retrieval skills of the two study groups, their electronically

captured search data will be analyzed by faculty members and librarian using a grading rubric that evaluates the efficiency, applicability, and use of appropriate database resources in finding the best evidence to solve a specific patient case-based clinical pharmacology problem. The scores on the Fresno test and information retrieval skills on weeks 1 and 14 between and within study groups will be compared using the *t*-test.
Results: Nine students enrolled in the spring 2007 course. (No student volunteered to participate in the control group.) The students took the Fresno test on week 1 of the fourteen-week semester. The test will be readministered on week 14. They also have completed three weeks of focused, hands-on instruction on the EBM domains, and the first three-week course module on pharmacogenomics. They still have to complete two course modules. The paper will report on the test of the null hypothesis that there is no difference between the week 1 and week 14 Fresno scores of the students. It also will present students' performances on the EBM domains and their skills in seeking and using EBM information sources on the three modules as assessed by worksheets and grading rubrics that have been created.

History of the Health Sciences Section

They'll All Be Rare Books One Day: Collection Development in Special Collections

Rooms 303 and 304

4:35 p.m.
Culling Your Collection for Quality
John Schleicher, head, Special Collections, McGoogan Library of Medicine, University of Nebraska Medical Center–Omaha
Presentation: What happens after ten years of not having a staff member managing your rare book collections on a day-to-day basis? Chaos perhaps? How many years will it take to clear up the backlog? The presenter will discuss the ensuing reorganization and collection management steps that had to take place in just such a situation. How many of us have had to clean up the mess a predecessor had left behind! Hear what it takes to do just that.

4:55 p.m.
Digitization of the Papers of Martin M. Cummings, Director Emeritus of the National Library of Medicine
Cheryl Rae Dee, assistant professor, School of Library and Information Science, University of South Florida–Tampa
Presentation: This presentation reports on a project to make the historically significant papers of Martin M Cummings, director of the National Library of Medicine 1964–1984, digitally available to future scholars. This presentation will discuss the project planning, content selection and location, system neutral metadata creation, digitization, potential digital presentation, and future considerations of interoperability and reuse of Cummings' speeches, testimony to the US House Subcommittee on Appropriations, and selected papers.

5:15 p.m.
Building a Retrospective Collection in Pharmacy, or Why the Materia Medica Matters
Michael Flannery, associate director, Historical Collections, Lister Hill Library of the Health Sciences, University of Alabama–Birmingham
Presentation: What in the world is "materia medica" anyway? We do not have a pharmacy school, why should I care about pharmacy-related materials? What are essential texts in the history of pharmacy and why? How can I tell "keepers" from "throwaways" in a mass of pharmaceutical literature? How would I go about filling in gaps in a spotty collection? How much might it cost? These and other questions will be addressed in this electronic presentation.

5:35 p.m.
Collection Development, International Dissertations, and the Oakland As
Diane McKenzie, collection development librarian, Health Sciences Library, University of North Carolina–Chapel Hill
Presentation: In 2004, the Health Sciences Library at the University of North Carolina-Chapel Hill accepted a gift from the New York Academy of Medicine of 3,500 linear feet of theses from academic institutions throughout the world. The gift included theses from the Universities of Paris and Berlin, as well as theses from lesser known universities, such as the Universities of Algiers, Buenos Aires, and Dakar. This presentation will focus on the decision to accept the gift and the ways we brought the library's resources together to create a team that could be competitive in the world (series) of the special collections.

Hospital Libraries Section

Information Revolution: Improving the Face of Vendor Relationships/Revolutionizing Our Bonds

In conjunction with Collection Development, Technical Services Sections

Grand Ballroom, Salon A and B

4:30 p.m.
Improving the Face of Vendor Relationships/ Revolutionizing Our Bonds
Nancy Bulgarelli, director, Sladen Library, Henry Ford Hospital, Detroit, MI; **Elizabeth Lorbeer,** associate director, Content Management, and assistant professor, Lister Hill Library of the Health Sciences, University of Alabama–Birmingham; **Linda Spadaccini,** library director, Waterbury Hospital, Waterbury, CT; **Beth Treaster,** librarian, Saint Francis Health System, Tulsa, OK; **John Mate**, director, Corporate Sales, Ovid Technologies, New York, NY; **Lynn Fortney**, vice

president/director, Biomedical Division, EBSCO Information Services, Birmingham, AL; **Mark Roux**, president, CyberTools for Libraries, Harvard, MA; **Dan Boutchie**, hospital sales manager, US and Canada, *The New England Journal of Medicine,* Waltham, MA
Objective: We are all involved in vendor relationships, making collection development decisions, and negotiating the best deal for our library or system. We want to revolutionize our vendor bonds to ensure a win-win strategy by focusing on value, key success factors for building long-term vendor-library relationships, and making pricing transparent. The program will present benchmarks as well as successes for improving vendor relationships. Librarians and vendors will step into each others' shoes in the process.
Setting: Invited panel of eight speakers: four librarians and fou vendors; contributed posters.
Facilitators: Michelle Volesko Brewer, director, Library and Corporate Information Services, New Jersey Hospital Association (NJHA)–Princeton; and Kerry O'Rourke, campus library director, University of Medicine and Dentistry of New Jersey (UMDNJ)–New Brunswick. Volesko Brewer and O'Rourke codirect the Joint Group Licensing Committee of the Health Sciences Library Association of New Jersey (HSLANJ)
Method: Presentation by facilitators followed by brief presentations from each of the panelists in response to the following questions:
1. What are the important characteristics of a successful vendor-library relationship?
2. What are the issues and concerns of various pricing models and pricing transparency? Pricing transparency is defined as "equal and public access for all market participants to the baseline starting retail price of a library resource (license, software, etc.) in a way that creates an easy and common understanding of the pricing information and that discloses all relevant information that would vary the price."
The presentations will be followed by a question-and-answer period, moderated by facilitators with open dialogue between panelists.
Results: Attendees will be presented with best methods for working with vendors, understanding and overcoming barriers in vendor relationships and pricing discussions. Librarians need due diligence, knowing the marketplace, and the vendors of specific product types, as well as qualitative components of the product sought.
Conclusion: Revolutionizing the bonds of vendor relationships will allow librarians to hold their own with license and product negotiations. Developing and improving vendor relationships will improve the quality of library services and lower costs.

Poster
Pluses and Minuses: The Doody's Core Titles' Experience
Lisa Huang, allied health sciences librarian, Central Park Campus Library, Collin County Community College District, McKinney, TX; **Paula Scott,** library director, Driscoll Children's Hospital, Corpus Christi, TX
Objective: With the retirement of Dorothy Hill and discontinuation of the Brandon/Hill lists, Doody's has attempted to fill the void in collection development for the small medical library with Doody's Core Titles. This poster examines the experiences of the authors as librarian selectors in patient education, medical librarianship, and anatomy/embryology.
Methods: The poster illustrates selection of Doody's Core Titles, work of the selectors, rating system, and designation of a title as an essential purchase.
Results: The authors' share the positive and negative experiences as selectors and offer suggestions for improving Doody's process for developing the Doody's Core Titles. These suggestions are offered as Doody's Core Titles is increasingly being used for collection development for all health sciences libraries.

Public Health/Health Administration Section

Filling the Void: Creating Access to All from Anywhere

In conjunction with Federal Libraries, International Cooperation Sections; Outreach SIG
Grand Ballroom, Salon C

4:35 p.m.
What Would John Snow Use Today? PDAs for Public Health Data
Mohammad Al-Ubaydli, consultant, IT Insights, The Advisory Board Company, Washington, DC
Presentation: From Ghana to Georgia, handheld computers are being used to collect public health data in the field. This option has become easier and cheaper with the development of open source software tools and the availability of smartphone handheld computers to transfer data. The lecture will cover the basics of handheld computers, list some of the tools, and begin discussing the issues that must be considered in developing such a public health project.

4:55 p.m.
Information Access for Rural Health Care Providers
Mark Scully, library consultant, Northern Wisconsin Area Health Education Center, Wausau, WI; **Cynthia M. Reinl, AHIP,** librarian, Rose Library, Bellin College of Nursing, Green Bay, WI; **Suzanne Matthew,** executive director, Northern Wisconsin Area Health Education Center–Wausau; **Diana H. Robertson,** knowledge specialist, Robertson Research, Woodstock, ON Canada
Objective: Our project provides access to online information via a Web portal to users that can be differentiated by profession, type of institution, and academic status. This paper will report on the second phase of a National Library of Medicine project by evaluating the usage and usefulness of online

information resources to these different types of users.
Methods: The paper will measure the impact of information services on the professional practice of health workers. In the first phase of the project, the users were given an introduction to the portal and some users received information literacy training. The project will continue the training in health information literacy and measure the effectiveness of such training. Results will be gathered on the following progress criteria:
• analysis of types and formats of materials accessed from Web portal
• acceptance and use of PDAs in small test group
• portal usages statistics
• online surveys of users
The project involves over 300 health professionals in 2 hospital systems, one college of nursing and 10 county health departments, as well as several community and tribal health clinics in a 10-county rural area.

5:15 p.m.
Maryland Public Health Practitioners Access and Use: Follow-up Analysis and Training
Lisa Massengale, associate fellow; **Kate Oliver,** associate director; **Claire Twose,** associate director; William H. Welch Medical Library, Johns Hopkins University, Baltimore, MD
Objective: To deepen our understanding of public health practitioners' need for and use of licensed, professional literature and effective ways to address this need.
Subjects: Twenty public health practitioners in two Maryland county public health departments.
Methods: Participants were provided with information literacy instruction and access to a full range of library services including a personalizable portal for accessing licensed literature and document delivery. The practitioners were asked to complete five bimonthly training exercises related to public health data and information needs. Librarians collected and analyzed the exercise results along with self-report and Web-log data on use of electronic resources and their impact on public health practice. A conjoint analysis survey was administered to determine participant's preferences for routes to accessing professional literature.

5:35 p.m.
Information Revolution: Arming the Troops: Providing PDA Training to Rural Critical Access Hospitals
Rick Wallace, assistant director, Outreach and Public Services; **Jamie Price,** PDA and outreach specialist; Quillen College of Medicine Library, East Tennessee State University–Johnson City
Program Objective: to train rural physicians how to use PDAs and the ePocrates database
Setting: Tennessee rural critical access hospitals
Participants: physicians
Program: This patient safety initiative was a collaboration between the Tennessee Hospital Association (THA) and the Universities of Southern Maine, Minnesota, and North Dakota, and the Maine Rural Health Research Center, Upper Midwest Rural Health Research Center, QSource (Tennessee QIO), eight small rural Tennessee hospitals and BlueCross/BlueShield of Tennessee (funder). Because of THA's knowledge of the East Tennessee State University Quillen College of Medicine Library (QCOML) through state conferences, QCOML was asked to conduct the training for the PDA segment of the project.
Main Results: The goal was to provide a PDA for every hospital prescriber in eight small rural Tennessee hospitals. The project provided a Palm TX device, a two year subscription to the full suite of ePocrates software and training. One hundred-thirty clinicians were trained in PDA/ePocrates. Retraining was provided at each site as needed.
Evaluation: evaluation was conducted by a 4–6 month user's survey, usage data from ePocrates (sync, look-ups) and evaluation based on the Brigham and Women's Hospital Survey.
Conclusion: Physicians were pleased with the PDAs and indicated that the devices positively influenced their patient care. This type of cooperative venture exposes the talents of medical librarians to new populations and opens up opportunities for further collaboration.

Relevant Issues Section

Strange Bedfellows: Radical Shifts in the Relationships Between Libraries and Their Partners

In conjunction with Leadership and Management Section
Grand Ballroom, Salons I and J

4:30 p.m.
Strange Bedfellows: Radical Shifts in the Relationships Between Libraries and Their Partners
Tony McSean, director, Library Relations, Elsevier, London, United Kingdom; **Tom Richardson,** director, Institutional Sales and Service, *New England Journal of Medicine,* Waltham, MA; **Joy van Baren,** senior user interface architect, User Centered Design, Elsevier, Amsterdam, The Netherlands; **John P. Robarts,** Research Library, University of Toronto, Toronto, ON, Canada
Presentation: Librarians are increasingly working with companies, organizations, or government entities that may have conflicts of interest with the mission of open access to health information. Vendors sponsor library functions and create indispensable products our patrons need yet may have business models that endanger library survival. Government agencies may provide information that is suspect or difficult to use, yet they are the ones charged with creating and disseminating that information. Organizations may simultaneously compete and cooperate with libraries to provide services or access to information of relevance to their mission. What are the trends and how does the library profession deal with such

conflicts of interest? Are there success stories that show a symbiotic rather than parasitic relationship? What is the long-term prognosis for these partnerships?

Veterinary Medical Libraries Section

Identifying Animal Alternatives in Medical Research and Education

Rooms 305 and 306

4:35 p.m.
The Search for Alternatives: Librarians and Animals in Research, Teaching, and Testing
Mary Wood, librarian, Center for Animal Alternatives Information, University of California–Davis
Presentation: Animal welfare and alternatives legislation exist in the United States, as well as in Canada and the member states of the European Union. Effectively, scientists are allowed to conduct an animal experiment only if no other scientifically satisfactory method is reasonably and practicably available. In the United States, the very specific alternatives search requirement was added to the Animal Welfare Act to assure the general public that no animal used in research suffers unnecessary pain or distress. While legislative requirements appear straightforward and regulatory compliance is not difficult, searching with a sincere effort to meet the intention is challenging. Locating relevant information and giving thoughtful consideration to the breadth of alternatives is not the usual search result. Research scientists and institutional review committees endeavor to meet regulations without always fully understanding the best and most productive approach. A comprehensive search, performed by searching all of the scientific literature published in a specific area of study, will result in the retrieved information being more relevant, attention to animal welfare assured, and compliance met. Already minimally familiar with locating scientific material for their research, scientists can readily learn to expand their literature searches to include additional databases. At the same time, the subject of alternatives can be more broadly defined to include the terms replacement, reduction, and refinement. Equally important is expanding the search to include new ideas and technology, as well as aspects of husbandry and care. Specific strategies and techniques to be used when searching for alternatives and welfare information will be presented, together with a discussion of database selection. By providing focused resources, instruction, and ready assistance, we can help scientists to both consider alternatives and comply with regulations.

4:55 p.m.
A Veterinary Medical Librarian as an Information Consultant for the Institutional Animal Care and Use Committee (IACUC): The Reality, Possibilities, and Benefits
Gayle Willard, AHIP, professor and director, Veterinary Medical Library, Kansas State University–Manhattan
Presentation: There is significant federal regulation and oversight on the care and use of animals in research, testing, and teaching in the United States. An effective institutional animal care and use committee (IACUC) is at the heart of a compliant animal care and use program. IACUCs must review many aspects of animal-based research or teaching. One of the most difficult responsibilities involves assuring that mandated literature searches for "unnecessary duplication of effort" and "alternative to painful procedures" are performed and evaluated properly. At Kansas State University, the veterinary medical librarian serves as the information consultant and member of the IACUC and reviews approximately 100 research and teaching applications each year. All US colleges of veterinary medicine have librarians with expertise in searching the veterinary medical literature. Having a veterinary medical librarian associate in some capacity with the IACUC provides benefits for the IACUC, educators, researchers, the librarian, and animal welfare. This presentation explores the reality, the possibilities, and the benefits based on the presenter's 'seven years experience as a member of the KSU IACUC.

5:15 p.m.
USDA and Searching for Alternatives: I'm From the Government and I'm Here to Help
Tim Allen, technical information specialist, Animal Welfare Information Center, US Department of Agriculture, Beltsville, MD
Presentation: With the passage of the 1985 "Improved Standards for Laboratory Animals" amendment to the Animal Welfare Act, Congress encouraged the use of alternative techniques and minimization of pain and distress for those animals used in research. The US Department of Agriculture's (USDA) implementing regulations required animal and care use committees (ACUC) to determine that scientists were considering alternative methods and techniques in their experiments. Acknowledging that ACUCs were not sure how to ensure the regulations were met, USDA released policy 12, "Written Narrative for Alternatives to Painful Procedures, to provide additional guidance. Despite these efforts, the search for alternatives remains a source of concern for scientists, ACUCs, and information providers. Surveys of animal care veterinary medical officers have shown that the search for alternatives is the most frequently cited problem area for ACUCs. Having a thorough understanding of what the regulations require and, more importantly, what constitutes an alternative method will allow all parties involved to have a clearer picture of what should be accomplished with the search for alternatives. Tips for developing the search strategy will also be discussed.

5:35 p.m.
Invited Speaker Panel
After presenting individual material, the invited speakers will participate in a panel discussion.

2007 National Program Committee

Revolutions Under Way: Capture the Moment

Grand Ballroom, Salons K and L

10:35 a.m.
In Librarians We Trust: Building a Partnership with Practitioners for the Benefit of Patients
Angela Dixon, head, Collection Management; **Mary Beth Klofas,** head, Information and Access Services; **Marilyn Rosen,** reference librarian; **Julia Sollenberger, AHIP, FMLA,** director; Health Science Libraries and Technologies/Edward G. Miner Library, University of Rochester, Rochester, NY
Program Objective: The Ask A Medical Librarian program objective was to deliver targeted, individualized information to in-patients, outpatients, and their families from trusted sources such as books, journals, pamphlets, and selected high-quality Internet sites. This was accomplished through the use of an information prescription over a seven-month period in three pediatric units.
Setting: The pilot was conducted in an academic health sciences library serving a school of medicine and dentistry and a school of nursing and a 740-bed teaching hospital, which includes a 124-bed children's hospital.
Participants: Librarians collaborated with health care providers in the pediatrics department.
Program: What would you do if a poster promoting librarian assistance with health questions was ripped off the wall by a pediatrician who opposed patients getting information directly from the library? The library director, cognizant that patients are getting information and misinformation from the Internet, proposed partnering with the pediatrics department to develop an information prescription program. A task force was created to design the form and to establish procedures for submitting and filling requests. The librarians also formulated goals and objectives, as well as evaluation tools for providers and patients. Multifaceted publicity was also incorporated into the program.
Results/Conclusions: During the 7-month pilot, 34 requests for information were submitted by providers and filled by librarians. To determine if the pilots' goals and objectives were met, surveys were conducted with both providers and patients or families. The surveys revealed that 100% of both providers and patients/families were either satisfied or very satisfied with the service. Based on the positive response that was received, the Ask A Medical Librarian Information Prescription service is being expanded to the entire department of pediatrics in 2007.

10:52 a.m.
Bringing the Mountain to Mohammed: Having a Librarian in the Operating Room Area
Denise P. Hersey, liaison activities librarian, Cushing/Whitney Medical Library, Yale University, New Haven, CT
Objective: To increase awareness and use of library-funded resources by physicians and residents who work in the operating room (OR) areas of a busy teaching hospital and to promote the inclusion of medical librarians in clinicians' information-seeking activities and curriculum decision making.
Methods: In an effort to provide library assistance to clinicians typically unable to find time to get to the physical library, a medical librarian was available in the anesthesiology department's clinical care area of the ORs for one hour, four days a week. This new "librarian on call" service was advertised by flyers and emails sent to the department's email list. Statistics were recorded on what types of inquiries were made, how much time the librarian spent on the query, which resources were used to answer the question or educate the clinician, how often the clinician went to the physical library or used the library's Website, and various demographic information. In addition to these data, a survey was distributed to those who used the service to determine if they were satisfied with the "librarian on call" service and which library resources they became aware of and now used regularly because of the program.
Results: During the initial two and half month period of the program, the librarian spent a total of 36 hours in the OR area of the hospital. In that time period, she answered 51 questions from 35 anesthesiology staff members. At least 50% of those who worked with the librarian in the OR had never worked with a medical librarian before. However, 78% of those who filled out the survey indicated that by speaking with the "librarian on call," they had learned of a library service or resource that they were previously unaware of.
Conclusion: During the time that the librarian began working in the OR, she has been invited to work more closely with anesthesiology department faculty. Data from this experience indicate that having a librarian in the operating room area is important to the medical staff working there and a useful way to integrate librarians into hospital and academic departments.

11:09 a.m.
A New Liaison Outreach Program: Mobile Reference Services to the School of Public Health
Donghua Tao, health sciences reference librarian; **Patrick McCarthy,** director; **Mary M. Krieger,** assistant director, Information Services; **Annie Webb,** reference assistant; The Medical Center Library, Saint Louis University, St. Louis, MO
Objective: To provide onsite library information services for faculty, students, and staff at the school of

public health; to improve library support for research and scholarship; to cultivate and strengthen liaison relationships with the school of public health; and to enhance marketing and delivery of library resources and services.
Setting/Participants/Resources: In 2005, the medical center library at launched a library liaison program, matching reference librarian subject specialists with users in schools of medicine, public health, and allied health.
Brief Description: The school of public health is located at a greater distance from the Library than other programs on the main medical center campus. Although the library provides a wide array of electronic resources, physical distance diminishes the ease of access to direct reference services for school of public health users. To bridge the gap, we developed an outreach program of mobile reference services to deliver onsite information assistance with regular office hours each week. This paper shares the experience of planning, implementation, maintenance and evaluation of this new program. The challenges encountered and issues involved—such as time, location, technical support, service scope, and related issues—are also discussed.
Results/Outcome: The mobile reference services program has received a good turnout. Since September 2006, there have been a total of thirty-seven reference transactions in twelve weeks, averaging three transactions per week in a two-hour period. Most of the information requests are librarian-mediated literature searches for paper assignments and research. The faculty and students prefer to schedule a meeting time during the mobile reference Services hours to make information requests. Some of them drop by just to say "Hello." The school of public health patrons have become significantly more aware of the library's resources and services, and the liaison relationship has been strengthened.
Evaluation Method: Through a reference statistics form, the basic demographic information of participants, the number, and the content of reference transactions have been recorded. Through a hard copy and online evaluation form, we are collecting user's feedback about the services.

11:26 a.m.
Books to Bedside

Cristina Pope, AHIP, director, Library, SUNY Upstate Medical University, Syracuse, NY; **Joyce Latham,** director, Onondaga County Public Library System, Syracuse, NY

Methods: If you have ever had the misfortune to be admitted to a hospital or have had a family member admitted, you know that what you do most is wait: wait for therapy, wait for tests, wait for results, wait while your family member is in therapy or in surgery—just wait. Now, patients, family members, and hospital staff, too, can take advantage of Books to Bedside, a service offered only through the partnership of SUNY Upstate Health Sciences Library, Upstate Volunteers, and the Onondaga County Public Library System (OCPL). At their bedside, patients can select from books provided from the collections of the public library system. If the client needs a library card, she can register for one at the bedside. Then, the items are checked-out using the OCPL online public access catalog. Clients can return the items to the volunteer, at the Hospital book drop and at any relevant location. Technology, volunteer training, obtaining permission to place a book drop in the hospital lobby, identifying eligible patients, etc.—all were obstacles we overcame. Then there was the one we didn't—room size! Come and learn from our experiences!

11:43 a.m.
Millenials Find Treasure in the Library!

Patricia Mongelia, information services librarian; **helen-ann brown, AHIP,** head; Information Services, Weill Cornell Medical College of Cornell University, New York, NY

Objective: With characteristics of millennials, those born from 1979 to 1994, in mind, the staff of the Weill Cornell Medical Library set out to create an engaging orientation in the form of a treasure hunt for our incoming freshman medical students to get to know the layout of the library, meet library staff and use some library resources.
Method: This is a summary report of a fun morning in late August 2006 when 103 incoming medical students, mostly millennials, taught themselves about our library. The afternoon before, the library director had introduced the treasure hunt, and there was a palpable sense of anticipation. The students were divided into teams of about 10, given a treasure map, and a list of tantalizing rhymes that required an answer. Ground rules were explained. Staff members were stationed at strategic locations to guide and verify that a rhyming clue was solved. Clues took them all over the library, in and out of the stacks and back and forth to the computer room. Each member of the winning team won a flashdrive. Every student filled out an evaluation and picked up a spillproof drinking mug.
Results: Students completed a evaluation. On a Likert scale, with 1 being uncomfortable and 9 being confident, the average comfort level of finding materials in the library was 6.1 and the average comfort level in finding materials on the library's Website was 6.3. The overall average rating of the treasure hunt was 7 with 1 being awful and 9 being outstanding.
Conclusion: The treasure hunt was a success because it met the experiential learning style of Millenial students who expect to be entertained and prefer to work in teams. Millenials also appreciate feedback and the opportunity to build rapport with the staff and each other. Because they work quickly, the winning team finished in seventeen minutes! Millenials thrive on immediate gratification and that's why the flashdrives for the winners and the spillproof mugs for all were such a big hit. Next year, more instruction to go with more riddles!

Dental Section

The Evidence Base: Evidence at the Point of Care: Where the "Rubber Meets the Road"

Sponsored by StatRef.

In conjunction with Health Association Libraries, Pharmacy and Drug Information, Research Sections; Clinical Librarian and Evidence-based Health Care SIG
Grand Ballroom, Salon D

10:30 a.m.
Evidence at the Point of Care: Where "the Rubber Meets the Road"
Heiko Spallek, assistant professor, Center for Dental Informatics, School of Dental Medicine, University of Pittsburgh, Pittsburgh, PA
Presentation: Heiko Spallek, assistant professor, Center for Dental Informatics, School of Dental Medicine, University of Pittsburgh, will focus on the dental informatics (DI) aspects and the ways DI could support evidence-based practice by providing the foundation of evidence-based decisions (i.e., chair-side decision support systems). He will discuss about how dentists actually record data using chair side computers in their offices. He will then present what he thinks needs to be improved and how we envision an electronic dental record of the future. Once the practitioner has all information electronically in a structured form, evidence-based rules and decision support can kick as we can see in many examples in medicine.

11:15 a.m.
Evidence at the Point of Care: Where "the Rubber Meets the Road"
Sarah Spinler, professor, Clinical Pharmacy, Philadelphia College of Pharmacy, University of the Sciences, Philadelphia, PA
Presentation: Sarah Spinler, professor of clinical pharmacy, Philadelphia College of Pharmacy, University of the Sciences in Philadelphia, is, in addition to being a professor of pharmacy, connected with the Cardiovascular Division in the Department of Medicine at University of the Sciences in Philadelphia and is on the Steering Committee for the "CRUSADE Registry, a national quality improvement initiative that is designed to increase the practice of evidence-based medicine for patients hospitalized with acute coronary syndromes." She will describe the current utilization of evidence-based medicine (EBM) by pharmacists at the point of patient care. She will then envision the practice of pharmacy in the year 2010 and describe what additional EBM resources may be needed to support practice.

Federal Libraries Section

Changing with the Times: The Multigenerational Workforce

In conjuction with New Members SIG
Grand Ballroom, Salon C

10:35 a.m.
Boomer + Nexgen = Library 2.0: Office Sharing as Double Mentorship
Maureen M. Knapp, reference librarian; **Mary L. Marix, AHIP,** reference librarian; John P. Ische Library, Louisiana State University Health Sciences Center–New Orleans
Objective: To explore how office-sharing provides a positive conduit between the generation gap.
Setting: Reference Department in a mid-sized urban academic health sciences center library.
Methods: A library hired a "Gen X" library school graduate and assigned her to the same office as the tenured "Boomer" librarian with twenty years experience. After 4 years of sharing an office, this case study will illustrate how intergenerational workspace collaboration can be the best mentoring of all.
Main Results: While the Boomer became the Gen Xer's primary authoritative source for the typical "newbie" concerns such as who's who in associations, university politics, distribution lists to monitor, and the best reference sources for the occasional unanswerable medical question, the Gen Xer discovered her own value as a resource when it came to explaining rapidly changing technology trends, software problems, and what the heck "wiki" meant.
Conclusion: Though at times, sparks flew and heads clashed, what was originally "just sharing an office" ultimately became a case study in double mentoring, which could easily serve as a model for other libraries facing the same "clash of generations" in a smaller space. This paper will examine the lessons we've learned after four years of collaboration and suggest methods to create a similar environment in your library.

10:55 a.m.
Uh..Hm... Breaking the Silence: Issues of Concern for New Medical Librarians
Lisa Huang, allied health sciences librarian, Collin County Community College District, McKinney, TX
Objective: The objective was to determine the issues that new medical librarians, who are members of the New Members Section Interest Group (SIG), have on MLA, the profession of librarianship, and professional development opportunities available to them, among others.
Methods: Members of the New Members SIG on the MLA email discussion list were surveyed anonymously regarding the above concerns. The survey was a composition of dichotomous questions, open-ended

questions and a few that employed the Likert-response scale. The data were analyzed using basic statistical methods with the results reported in descriptive and graphical forms.
Results: Detailed and graphical statistics will be available at the paper presentation as well as commentary from the participants. A sample of the survey results:
• 50% of the survey participants are in the 25–30 age group
• 46% of the survey participants state that librarianship is their first career
• 64% of the survey participants think the issue of budget cuts or changes in libraries will be very important to MLA in the next 5 years
• 38% of the survey participants report encountering generational issues between themselves and their supervisors occasionally
Conclusion: Results from the survey will be used to assist management in recruiting, retaining, and developing new members to the profession.

11:15 a.m.
The Accidental Cohort: Mentorship and Cross-Training in an Academic Health Sciences Library
Debra Werner, science reference librarian/biomedical specialist, The John Crerar Library, University of Chicago, Chicago, IL; **Nicole Theis-Mahon,** head, Technical Services, Bio-Medical Library, University of Minnesota–Minneapolis; **Robert E. Johnson,** education services librarian, Tompkins-McCaw Library for the Health Sciences, Virginia Commonwealth University–Richmond
Objective: Use mentorship and training to provide learning opportunities, encourage collaboration, promote medical librarianship, and offer continuity of service.
Methods: Based on the reference desk's need to fill several regular shifts, professional librarians provided mentorship and reference training to three technical services employees who were pursuing their master's of library and information science. These paraprofessionals were given extensive one-on-one reference training, attended training meetings with reference staff, and staffed regular hours at the reference desk. The paraprofessionals helped reference staff streamline current and develop new services. This collaborative effort bridged gaps between professionals and paraprofessionals, reference and technical services, and Baby Boomers and Generations X and Y.
Results: The initial benefit was to the reference desk, but both professionals and paraprofessionals saw increased staff flexibility, recruitment to the field, a global perspective for professionals and paraprofessionals, valuable training and experience, an understanding of how work in technical services impacts library users, and better communication between technical services and reference departments.
Conclusion: The library benefited from the cross-generational and interdisciplinary interaction between the reference and technical services departments. Although the library continues the practice of cross training, the emphasis is now on staffing the reference desk rather than the interdisciplinary nature of the initial cohort.

11:35 a.m.
Invited Speaker
Shannon D. Jones, education services outreach librarian, Tompkins-McCaw Library for the Health Sciences, Virginia Commonwealth University–Richmond
Presentation: Before hearing about generational issues in the workplace, this talk will review the traits of the Baby Boomers, Generations X and Y, and the soon-to-be-working Millenials. These labels carry with them stereotypes; however, much can be learned about workplace patterns by understanding how the generations tend to work together. Instead of feeling locked into a stereotype, we can then begin the discussion on how to work most efficiently together in the medical library.

Leadership and Management Section

Declaring Our Independence: Ringing in New Practices, New Partners, New Spaces

In conjunction with Hospital Libraries and Technical Services Sections
Grand Ballroom, Salon A/B

10:35 a.m.
The National Institutes of Health Enhanced Public Access Policy at the University of New Mexico: Sparking a Revolutionary Change in Research Culture and Practice
Holly Phillips, AHIP, electronic resources and access coordinator; **Erinn Aspinall, AHIP,** distance services coordinator; **Philip Kroth,** assistant director, Health Sciences Informatics Program Development; Health Science Library and Informatics Center, University of New Mexico–Albuquerque
Objective: To increase the University of New Mexico's current manuscript contribution rate of zero to PubMed Central in accordance with the National Institutes of Health (NIH) Enhanced Public Access Policy (the Policy) by (1) determining investigators' awareness of and perceived barriers to compliance with the Policy, (2) developing a range of library-based interventions to support investigator compliance with the Policy, and (3) measuring the effectiveness of the interventions.
Methods: The authors developed a PubMed query to measure the University of New Mexico's overall (7.7%) and investigator-submitted (0) contribution rate to PubMed Central in accordance with the Policy. The authors surveyed all (128) of the University of New Mexico's 2002–2005 NIH-funded investigators to

ascertain their knowledge, acceptance, and perceived barriers to Policy compliance. The authors used the data to identify promotional, educational, and service activities the library could implement to increase policy compliance. Library faculty ranked the recommendations in order of their potential effort and impact, and the authors developed a strategy for implementing the highest ranked recommendations. The PubMed query will be used to evaluate the effectiveness of these efforts by comparing the pre- and post-intervention contribution rates.
Results: The survey results demonstrate the importance of library support of the Policy and larger scholarly communication issues. As a result, the library included the creation of a scholarly communication support center in its 2007–2009 strategic plan. The new center will help researchers increase the impact of their scholarly work by integrating information dissemination protocols into the research process. Library faculty will implement these strategies in the newly created master's of science in clinical research program that is a part of the University of New Mexico's Clinical and Translational Sciences Center.

10:52 a.m.
Planning for Integration of the Digital Library, Clinical Decision Support and Evidence at the Point of Care (EPOC)

Linda M. Schwartz, library information specialist; **Barbara J. Iobst, AHIP,** library director; Library Services, Lehigh Valley Hospital and Health Network, Allentown, PA
Objective: The digital library is pivotal in a planning grant project to integrate information domains throughout the institution. Primary focus is integrating clinical decision support, evidence at the point of care (EPOC), and library content. Particularly significant is investigation of a seamless interface with the physician order entry system and the historical medical record system.
Methods: The planning process, collection of data, and evolution of the integration project are explored. Aspects of planning included: educational sessions on the grant goals, organization of planning teams, data collection tools, unstructured interviews of key stakeholders across five informational domains, and survey development. The library's grant mission includes both traditional roles such as identification of, evaluation of and education about knowledge-based information products, and exploration of more novel content areas such as clinical calculators and investigation of a seamless interface for integrating knowledge with the system. The digital library played a significant role in spotting key trends leading to the investigation of a software system for integrating three information domains (digital library, clinical decision support, and EPOC). This investigation resulted in an offer from a noted expert to participate in a grant proposal with potential for implementing the interface.

11:09 a.m.
Implementing a Center to Support Creative Problem Solving and Decision Making

Mary Moore, executive director, Libraries and Center for Knowledge Management, Office of the Director, University of Texas Health Science Center–San Antonio
Objective: *Charting the Future* is the Association of Academic Health Sciences Libraries' key publication for describing how libraries will change. In summary, libraries have moved from providing collections to providing access to information. The next stage will find libraries providing services and products to facilitate the capture and use of knowledge. This paper describes how libraries might provide collaboratory services.
Methods: Bill Wulf coined the term "collaboratory," using it to describe a laboratory without walls. The concept of collaboratory has evolved to include technology-enhanced centers for supporting brainstorming, problem solving, and decision making. The author has been researching collaboratories for over 10 years and has recently implemented a basic collaborary that could be implemented in any library. Information is presented on the history of collaboratories, as well as a summary of 240 documented collaboratories and brief descriptions of some existing health collaboratories. The author presents a plan to implement a basic collaboratory, including software and equipment needed, problems encountered, and lessons learned from implementation.
Results: Early use of a new collaboratory at the University of Texas Health Science Center-San Antonio has met with mixed results. Clients support the concept and are eager to use the space, but the software has been helpful in only limited ways. New partnerships with evaluators and group facilitators increase the potential for future use.

11:26 a.m.
A Unique Collaboration Uses Consumer Health Gateway and Go Local Resources to Create a Statewide Women's Health Resources Directory

Sally M. Patrick, project director, Utahealthnet, and outreach librarian; **T. Elizabeth Workman,** project director, goLocalUtah, and associate librarian; Spencer S. Eccles Health Sciences Library; **Kathleen Digre,** director, Center of Excellence in Women's Health, Region 8, School of Medicine; University of Utah–Salt Lake City
Objective: Produce a unique, statewide Women's Health Resources Directory by collaborating with three federally funded health information programs: goLocalUtah (www.golocalutah.org), an National Network of Libraries of Medicine (NN/LM)-funded project and part of the MedlinePlus Go Local Program; Utahealthnet (utahealthnet.org), a National Library of Medicine (NLM)-funded consumer health gateway; and the Department of Health and Human Services (HHS) Office on Women's Health, Center of Excellence in Women's Health (CoE) Demonstration Project, Region VIII.

Methods: The Spencer S. Eccles Health Sciences Library created a current, online directory of women's health resources in Utah by combining consumer health information from Utahealthnet, with content on health-related services in communities throughout the state provided through the goLocalUtah database. This content was mapped according to Go Local taxonomy and correlated with the CoE-defined categories, which are general health, perinatal/reproductive women's health, adolescent girl's health, and senior women's health. Each category is further defined in the CoE seven health domains: physical, psychological/mental, social, environmental, occupational/economic, intellectual, and spiritual. The resulting resource is available at www.uuhsc.utah.edu/coe/womenshealth/resources/women.html The Eccles Health Sciences Library has partnered with the CoE since its inception in 2005. Utahealthnet has served as the online women's resource for statewide health information. GoLocalUtah debuted in January, 2006, the eighth resource of its kind in the MedlinePlus Go Local program.
Results: The Spencer S. Eccles Health Sciences Library facilitated the creation of an up-to-date, online directory of statewide women's health resources and services through the collaboration of three successful federally funded health information projects: goLocalUtah, an NN/LM-funded project and part of the MedlinePlus Go Local Program; Utahealthnet, an NLM-funded consumer health gateway; and the HHS Office on Women's Health, CoE Demonstration Project, Region VIII.
Conclusions: This methodology could serve as a model to target content in other Go Local databases to design tailored, community-based health and human services directories.

11:43 a.m.
Library and Museum Collaboration: Celebrating a Medical Pioneer on both Sides of the Atlantic!
Ian R. Snowley, director, Academic Services, Research Library Services, University of London, London, United Kingdom; **Lisa Gensel,** assistant archivist, University of Delaware–Newark
Objective: This paper will report on the process of creating a joint exhibition to celebrate Benjamin Franklin's contribution to medicine in the United Kingdom and United States and will discuss the experiences of international and cross-professional collaboration.
Methods: The Royal Society of Medicine (RSM) Library in the United Kingdom and The Library of the College of Physicians of Philadelphia, in the United States collaborated to curate and host a major exhibition celebrating Benjamin Franklin's contribution to medicine as part of the Franklin Tercentenary celebrations. The idea for the exhibition arose as a result of discussions between the two organizations about areas for collaboration, which ultimately focused on the significant historical collections in their libraries. This was the first collaboration between these institutions. The project required librarians and museum curators to work together across both the Atlantic and professional barriers to bring about a truly inspiring collaboration. The RSM had never hosted a large scale exhibition before, and the college had never mounted an international exhibition, so many lessons were learned on both sides.
Results: The exhibition opened in London in October 2005 (remaining open through the Anniversary of Franklin's Birth on January 17, 2006) and attracted attention from the BBC and many visitors during the three months it was open. The exhibition opened in the Mutter Museum at the College of Physicians of Philadelphia in 2006 and will remain open until July 2007 and has attracted a wide range of media coverage as well as large numbers of visitors. Both institutions gained valuable experience in dealing with cross-professional collaborations, as well as lessons in the complexities of international exhibitions.

Medical Informatics Section

Revolutionizing Discovery through Text Mining

In conjuction with Molecular Biology and Genomics SIG

Grand Ballroom, Salons I and J

10:30 a.m.
Natural Language Processing and Knowledge Discovery for the Health and Biological Sciences: "Ask Not What Text Mining Can Do for You…"
K. B. Cohen, biomedical text mining group lead, Center for Computational Pharmacology, University of Colorado Health Sciences Center–Denver
Presentation: Text mining holds considerable promise for addressing problems currently being faced by a wide variety of health and biomedical professionals, ranging from bench scientists and model organism database curators to medical librarians and practicing clinicians. This presentation will describe the current state of the art in language processing technologies and automated knowledge discovery, beginning with a definition of the field and related disciplines, including text mining, data mining, natural language processing, information retrieval, knowledge discovery, and hypothesis evaluation. We will discuss what current systems are capable of, show how to recognize hype, and estimate what will be possible ten years from now. A basic background in how text mining works will be provided, including the two major types of approaches, rule-based and statistical, and their strong and weak points, as well as what makes any text mining approach fail. Finally, there will be a description of the currently hot research topics in a representative active research group and several examples of how medical librarians can participate meaningfully in the development of the field.

Medical Library Education Section

Taking Flight with Evidence-based Library and Information Practice: Educational Perspectives

Rooms 303 and 304

10:35 a.m.

Teaching Medical Residents: Impact of Instructor's Background in Medicine and Attitude

Assako N. Holyoke, medical reference librarian; **Mary M. Krieger,** assistant director; Medical Center Library, Saint Louis University, St. Louis, MO

Objective: To evaluate the role of librarians' medical background and their instruction style and attitude in the process of improving interaction with medical residents and increase the usefulness of library-provided instruction. To develop a trusting relationship with residency program coordinators and provide library contribution by offering enhancement opportunities for achieving one of the six competencies required in a residency education program.

Methods: Target population is new residents entering a residency program at the Saint Louis University (SLU) School of Medicine. A letter to medical degree coordinators in twenty three residency programs was sent by the medical center library (MCL) reference librarian, offering a library presentation to their new residents. Suggested presentation was on how to effectively access library resources and effectively search for medical information, including evidence-based medicine (EBM) literature. Instructor's professional background in medicine was mentioned in the letter. The presentation was carefully tailored to each residency program's preferences and requests or based on interests expressed in each program's Website. Teaching style, attitude, and interaction with residents were considered by the instructor at every session. After class, residents were asked to provide feedback by filling out an evaluation form.

Results: Presentations were provided to 95 residents in 9 residency programs, 8 of which agreed that library classes be given to residents for the first time. Greater emphasis in the class was placed on effective access to information. All residents rated the presentations either excellent (30%) or good (70%) and said they would recommend the class to peer or faculty.

Conclusion: The instructor's background and attitude had significant impact on the residents' perceptions of the class as her medical background allowed her to tailor course content more precisely to genuine needs of the residents. In the past, instruction to residents provided by the MCL often received indifferent response. A common attitude was "We graduated from medical school and don't need a class on searching." When the library assigned a librarian with medical background to be the instructor for a class aimed at SLU Medical School residents, however, evaluations improved markedly.

10:55 a.m.

Qualitative Methods in Health Sciences Library and Information Sciences Research 1996–2006: The State of the Evidence Base

Martha I. Preddie, doctoral student, School of Information and Library Science, University of North Carolina–Chapel Hill

Objective: An assessment of the evidence base for library and information practice indicated the lack of an inventory of qualitative studies in the sphere of health sciences librarianship. The objective of this study was to examine the use of qualitative methods by health sciences library and information professionals in order to gauge the existing state of the research base.

Methods: A content analysis was conducted of research published in the health sciences library and information field during the period 1996–2006. Publications were identified through a search of the PubMed database. Data were extracted, compiled, and analyzed to answer four questions: What qualitative research methods have been utilized? Who is conducting such research? What subjects and settings have been studied? Are there differences in the qualitative research trends among professionals in different countries?

Results: Results and conclusions will be provided during the presentation.

11:15 a.m.

Designing a Curriculum in Evidence-based Information Practice for Master's Students in Library and Information Science

Joanne Gard Marshall, FMLA, alumna distinguished professor, School of Information and Library Science, University of North Carolina–Chapel Hill; **Carol Perryman,** Chapel Hill, NC

Purpose: This paper describes the experience and outcomes of conducting a full semester-length academic course focused on evidence-based library and information practice (EBLIP), the first graduate offering of its kind. The course was also used to pilot-test an online tutorial for potential use by practitioners interested in implementing EBLIP.

Setting/Participants/Resources: The core curriculum materials included readings from the edited work, *Evidence-based Practice for Information Professionals* (Booth & Brice 2004) and a six-module online tutorial. Guest speakers from other professions such as social work, nursing, and health policy provided comparative information about the implementation of EBP in their fields. The participants in this seminar-style class explored the basic concepts of EBLIP as well as factors involved in implementing evidence-based practice in library and information settings. Practitioners from health sciences libraries in the area were also invited to the sessions.

Brief Description: The course was undertaken as a selected topics course at the school of library and information science, a category reserved for new topics in the curriculum. This presentation will discuss the response to the seminar and provide highlights of the

discussions held among the participants. The models of EBP implementation in other professions presented by guest speakers in the seminar will be reviewed. A model for evidence-based practice for library and information professionals resulting from seminar discussions will be presented.

11:35 a.m.
Question & Answer Session
Presenters will answer questions following the third presentation.

Nursing and Allied Health Resources Section

A Virtual Revolution: Innovative Trends in Distance Education

In conjuction with Outreach SIG
Independence Ballroom

10:35 a.m.
It's a Small World: Changing Techniques to Accommodate Increasing Remote Users
Joanne Rich, information management librarian; **Janet G. Schnall, AHIP,** information management librarian; **Leilani A. St. Anna, AHIP,** information management librarian; Health Sciences Libraries, University of Washington–Seattle
Objective: This paper illustrates several library initiatives to bring library instruction and services to health sciences students that are independent of student location.
Methods: The University of Washington (UW) Health Sciences Libraries (HSL) is an academic library serving six health sciences schools across a five-state region. The librarians work as liaisons to provide in-curriculum and ad hoc library instruction and services to faculty, staff, and students. It is a continual challenge to maintain quality instruction in information literacy as the fraction of our remote users grows. This paper describes the history of our distance efforts and forward-looking initiatives that will allow us to maintain a substantial, high-quality presence in our environment of virtual users. Specific examples (e.g., using Camtasia software to create an help videos for an online nursing research methods class; taping consultations for later off-site review; recording orientation videos tailored to several schools, personalized with introductions and liaison information and recurring core video segments; and videoing a PowerPoint presentation for an offsite new pediatric fellows orientation) will be drawn from the schools of nursing, medicine, and clinical pharmacy. Focus will be placed on new technologies as well as new uses for old technologies.
Results: The UW health sciences schools have been leaders in providing distance education opportunities to their students. The HSL has changed its techniques to reach and educate our remote users, including incorporating improved educational technologies as available and using as many forms of communication as possible. The HSL is now experimenting with new technologies (e.g. blogs, podcasts, instant messaging) to best reach the current student population.

10:52 a.m.
Embedded: Librarians and Faculty Collaborate to Serve Online Students Through Instructional Courseware
Ladonna C. Guillot, health sciences librarian, Baton Rouge Nursing Library, Southeastern Louisiana University–Baton Rouge; **Beth Stahr,** distance education librarian and interim head, Reference; Sims Memorial Library, Southeastern Louisiana University–Hammond
Objective: The objective is to deliver cost-effective and class-specific reference services and instruction via instructional courseware for distance learners in a 4-university graduate consortium that has recently migrated to 100% online instruction.
Methods: The health sciences and distant education librarians at a medium-sized state university collaborated with nursing faculty to address changes in instructional delivery for a graduate consortium. The program migrated to 100% online instruction in fall 2006. Librarians responded to this innovation with a small scale embedded librarian service designed to provide course and assignment specific library assistance in the BlackBoard environment. Librarians log in as teaching assistants to monitor library related threads on discussion boards, post research tips, and conduct chat sessions. They work collaboratively in the "online classroom" to ensure the changing needs of distant learners are met. They engage faculty by targeting instructors who teach online, by showing faculty how to link from courseware to library resources, and by creating course or discipline specific research guides. Advantages to this program include its technological simplicity and ease of implementation in existing courseware with little or no additional funding in an area faced with budget restraints.

11:09 a.m.
One Stop Shopping for Information Literacy Training
Robert E. Johnson, education services librarian; **Catharine S. Canevari,** interim deputy director; **Shannon D. Jones,** interim head, Education Services; **Virginia L. Stone,** education services librarian; Tompkins-McCaw Library for the Health Sciences, Virginia Commonwealth University–Richmond
Objective: Use distance learning technologies to deliver library instruction.
Methods: Librarians designed a non-credit course using the Blackboard course management system to deliver comprehensive information literacy instruction to health sciences students enrolled in distance education and on-campus programs. The Association of College and Resource Libraries Information Literacy Competency Standards for Higher Education were used as the basis for designing content. Sections for content were organized in the Blackboard course. These included sections for

Announcements, Welcome, Getting Started, Exploring Databases, Getting Materials, Evaluating, Citing Sources, and Check Your Skills. Database tutorials, help pages, self-checking assessments are included as part of the content. System-provided tools are used to facilitate communication and push information to remote users. Students enrolled themselves in the course during library orientations, and announcements remind them of available resources within the course to help them with their assignments.

11:26 a.m.

Blending Formats: An Innovative Model for Teaching Medical Informatics

Ana D. Cleveland, AHIP, professor and director, Health Informatics Program; **Jodi L. Philbrick,** doctoral candidate and adjunct faculty; School of Library and Information Sciences, University of North Texas–Denton

Purpose: To showcase a model for teaching medical informatics in a blended format, combining online instruction with face-to-face instruction, that is successful due to partnerships with area academic health sciences libraries.

Description: For the last five years, the presenters have been teaching medical informatics in a blended format, which has developed a successful teaching model. The course is taught online using WebCT Vista with one face-to-face weekend meeting. The presenters will describe the content and delivery of the course as well as highlight the guest speakers who have been utilized in the course. One of the major successes of the course is the partnerships with area academic health sciences libraries to provide an enriching learning experience for the students.

Results: The presenters have found that medical informatics can be successfully taught in a blended format, combining online instruction using WebCT Vista with face-to-face instruction during a weekend meeting. The face-to-face weekend meeting has proved to be an excellent vehicle to introduce medical informatics research initiatives and allows the students to network with health information professionals and health care providers. The course content merges medical informatics with library and information sciences. Engaging area academic health sciences librarians in developing and teaching the course has been a core component to the success of the course.

11:43 a.m.

Teaching PubMed in Cyberspace: The Development of a Self-learning Package

Samuel B. King, librarian, Manchester Campus, Library and Learning Resources, Massachusetts College of Pharmacy and Health Sciences–Manchester; **Richard Kaplan,** dean; **Kathleen MacDonald,** director, Instructional Design Services; Library and Learning Resources, Massachusetts College of Pharmacy and Health Sciences–Boston

Objective: Initially targeting physician assistants, this initiative was designed as a "virtual tutor" for health care practitioners, particularly in rural areas, who lack access to an instructional program in PubMed. Our vision is to provide an intuitive, automated teaching package providing essential PubMed skills in an environment that can be easily updated using currently evolving technologies.

Methods: Through a grant from the National Network of Libraries of Medicine/National Library of Medicine, a self-learning tutorial was created utilizing Tegrity Weblearner. Content was divided into a series of nine self-contained modules covering specific aspects in using Pubmed. The modules included a combination of video clips, narrated PowerPoint presentations, video-guided virtual demonstrations, and real time opportunities for participants to practice online. Structured quizzes enabled participants to measure their skills and qualify for possible continuing education credit. The development team included a librarian who was responsible for content development and course delivery and an instructional designer who contributed to the overall design and the selection and integration of several instructional technologies.

Results: The modules were successfully completed, and CD-ROM copies were mailed to over eighty libraries in the northeast. These instructional modules can be used by health care practitioners for continuing education credit or for simply updating their searching skills. The American Association of Physician Assistants has approved these modules as a continuing education course. It can also assist librarians from any type of facility or expertise level in enhancing their own PubMed skills. The modules are designed to be easily incorporated into existing library instruction programs.

Conclusions: Three areas of related research are actively being pursued:

1. investigate other technologies that will provide easier updating as well as Internet access using video streaming
2. create survey instruments to accurately measure immediate and long-term user satisfaction with the course and instructional technologies
3. distribute modules to a wider audience including other health practitioners and libraries nationally

Relevant Issues Section

The Politics of Health Information: Keeping the New Barbarians at Bay

In conjunction with Chiropractic Libraries Section; Lesbian, Gay, Bisexual, and Transgendered Health Sciences Librarians SIG

Rooms 305 and 306

10:35 a.m.

Celebrating the Role of Academic Tenured/Tenure-track Librarians in Disseminating Health and Human Services Research Findings in Politically Sensitive Subject Areas

Paul Blobaum, assistant professor and health professions librarian, Library, Governors State University, University Park, IL

Objective: This paper will explore the professional milieu of tenured/tenure-track health sciences librarians at public universities and ways their work ensures that vital health information resources are developed independently from external influences. Academic librarians serve in a unique role that enables them to ensure that research results in sensitive subjects are disseminated widely in accord with the mission of universities and librarian professional values.

Methods: A small public university library with tenured/tenure-track library faculty turned to grant writing to support collection development efforts in response to a 28% budget cut and a need to support growing professional programs. The health professions librarian leveraged external grant programs to obtain seed money for new materials supporting research in the health disparities of gay, lesbian, bisexual, and transgendered (GLBT) persons. Tenure-track status and academic freedom offers individuals protection from retribution and retaliation for working with subject matters that are offensive to power brokers. An allied health subject partnership was forged with academic libraries across the state to address gaps in the collection regarding the health care of GLBT persons, thus enriching state-wide library resources as well.

Results: Academic tenured/tenure-track librarians are not immune from reprisals in the course of their professional work. However, grievance procedures and other institutional policies in academia offer relief from political reprisal and give hope that research results will continue to be disseminated for the sake of the public "right to know."

10:55 a.m.

The Politics of Health Information: Keeping the New Barbarians at Bay

David Dillard, librarian, Samuel L. Paley Library, Temple University, Philadelphia, PA; **Julie Schneider,** head, Technical Services and Collection Development, Ebling Library, University of Wisconsin–Madison; **Susannah Fox,** associate director, Editorial, Pew Internet Trust, Washington, DC

Presentation: Recent years have seen an increase in the attempts to hide or distort health information that is at odds with the current political climate in the United States. Once considered safe and protected, basic scientific and health information is under attack—sometimes from within (i.e., government appointees hostile to the mission of the agencies they work for), sometimes from without (i.e., political action committees and other pressure groups). The ability to widely disseminate such information electronically has actually led to a new problem—revision or distortion of what was considered sound and settled information. Examples include reproductive health and environmental information, but there are potentially many other types of information that could be subject to political pressure. What is the role of librarians in protecting such information and making sure access to it remains freely available?

2007 National Program Committee

Beyond the Digital Revolution: Virtual Collaborations, Virtual Partnerships, Virtual Communities

Independence Ballroom

3:05 p.m.
The Ultimate Virtual Library
Carol Perryman, fellow and PhD student, School of Information and Library Science, University of North Carolina–Chapel Hill; **Jennifer E. Watson,** assistant professor and department head, Electronic and Collection Services, Library, University of Tennessee Health Science Center–Memphis; **Guus van den Brekel,** coordinator, Electronic Services, Central Medical Library, University Medical Centre, Groningen, Netherlands Antilles
Objective: In building new models for service that explore the use of new technologies and innovative methods of collaboration, librarians at the Second Life Medical and Consumer Health Libraries are reaching out to the one million registered users of the Second Life 3D online world. We will discuss the experience of this new setting, a step beyond even virtual reference.
Methods: We outline the history and purpose of virtual communities such as Second Life, then examine the rationale for establishing medical and consumer health libraries in Second Life in light of changing demands for library services and the revisioning of the concept of library as place. Priorities include the identification of user populations and collaboration with librarians and nonlibrarians from wide-ranging backgrounds across the globe. The virtual environment for medical and consumer health libraries is compared with the brick-and-mortar environment, highlighting the role of Second Life as a "sand box" for exploring new models of information service and user interaction. Challenges include providing reference services, building collections, cataloging in a virtual environment, coping with the instability and impermanence of a virtual environment, and working with an all-volunteer workforce.
Results: The fast-paced environment of Second Life makes it difficult to offer results, when changes occur almost by the minute. HealthInfo Island attracts a large number of visitors and has begun to serve as an information and referral resource for quality health information. Observations are made about recruitment and organization of personnel and the limitations and possibilities of technology in this new setting. The global nature of a Web-based multi-user virtual environment presents additional challenges in terms of language and cultural barriers.
Conclusions: At this early stage of development, volunteers and organizations are more present than individual patrons, due to the lack of marketing. Plans for action include outreach, resource development, and enhanced access to resources at Second Life. It is our belief that exposure to diverse patron and disciplinary populations in communities such as Second Life has the potential to enhance our understanding of the challenges facing libraries today.

3:22 p.m.
Creating an Academic "Home" for Clinical and Translational Research: Library Roles
Karen A. Butter, AHIP, university librarian; **Heidi Schmidt,** director, Academic Information Systems; Library and Center for Knowledge Management, University of California–San Francisco
Objective: This paper examines the University of California-San Francisco (UCSF), Library's role in the Clinical and Translational Science Award, an National Institutes of Health initiative to accelerate the pace in translating discovery into patient care.
Methods: The Clinical and Translational Science Institute (CTSI) extends across academic and clinical programs to translate knowledge into therapies. The program is designed to address major challenges in translational research. One challenge is the lack of effective communications and information infrastructure to promote collaboration and support the information and knowledge translational connections. The UCSF CTSI application proposed the development of a "virtual home," an effort led by the library. This paper describes the virtual home concept, the organizational challenges and issues around its initial creation, and initial functionality required by investigators. Survey and use data will be presented to indicate successes and opportunities.
Results: The project has completed its first year. An advisory group was charged by the academic information systems board, a "virtual home team" is in place, the concierge service is ready to launch, and "quick win" applications are in development. Preliminary assessment methodologies were developed and data collection is now underway.
Conclusion: Objective and subjective data support the centrality of the virtual home concept to the UCSF CTSI effort.

3:39 p.m.
Supporting the Independent: Developing New Information Services for Basic Science Researchers
Carrie L. Iwema, basic science librarian, Welch Medical Library, Johns Hopkins Medical Institutions, Baltimore, MD; **Brian Brown,** biomedical librarian, NIH Library, National Institutes of Health, Bethesda, MD

Objective: To assess the usage and usefulness of a recently developed specialized digital library created for a traditionally self-sufficient population as part of a new model of library information services.
Methods: The Basic Sciences Digital Library was developed out of a needs assessment based on a written survey and personal interviews with faculty, staff, and students of eleven basic sciences departments at a large biomedical research institution. Created to be a "one-stop shop" for busy researchers at all levels, the Basic Sciences Digital Library integrates library resources, institutional links, National Center for Biotechnology Information-Entrez database searching, and an extensive list of Web-based bioinformatics tools. A follow up survey was administered to assess usability and relevancy of the content of the Basic Sciences Digital Library. The results of the survey will serve as a guide for progressive modifications of the Basic Sciences Digital Library to maintain a user-driven information tool.

3:56 p.m.
Declaring Independence from the Classroom with Moodle: Outcomes of the MLA Continuing Education Institute for Developing Web-based Instruction

Gail Kouame, consumer health coordinator, National Network of Libraries of Medicine, Pacific Northwest Region, University of Washington–Seattle; **Michele Spatz,** director, Planetree Health Resource Center, Mid-Columbia Medical Center, The Dalles, OR; **Dolores Judkins, AHIP,** head, Research and Reference Services, Library, Oregon Health & Science University–Portland; **Andrea Ryce,** resource sharing/network coordinator, National Network of Libraries of Medicine, Pacific Northwest Region, University of Washington–Seattle

Objective: The purpose of this paper is to report on the experiences and outcomes of four participants in the MLA Continuing Education (CE) Institute for Developing Web-based Instruction and their use of Moodle, a software program for developing Web-based courses.
Methods: MLA's CE Institute for Developing Web-based Instruction took place in Chicago, IL March 12–17, 2006. The Institute was cohosted by the National Network of Libraries of Medicine, Greater Midwest Region. Based on a competitive process, sixteen participants were selected to learn to turn face-to-face CE classes into Web-based CE courses. Topics covered throughout the week of the institute were: "Online and Adult Learning," "Course Design," "Communication and Collaboration," and "Course Evaluation." While no individual courseware was recommended or required, all four of the paper authors chose to use Moodle, an open-source software program for Web-based instruction. Presenters will discuss concepts and challenges faced in converting face-to-face classes to the online environment. They will also discuss uses for Moodle beyond the MLA CE courses.
Results: All of the courses developed as a result of the CE institute are certified for MLA CE contact hours. Currently, all institute participants have offered their courses at least once. The authors of this paper have chosen to use the asynchronous model, where learning takes place at the participants' own pace. One of the authors incorporated a real-time discussion into the final assignment for her course. Lessons learned include:
• Developing online courses takes a lot of thought, time, and energy, especially when converting course material from a face-to-face class.
• Communication issues are different in the online environment than for an in-person class.
• Adult learners are likely to respond differently than what you might expect or what you had in mind when developing the course.
• The online course software has helpful uses beyond the MLA CE courses.
Most participants will offer their courses at least one more time in 2007.

4:13 p.m.
Revolutionizing Interlibrary Loan and Document Delivery to Meet the Needs of the Modern User and the Modern Library

Theodora A. Bakker, access services manager, Levy Library, Mount Sinai School of Medicine, New York, NY

Objective: To revolutionize interlibrary loan (ILL) and document delivery at an academic health sciences library serving a major medical center to meet user and library needs. Users want simple ordering, faster turnaround, and desktop delivery. Staff want easier processing, fewer problem requests, better workflow, and a reduction in cost. The goal of the process redesign is to make services easier and faster.
Methods: Following an in-depth analysis of ILL and document delivery and a study of workflow redesigns in businesses and libraries, best practices and a gold standard was established for interlibrary loan and document delivery. This project uses this research to design and implement a single unit batch processing workflow to make requests available in less than half the time and reduce staff time by over 30%. The project includes establishing new standards of practice, a robust training program, utilizing standard ILL and library systems like open url technology in new ways, redesigning the workspace, and raising user and staff expectations. The project represents a significant change and calls for additional focus on managing change of people-based processes and technology uses. Qualitative and quantitative analysis are used to evaluate success relative to the goals.
Results: Within 6 weeks of implementation, the core launch team had an 85% reduction in average turnaround time. Department wide implementation followed, resulting in no statistically significant increase in this turnaround time. Qualitative assessment of

primary team members revealed positive reception to workflow changes and a perceived reduction in work with few exceptions. Anecdotal evidence reveals a dramatic positive shift in customer satisfaction.
Conclusion: Single unit processing of ILL and document delivery significantly improves the process for both the user and the library.

Consumer and Patient Health Information Section

Power to the People: Serving the Underserved

In conjunction with Chiropractic Libraries, Hospital Libraries, Relevant Issues Sections; African American Medical Librarians Alliance; Complementary and Alternative Medicine; Lesbian, Gay, Bisexual, and Transgendered Health Sciences Librarians; Mental Health SIGs

Grand Ballroom, Salons A and B

3:00 p.m.
Power to the People: Serving the Underserved
Ysabel R. Bertolucci, AHIP, health sciences librarian, Health Sciences Library, Kaiser Permanente Medical Center, Oakland, CA; **Margaret (Peg) Allen, AHIP,** library Consultant, Hmong Health Project, Stratford, WI; **Gale Dutcher,** head, Office of Outreach and Special Population, National Library of Medicine, Bethesda, MD; **Andrea Kenyon,** director, Public Services, Library-Administration, College of Physicians of Philadelphia, Philadelphia, PA; **Mark Scully,** Library Consultant, Library, Bay Area Medical Center, Marinette, WI
Presentation: This panel discussion will focus on the role of collaboration between public and medical libraries (both academic and hospital) in doing outreach to underseved populations. The information will be practical, focusing on how to create outreach programs—what works and what does not work.

Medical Informatics Section

Top Technology Trends: Where Is the Revolution Leading Us Next?

Grand Ballroom, Salons I and J

3:00 p.m.
Top Technology Trends: Where Is the Revolution Leading Us Next?
Sadie Honey, information and Web services librarian, Library and Center for Knowledge Management, University of California–San Francisco; **Wallace McLendon,** deputy director, Health Sciences Library, University of North Carolina–Chapel Hill; **Bart Ragon,** assistant director, Library Technology Services and Development, Claude Moore Health Sciences Library, University of Virginia–Charlottesville; **Eric Schnell,** associate professor and head, Information Technology, John A. Prior Health Sciences Library, Ohio State University–Columbus; **Eileen Stanley, AHIP,** Roseville, MN
Presentation: Have you ever felt caught off guard by a new technology? Have you ever felt like you are behind the times and want to be more up to date? Did you ever wish that you had known about an emerging technology before your patrons did? Then this is the session for you! From the ranks of health sciences libraries, technology trend spotters will offer their insights, opinions, and criticisms on where technology is leading us next. This lively, informal, and possibly irreverent panel discussion will include plenty of time for questions from the audience as well as a wrap up with advice on how we can co-opt technology to use it to our advantage.

Medical Library Education Section

New Voices in the Air: Next Generation of Medical Librarianship

Rooms 303 and 304

3:05 p.m.
A Study on the Adoption of a Web Page Content Assessment Tool: SPAT
Elizabeth La Rue, AHIP, academic coordinator, Nursing Informatics, School of Nursing, University of Pittsburgh, Pittsburgh, PA
Objective: This research study proposes to measure the acceptance of a Web page assessment tool developed by this investigator. The purpose of this study was to validate the assessment tool's use in analyzing Web page content quality and reliability.
Methods: A case-controlled research design was used to collect data from a convenience sample of thirty-eight certified diabetes educators (CDEs). Each CDE completed a closed-question demographic questionnaire gathering data on their perceived level of skill in accessing information from the Web. To evaluate the effectiveness and personal usefulness of SPAT, each subject was asked to review two sets of preselected freely available diabetes information Web pages. After reviewing set one diabetes Web pages, the CDE completed a semi-structured questionnaire querying their assessment process. Next, SPAT was verbally introduced by the investigator. Following the introduction of SPAT, set two diabetes Web pages were reviewed by the CDE, then a second semi-structured questionnaire was completed, thus finishing the formal interview. To complete the study on the adoption of SPAT, a follow-up email was sent approximately three weeks after the introduction of the tool.
Results: There was no statistical difference found in the CDEs' evaluation of the URL, author, and date, pre- and post-introduction of SPAT. There was statistical significance for evaluating a Web page's text and intended audience. While the differences in mean scores

between the pre- and posttest were narrow, the near perfect effectiveness of SPAT manipulation is notable as proof that if one knows of the tool SPAT and uses it, one evaluates a Web page. With a 78% return rate for the follow-up questionnaires, 47% of the CDEs changed their evaluation process "somewhat" by knowing SPAT. Seven percent said their Web page reviewing method changed "extensively." Overall, SPAT had made an impact on the way CDEs review Web-based information.
Discussion: The findings from this study add to our understanding of the diffusion and adoption of information technology by CDEs and their utilization of the Web page evaluation tool SPAT.

3:25 p.m.
Technical Concerns of Using Extended Character Sets in Creating Bilingual Chinese/English Health Information Pathfinders
Marty J. O'Neill II, research assistant, Health Informatics Program, University of North Texas–Denton
Objectives:
1. to elucidate the technical issues associated with creating Websites using languages that have extended character sets (such as Chinese)
2. to present a bilingual Chinese/English health information pathfinder as a model of a bilingual Website using an extended character set
Methods: To build the bilingual Chinese/English health information pathfinder, the issues associated with using languages that have extended character sets had to be overcome. Different techniques may be used to implement such bilingual Websites, but each of these techniques has its own unique set of problems associated with it. To decide which technique should be used to address these problems, the author took the following steps:
1. The source code of many different Chinese language Websites was examined.
2. A literature review of online tutorials and technical specifications was conducted to discover a wider range of standards-compliant techniques for addressing these problems.
3. The different techniques were implemented on both Microsoft and Linux Web servers. The implementations of these different techniques were tested and compared using both Microsoft Internet Explorer and Mozilla FireFox.
Results: After much research and testing of different techniques, numerical character references (NCRs) were chosen to represent the Chinese characters. Some references do not recommend the widespread use of NCRs because:
• using NCRs increases the overall file size in relation to other techniques using dual-byte encoding
• representing Chinese characters as NCRs makes the source code of a file more difficult to read and edit
However, because of the bilingual nature of the content of the pathfinder, using NCRs actually decreased the overall file size. Also, a method of reverse-engineering the NCRs back into the Chinese characters was discovered, thus addressing the second argument against using NCRs. The result is a bilingual Chinese/English health information pathfinder that is easily viewable on the most commonly used Web browsers, and it can serve as a model for other Websites using extended character sets.

3:45 p.m.
An Analysis of Evaluation Practice in Library Outreach Efforts from Regional Medical Library Subcontracts, 2001–2006
Mellanye Lackey, NLM 2nd year associate fellow, Health Sciences Library, University of North Carolina–Chapel Hill
Objective: This project explores the scope of evaluation practice in library outreach efforts. Using a subset of Regional Medical Library (RML) subcontracts from 2001–2006, the project identified barriers to conducting evaluation, analyzed the range and frequency of evaluation methods used through quantitative and qualitative means, and discussed options for the wider dissemination of evaluation practice in library settings. The presentation reviews evaluation materials and publications currently available to practitioners through the Outreach Evaluation Research Center, educational opportunities, and new options for publicizing and reporting evaluation of library outreach efforts.
Methods: Barriers to evaluation practice were identified through a literature review and interviews with key informants. This was followed by an analysis of 150 records in the National Library of Medicine's (NLM's) database of outreach projects. Analysis revealed which evaluation methods were used in outreach efforts at specific funding levels.
Results and Conclusions: Common barriers to evaluation included lack of time, money, and knowledge of evaluation techniques. RML-sponsored projects employed a variety of evaluation methods and approaches. The most common evaluation methods were questionnaires, tallies or logs, pre- and posttests, and post-training evaluation forms. Other methods included internal review committees, interviews, case studies, focus groups, and observational studies. The funding amounts of projects analyzed ranged from $2,500 to $70,000. Evaluation methods associated with these projects were not found to vary by level of funding. That is, projects funded at relatively high and low amounts relied on a common set of evaluation methods.

Public Services Section

Declaring Interdependence: The Evolving Role of the Library in Curriculum Integration

In conjunction with Libraries in Curriculum SIG
Grand Ballroom, Salons K and L

3:05 p.m.
Curriculum Integration of Information Skills into a Problem-based, Group Discussion Course for First-year Medical Students
Terry Henner, head, Information and Education Services, Savitt Medical Library, University of Nevada School of Medicine–Reno
Objective: To promote curriculum integration of information skills into a problem-based, self-directed investigative and group discussion course for first-year medical students. This paper describes a collaboration between library educators and medical teaching faculty to co-facilitate a clinical problem-solving course introducing foundational knowledge about the diagnosis and management of common medical problems.
Methods: The "Clinical Problem Solving "course comprises a year-long bimonthly series of clinical cases presented to medical students in small group settings under the guidance of faculty facilitators. Medical librarians partner with course coordinators in authoring clinical cases, in particular, building into the scenario key learning issues in information retrieval. Subsequent to the authoring of clinical scenarios, a framework of links is established to promote exposure to case-relevant information resources. During small group sessions, medical librarians engage students in real-time information-seeking activities to encourage critical thinking on effective strategies for obtaining evidence. Teaching during the case presentation centers both on demonstrations via video projector and hands-on activities of students through wireless laptop connections.

3:22 p.m.
Developing Information Competencies for an Evidence-based Nursing Curriculum: Initial Opportunities and Challenges
Mary L. Klem, reference librarian, Health Sciences Library System, University of Pittsburgh, Pittsburgh, PA
Objective: This paper describes the development and initial implementation of a set of information competencies for a four-year undergraduate nursing curriculum.
Setting/Participants/Resources: A school of nursing and an academic library system, both located at a public university in the eastern United States.
Brief Description: In preparation for the introduction of an evidence-based practice curriculum, a taskforce in the school of nursing developed a set of research competencies for its three existing academic programs. The library system's liaison to the school of nursing, using the research competencies as a guide, created a corresponding list of information competencies. These competencies outlined both basic (e.g., ability to differentiate between popular literature and scholarly literature) and more complex skills (e.g., demonstrate understanding of, and competence in the use of, CINAHL or MEDLINE search filters). For each competency, a set of recommended teaching exercises and assessments was also developed. The information competencies were presented at an annual retreat of the baccalaureate teaching faculty and individual faculty have begun integrating the competencies into their classes. This paper will provide additional details on the development and content of the information competencies and discuss initial attempts to integrate the competencies into the overall curriculum.
Results: Support from nursing faculty for integration of information competencies into the undergraduate nursing curriculum has been strong. Freshman students now receive basic instruction on the characteristics of scholarly literature and the nature and functions of controlled vocabulary. This knowledge should prepare them to better understand and complete literature search assignments they will receive in their sophomore year of classes. Challenges to further integration include an already crowded curriculum, the time required to create and offer in-depth lectures on information literacy topics, and recognition of a need to educate nursing faculty as well as students. Nonetheless, the initial experience has been positive, and we look forward to continuing this collaborative educational project.

3:30 p.m.
Measuring MEDLINE Searching Skill Retention in Medical Students: A Curriculum Integrated Instruction Follow-up Study
Melissa L. Just, AHIP, director, Graff Library, City of Hope, Duarte, CA
Research Question: What is the retention rate of medical students' MEDLINE searching skills from year-one to year-four? Do skills acquired during curriculum-integrated searching projects persist throughout medical school?
Methods: First-year medical students at the University of Southern California participate in a year-long MEDLINE searching project as part of the medical school curriculum. During orientation the students receive a hands-on MEDLINE searching instruction session. They are then assigned a clinical scenario and question for which they must conduct a literature search and submit their search strategy along with selected articles that answer the clinical question. The assignments are graded by librarians using a locally developed instrument. Written feedback is provided to reinforce the skills taught during the training session. The assignment is repeated two more times during the first year. For this study, the assignment was also repeated during the fourth year neurology clerkship. The literature search assignment scores from the first year were compared with the scores from the fourth year. Additional comparisons were made between first year and fourth year recall, precision and

F-measure (a harmonization of recall and precision). *T*-tests were conducted to determine whether differences in scores from year-one to year-four were statistically significant.

3:56 p.m.

Curriculum Mapping for the Health Sciences: Mapping Association of American Medical Colleges Informatics Objectives to Specific Courses in a Medical Curriculum

Dianne Cmor, information services librarian, Weill Cornell Medical College in Qatar, Doha, Qatar

Objective: To demonstrate how applying a curriculum mapping framework can bolster the success of information literacy programs in achieving desirable outcomes. These outcomes include faculty involvement and commitment, sequenced instruction, innovative instructional techniques, assessment guidelines, and program cohesion.

Methods: Using an external set of information literacy standards (Association of American Medical Colleges) and local information literacy requirements and activities, we mapped information literacy goals to specific courses in the medical curriculum and specific instructional events or techniques. This map is now being used as a discussion point with faculty and administration, both formally and informally, to clearly set out a collaboratively constructed program of curriculum-integrated instruction. As we await the formation of a library advisory committee to provide guidance on library priorities, we hope the map will be adopted at an institutional level and remain a living document that both informs and reflects our efforts.

Results: The mapping exercise presented both challenges and successes. Challenges included retaining consistency with our New York program while introducing innovation, engaging faculty who were busy building their own instructional plans, and contending with institutional roadblocks that were unrelated to this initiative. Successes included developing a means for clear articulation of the library's plan both internally and externally, two-way communication with faculty for ongoing refinements, and the development of means to assess and disseminate innovations.

Conclusion: Curriculum mapping has not been used frequently in the health sciences library community. This method provides several advantages to structuring, developing, documenting, and marketing instruction initiatives.

4:13 p.m.

Evidence-based Medicine Search: Integrating a Customized, Federated Search Engine into a Medical School Undergraduate Curriculum

David K. Howse, assistant librarian, Information Services, Arizona Health Sciences Library, University of Arizona–Tucson; **Paul J. Bracke,** associate dean, Information Technology, Information Services, Purdue University Libraries, West Lafayette, IN; **Samuel M. Keim,** residency director, Department of Emergency Medicine, University of Arizona College of Medicine–Tucson

Purpose: This paper describes the construction and integration of novel evidence-based educational resources and librarians into a newly revised undergraduate, case-based medical school curriculum.

Setting/ Participants/ Resources: The Arizona Health Sciences Library (AHSL) and the University of Arizona College of Medicine.

Brief Description: Librarians at the AHSL collaborated with College of Medicine faculty to create a combined federated search engine and educational tool that includes an evidence ranking system adapted from the Oxford Centre for Evidence-based Medicine Levels of Evidence. The search engine was designed in anticipation of a newly revised 2006 medical school curriculum, which includes a cased-based learning focus and an evidence-based decision making (EBDM) curriculum thread. By integrating the search engine into medical school courseware and promoting its use throughout the undergraduate curriculum via the EBDM thread, the library is attempting to facilitate learning about the quality of health information to medical undergraduate students engaged in case-based instructional activities.

Results/Outcome: Evaluation is currently underway. After a successful testing, implementation and training period, student use of the search engine began with the 2006 fall semester.

Evaluation Methods: Program Evaluation methods include Web usage statistics, structured surveys, and focus groups.

Research Section

Foundations of Health Information Behavior

In conjunction with Collection Development Section

Grand Ballroom, Salon C

3:05 p.m.

How Do Rural Southerners Access Health Information? The View from Allendale, South Carolina: A Descriptive Survey

Nancy C. McKeehan, assistant directorn of libraries, Systems; **Janice May,** program coordinator, Hands on Health-SC; **Lillian Trettin,** assistant professor, Public Information and Community Outreach; Library, Medical University of South Carolina–Charleston

Objective: Allendale County is the poorest rural county in South Carolina. Eighty percent of its residents are African American; 2% are Hispanic. Seventy percent have a high school education or less. Our purpose was to determine how the county's disadvantaged residents access health care and consumer health information and how they would like to access information.

Methods: We designed a multiple-choice and short-answer survey to address (1) what kinds of health services residents use, (2) what kinds of public health information they need, and (3) how they access health information,

including current and preferred modes of access. We were interested in determining what real and perceived barriers to health service exist in a rural area and whether there are ethnic variations in how rural residents gain access to health information. Following a half-day training session, 18 local high school students conducted surveys in front of local grocery stores, the post office, and other frequented public places. Approximately 600 respondents (5.5% of the county's total population) matched census statistics proportionately in ethnic background, gender, and age. Data from 513 valid surveys was cross-tabulated using SPSS.
Results: Seventy-five percent of respondents preferred receiving medical information from a family doctor. However, 30% said they either had no doctor or visited the emergency room for care. Seventy-five percent of this group relied on bicycles, walking, or rides from others to get around. Those without a doctor represented 32% of Hispanics surveyed, as compared to 12% of African Americans or 19% of caucasians. Those without a dentist represented 69% of Hispanics surveyed, 24% of African Americans, and 19% of caucasians. Respondents identified television, family members, and the Internet as other sources of health information. They also identified health topics of particular interest and how they preferred to receive information. Cancer, diabetes, high blood pressure, HIV/AIDS, and heart disease ranked highest on the list. Survey results formed the basis for public programs at health fairs, schools, and a community clinic, the participants in which were approximately 70% African American and 30% caucasian.

3:20 p.m.
Before the Search: Characterizing the Health Concerns and Questions of Low-literacy Individuals
Mary Jo Dorsey, AHIP, PhD candidate; **Valerie Monaco,** assistant professor, School of Medicine; University of Pittsburgh Pittsburgh, PA
Objective: Adult low-literacy affects a large portion of the US population. We need to learn more about how this population phrases health concerns and questions. Collecting this type of information will help us address the greater problem of how this population retrieves health information from an electronic search engine. The purpose of this research is to identify health questions and concerns that commonly occur among individuals with low literacy skills. These findings will be used to develop realistic search scenarios for future usability research on a specialized health search engine designed for this population.
Methods: To collect real-life health scenarios, English-speaking students of a local literacy center were asked to participate in this study. Participants took part in an individual face-to-face interview with the researcher. The semi-structured interview was designed to elicit a specific health concern or question that had arisen during the past three months. Background information such as educational level, reading ability, and computer skills were asked. The data were analyzed to characterize both the broader category of questions that were raised in the interview (e.g., etiology, treatment, etc.) and the actual wording of the participants.
Results: We were aware that basic literacy skills may affect health-related outcomes and decisions. We knew, also, that health literacy (particularly, consumer electronic health literacy) demands much more than basic literacy skills. We learned that low-literacy adults suitably identify health questions or concerns in one or two word phrases. They then frame a more specific question of etiology, diagnosis, treatment, or prognosis with the visual aid of basic versions of these health concepts.
Conclusions: The real-life scenarios gathered in this study are a beginning to bridging a divide between unattainable and attainable health information for low literate adults. It is the hypothesis of the overall project that the reading level evaluation engine will successfully locate understandable health information compared to the original Google interface. By "bridging the gap" between low-literacy individuals and online health information sources, low literacy will have less of an impact on health status in the future.

3:35 p.m.
Women's Information-seeking Behavior from Diagnosis to Treatment for Symptomatic Uterine Fibroids
Kalyani Ankem, associate professor, School of Library and Information Sciences, North Carolina Central University–Durham
Objective: To understand the use of several information sources—mass media versus interpersonal—from diagnosis to treatment among women who underwent an innovative procedure, uterine fibroid embolization (UFE), for symptomatic uterine fibroids.
Methods: Interviews were conducted with women who had UFE between January of 2000 and March of 2005 at the Detroit Medical Center in Michigan. Frequencies of information sources that provided the women various types of information at "critical stages of information utilization" during the illness were gathered. These stages during the illness included awareness of treatment options, knowledge of treatment options, decision making, and undergoing the procedure. In addition to the frequencies gathered, all patient comments concerning information source use at the critical stages were transcribed. The comments were analyzed qualitatively to develop themes of patients' information source use—mass media versus interpersonal at the critical stages of information utilization. The frequencies complemented the themes to construct a model of women's information-seeking behavior as they moved from diagnosis to treatment for a chronic but non-life-threatening illness.
Results: The women became aware of the innovative procedure through various sources, including gynecologists, friends, popular magazines, and television. Upon awareness, many women explored the suggestions

of gynecologists and sought knowledge by searching for information about the illness on the Internet before they reached decisions.
Conclusions: Health sciences librarians can contribute to women's health by directing female patients to quality health information sites. Especially in non-life-threatening illness situations, librarians must recognize the utility of easy-to-read magazine articles in informing women about health concerns.

3:50 p.m.
When the People Speak, We Listen: Making Sure the Library of Tomorrow Reflects the Real Needs of Users
Gretchen Arnold, AHIP, interim director, Claude Moore Health Sciences Library; **Melody M. Cash,** doctoral candidate, Curry School of Education; **Wendy F. Cohn,** associate professor, Department of Public Health Sciences; University of Virginia–Charlottesville
Objective: How well does the library meet the information needs of its users with regard to their information-seeking behavior and preferences? To best determine this, various groups were analyzed to determine their (1) knowledge of existing resources and services, (2) utilization of resources and services, and (3) information-seeking behaviors and preferences for using and learning about resources and services.
Setting/Population: An academic health sciences library serving a school of medicine, school of nursing and a hospital.
Methodology: Quantitative and qualitative methods were used to distinguish information seeking behaviors of clinicians, researchers, and students to develop future library services and information resources. A Web-based survey assessed the usage of and satisfaction with library services and resources. Surveys were received from a sample of core users groups (n = 531). In depth interviews with volunteers used an interview guide to assess natural behaviors that influence information seeking. Approximately 30 interview (1.5 hours) were conducted from the primary groups (physician and nurse clinicians, physician and nurse researchers, medical students, and nursing students). Interviews were content analyzed for themes in information-seeking behaviors.
Results: All user groups reported frequent use of the library's resources. Forty-eight percent of users reported daily use of information and 34% weekly use. Fewer reported use of specific educational services such as classes (28%), consultations (14%), and housecalls (5%). The most frequent reasons for not utilizing educational services were (1) not knowing about the service, (2) not having the time, or (3) the service not being offered at a convenient time. On average, about half (41%-56%) of the users indicated a desire for specific services or training when asked about available resources. Online tutorials and Web-based instructional support were the most frequently cited modes of instruction. These results indicate that the library needs to find additional means of communication to ensure that users are aware of all library services and resources. Additionally, it will be important to adapt educational content to more Web-based instruction that will be available 24/7.

4:05 p.m.
Site Searching: Using Data Analysis to Improve Site Search Success Rates
MaryBeth Schell, North Carolina AHEC Digital Library project manager, North Carolina Area Health Education Center Digital Library, Health Sciences Library, University of North Carolina–Chapel Hill
Objectives: To examine the following questions: how successful were searchers in utilizing the Website search box attached to the North Carolina Area Health Education Center (AHEC) Digital Library (ADL, an online Web portal into licensed and free Web-based resources for health care practitioners), who were the searchers using the search box, and what were the categories of search terms used.
Methods: This study pulls from a database that was built specifically to track searches entered into the site search box. The topical analysis of each search classifies search terms into one of four categories: specific resource, topic, unknown, and out of scope. Each of the searches that fell in the topic category was then assigned to a more specific health topics category. The resources classified as specific resource searches were organized according to resource type (for example article, journal, book title, etc.).
Hits resulting from each search were retrieved. A hit is counted any time a resource was returned in response to a search. If a term had no hits, it was deemed a failure; if it had any hits, it was deemed a success. The site searchers were also analyzed and classified according to a local system of organizing users.
Results: The evidence from this study indicates that Website searching of a specific site is not successful. Questions arise as to what modifications can be made to the site search to make it more effective. It will take further study to develop a definitive set of guidelines for improving this Website's search engine. Topical searches are the most popular type of search. Further study needs to be conducted to discover how to better maximize the success of these topical searches. Should more information be added to each record regarding health topics that would make keyword searching more effective? Should the fields currently searched be expanded? The searches for specific resource titles resulted in remarkable low success. The reasons for the low hit rate could range from resources not being in the ADL, to resources not being available for a specific user's profile, to misspelled words, to the use of abbreviations.

Veterinary Medical Libraries Section

Hunger, Food Security, and Public Health: The Converging Roles of Veterinary and Human Health Sciences

In conjunction with Federal Libraries Section

Rooms 305 and 306

3:00 p.m.

Threats to Food Safety and Public Health through Zoonotic Diseases: The Converging Roles of Veterinary and Human Health Sciences

Alan Kelly, The Gilbert S. Kahn dean emeritus, School of Veterinary Medicine, University of Pennsylvania–Kennett Square

Presentation: Veterinarians and other public health professionals are keenly aware of the potential threats to human health and the food supply from zoonotic diseases (diseases communicable from animals to humans). Most of the recent threats from zoonotic disease have come about because of a boom in livestock and poultry production in developing nations of southeast Asia. This growth in production is largely unregulated and poses serious threats to animal and human well-being in terms of infectious disease spread, food safety, and environmental degradation. There are also a number of bacterial and viral agents associated with animals that may provide opportunities for acts of bioterrorism. Our speaker will address the role of the veterinary profession in controlling these diseases and discuss what steps are being taken to monitor, evaluate, and respond to potential threats to the agricultural food supply, including wildlife. This is an area the medical profession, in general, does not understand but needs to, for its potential impact on human health is enormous.

Section Programs
Tuesday, May 22, 3:00 p.m.–4:30 p.m.

Collection Development Section

Evaluative Measures for Resource Quality: Beyond the Impact Factor

In conjunction with Molecular Biology and Genomics SIG

Grand Ballroom, Salons I and J

3:10 p.m.
The How and Why of the Impact Factor
Eugene Garfield, AHIP, FMLA, founder and chairman emeritus, Institute for Scientific Information (now Thomson Scientific), Philadelphia, PA
Presentation: Eugene Garfield is the founder and chairman emeritus of the Institute for Scientific Information (now Thomson Scientific). He first mentioned the idea of an "impact factor" in a 1955 article in *Science*. He has said that the impact factor, like nuclear energy, has become something of a mixed blessing. Librarians often consider the impact factor of a journal for selection and deselection purposes. Others may believe that the impact factor is the sole selection criteria necessary for a library. Garfield will keynote this session by discussing what the impact factor is meant to determine, its appropriate use, and possible misuse as a surrogate for researcher evaluation.

3:35 p.m.
Usage Statistics Made Eas(ier)
Bob Schufreider, US sales manager, MPS Technologies, Cambridge, MA
Presentation: Libraries' decision making on what to subscribe to is as diverse as the libraries themselves. This part of the discussion will take a look at the role usage statistics play in decision making and the technologies designed to aide the libraries in this laborious task. We will examine recent surveys on how statistics can mean the difference between keeping or canning.

3:55 p.m.
The Promise of Value-based Journal Pricing
Julia K. Kochi, director, Digital Library and Collections, Library and Center for Knowledge Management, University of California–San Francisco
Presentation: In early 2007, the University of California (UC) library released "The Promise of Value-based Journal Prices and Negotiation: A UC Report and View Forward." The report details UC's rationale for value-based journal prices and modeling of prices that are reasonable, transparent, and based on the value of the material to UC's academic mission. Borrowing from work done by Bergstrom and McAfee on journal cost-effectiveness, UC has developed and is testing a value-based approach to journal prices. The UC approach also includes suggestions for annual price increases that are tied to production costs; credits for institutionally based contributions to the journal, such as editorial labor; and credits for business transaction efficiencies from consortial purchases. Julia Kochi, who served as chair of the investigating committee, will present an overview of the report and its potential implications for health sciences libraries.

4:15 p.m.
Invited Speaker Panel
After presenting individual material, the invited speakers will participate in a panel discussion.

Educational Media and Technologies Section

1,776 Uses for Technologies

In conjunction with Public Services and Medical Informatics Sections

Independence Ballroom

3:05 p.m.
A Customizable "Mash-Up" for Model and Disease Organisms
Indra N. Sarkar, informatics manager; **Patrick Leary,** programmer; **Cathy N. Norton,** director; MBL/WHOI Library, Marine Biological Laboratory, Woods Hole, MA
Objective: Toward aggregating life sciences knowledge from the rapidly growing variety of Web-based resources, this study aimed to develop a dynamic, user-customizable interface (a "mash-up") to identify and track relevant digital information. An additional goal was to determine if these mash-ups could elucidate potential linkages between biodiversity and biomedicine information relative to studies about model and disease organisms.
Methods: A Web-based mash-up interface was developed to collect life sciences information from literature citation indexes, publisher RSS feeds, image databanks, and the Web at-large. The interface incorporates a "taxonomically intelligent" search strategy that is informed by nearly 9.5 million scientific name strings. For example, one can search for "fruit fly or vinegar fly" and the system will include other variants for "drosophilidae." A mapping of the Medical Subject Headings (MeSH) and National Agricultural Library Thesaurus (NALT) vocabularies, respectively used by MEDLINE and AGRICOLA, was used to link literature across these indexes in addition to enhancing queries for more general resources, such as the Web. We assessed the utility of this resource using National Institute of Allergy and Infectious Diseases (NIAID) category A pathogens.
Results: Two Websites were developed to demonstrate the scientific-name based Web aggregation technologies. The first, called the uBio Portal (portal.ubio.org) is a generic interface that searches across vetted Web content. The second, Literature and Sequence Retrieval (LitSeqR) tool also enables searches for molecular data. LitSeqR specifically enables users to navigate and filter

content using either MeSH or NALT terms. Through a snowballing technique, based on MeSH or NALT terms along with organism names, one can increase the number of results. Each of the elements of the resulting Websites is customizable and can generate automated RSS alerts for users.

3:22 p.m.
Getting More Mileage Out of Extensible Online Tutorials

Keven M. Jeffery, information services librarian and Web coordinator; **Lauren Maggio,** coordinator, Library Education and Information Management; **Mary Blanchard,** associate director, Library Services; Alumni Medical Library, Boston University Medical Center, Boston, MA

Objective: This paper describes the library's experience creating extensible online tutorials to introduce students in an offsite family medicine clerkship to evidence-based medicine (EBM). Additional attention is paid to the tutorials expansion to support students in an evidence-based dentistry (EBD) course.

Methods: Librarians constructed two interactive online tutorials, "Introduction to EBM" and "Formulating a Clinical Question (PICO)," for the clerkship and then quickly repurposed the existing tutorials to support the EBD course. Adobe's ColdFusion software was used to populate the tutorials with course-specific content based on the URL used to enter each tutorial, and a MySQL database was used to collect student input. Student responses were viewable immediately by course faculty on a password-protected Website. The tutorials ensured that all students received the same baseline training and allowed librarians to tailor a subsequent library skills workshop to student tutorial answers. The tutorials were adopted as a course requirement by the family medicine clerkship and were used as part of an EBD workshop for the dentistry course.

3:39 p.m.
Tracking Usage of a Library's Browser Based Toolbars

Sadie L. Honey, information and Web services librarian; **Jason Randell,** Web developer, Advanced Technology Group; **Leslie Kleinberg,** Web and print publications coordinator; **Julia K. Kochi,** director, Digital Library and Collections; Library and Center for Knowledge Management, University of California–San Francisco

Objective: To determine if library developed browser-based toolbars have changed actual and self-perceived usage of library resources.

Methods: A preliminary literature search has found no studies with quantitative data on the use of toolbars in a library setting. To further this area of study, we will analyze the usage of our toolbars in an academic health sciences setting. There will be two parts to the study: a Web log analysis and a user survey. Web log files covering comparable time periods will be analyzed pre- and post-introduction of the toolbars. To facilitate this analysis, a special parameter has been added to the URLs of linked resources to indicate whether traffic to a page was initiated from the toolbar. To determine self-perceived changes in usage of library resources, we will conduct a user survey. Questions will discover if installing a toolbar changes the way users access library resources.

Results: A small amount of traffic to library Web pages originates from the toolbars. This usage seems to be growing. Toolbars account for 0.53% of the traffic to the home page in December, 0.99% of the traffic in January, and 1.41% of the traffic in February. However, it is too soon to discover a true pattern. In the time leading up to presentation of this paper, we plan to gather more data and use more sophisticated analytical tools to look for patterns.

Conclusions: Continued monitoring is necessary to discover if distribution of the toolbars will change actual and self-perceived usage of library resources. We continue to see enthusiasm for the toolbars. There are an average of eighty-five downloads per month for the months of November to February.

3:56 p.m.
Strategies for Podcasting: Transforming Library Instruction to Meet the Needs of Technology-savvy Students

Brenda Faye Green, associate professor and coordinator, Instructional Services; **Jasmine M. Bagay,** computer information specialist; **Matt Grayson,** instructor and Web services librarian; Health Sciences Library and Biocommunications Center, University of Tennessee Health Science Center–Memphis

Objectives: In response to student interest in self-directed e-learning, one library transformed traditional lectures into podcasts and vodcasts featuring overviews of workshops, orientations, and databases. This paper discusses the podcasting methods used, including successful strategies and lessons learned. It also discusses usage statistics and user feedback collected in determining the success of this new instructional service.

Methods:

1. Faculty librarians developed lectures and PowerPoint slides for traditional instructional sessions.
2. After the sessions, librarians submitted slides to the instructional services department (ISD) for use in podcast production. Librarians developed narrative summaries of sessions to accompany slides, and then met with ISD to digitally record them as audio files.
3. ISD:

a. converted the slides into images and obtained additional images to supplement audio narrations
b. used photo editing and podcast creation software to develop podcasts and vodcasts
c. collaborated with the Web services department to establish a podcast space on the library's Website

d. collaborated with the library's communications department to publicize podcasts through campus emails, newsletter articles, and promotional flyers
4. The Web Services department provided usage statistics and, in collaboration with ISD, developed a summative online survey to evaluate user feedback and project efficacy.
Results:
1. Usage statistics from September 2006 to February 2007 revealed:
a. Web page visits and downloads increased monthly, except for a decrease during December holidays.
b. 287 users visited the Web page 766 times
i. 60% visited once, 20% 2–4 times, and 20% 5+ times.
ii. 57% downloaded a podcast once, 38% 2–4 times, and 5% 5+ times.
c. Requests for the RSS feed increased monthly; 13 users are subscribed.
2. A campus survey revealed:
a. Listeners rated podcasts favorably in terms of usefulness for academic and professional needs, and plan to view/listen to future podcasts.
b. Reasons for non-listening included technical problems and lack of awareness.
Podcasts effectively supplement traditional library instruction and complement newly implemented podcast initiatives in other colleges on campus. Continuous publicity is necessary to increase awareness of new podcasts. ISD will continue to incorporate relevant podcast and vodcast technology in supporting and delivering library instruction.

4:13 p.m.
Integrating New Technologies in Library Operations to Improve Staff Knowledge and Customer Service
Theodora A. Bakker, access services manager, Levy Library, Mount Sinai School of Medicine, New York, NY
Objective: Use emerging Web-based technologies with access services staff to create a knowledgebase, increase comfort with technology, foster integration of new technologies in daily activities, and enhance customer service through a learning culture for staff. The project will directly impact library staff and will have indirect but significant effects on customer service and promotion of library resources and services.
Methods: This project transforms a paper and oral departmental knowledgebase to the Internet through use of an internal wiki, enhanced with other institutional systems. This traditional customer service department with staff tenure ranging from one to twenty-six years must adopt to new technologies, knowledge, and skills to meet the rapidly evolving expectations of sophisticated users in a library with a collection focus on electronic resources. By using social software to train and share knowledge, the department will increase its knowledgebase while adapting to using technology-based solutions to communicate and meet information needs. Planning and implementation of the knowledgebase wiki, including knowledge gathering and organization, are achieved using a committee, and all team members are trained in the technology to enable knowledge sharing. Core elements include comprehensive content, accessibility, and training to use the new technology.
Resuls: Using nontraditional technologies forced the group to analyze the departmental approach to looking for information in order to create an organizational structure for the knowledgebase. This had additional implications of revealing gaps in departmental knowledge and the need for an in-depth analysis of customer service patterns. Contribution to the knowledgebase varied greatly among staff and impacts its ability to provide overall knowledge and service. Early results reveal change management issues play a significant role and should be an integral element of knowledgebase project planning. Despite the challenges, preliminary results remain positive: we anticipate customer satisfaction assessments will reveal statistically significant improvement, the impact on staff knowledge and access to information at the point of need is significantly improved, and there is a strong indication that the cost-benefit analysis will continue to demonstrate concept viability.

Federal Libraries Section

Back to Our Revolutionary Roots: Making Change Work

Grand Ballroom, Salon D

3:00 p.m.
Back to Our Revolutionary Roots: Making Change Work
Emma J. McNamara, director, Information Access Division, US Environmental Protection Agency, Washington, DC; **Rita F. Smith, AHIP,** medical librarian, Medical Library, Wilford Hall Medical Center, Lackland, TX; **Ann Russell Potter, AHIP,** command librarian, Library Command Office, Headquarters, US Army Medical Command, Ft. Sam Houston, TX
Presentation: Speakers from the Army, Navy, Air Force, VA, Federal Library and Information Center Committee/ Federal Library and Information Network (LC's FLICC/ FEDLINK), and others will discuss merging and sharing in federal libraries—weathering changes, contending with A-76, closures, successes and problems, and impact on other libraries and institutions.

History of the Health Sciences

Joining the Revolution: Providing Information in Complementary and Alternative Medicine, Past, Present, and Future

In conjunction with Chiropractic Libraries Section; Complementary and Alternative Medicine SIG

Rooms 305 and 306

3:05 p.m.

Progression of Alternative to Accepted: A Crooked Mile

Suzanne M. Shultz, director, Library Services, Philip A. Hoover, M.D., Library, Wellspan Health at York Hospital, York, PA; **Esther Y. Dell, AHIP,** associate librarian, The George T. Harrell Library, Penn State College of Medicine, Hershey, PA

Objective: Mainstream medical professionals have traditionally viewed alternative and conventional medical therapies as uncompromisingly segregated. This separation evolved over centuries and is exemplified by such ideas as small pox inoculation, microbial etiology of disease, and herbal cures. Alternative medicine, branded unworthy, was excluded from standard medical practice. History, however, reveals a very crooked boundary between alternative and mainstream medicine.

Methods: This paper will examine a sample from a growing list of formerly alternative therapies that have been validated and accepted by mainstream medicine as standards of medical practice. These include, but are not limited to, osteopathy, acupuncture, relaxation and biofeedback, vaccination, folk medicine to pharmacologic agents, and nutritional practices.

Results: The public demands unification of the best available healing resources into one common mode of medical practice. Many formerly alternative practices have become so intertwined in modern medicine that younger practitioners may not even be aware of their "alternative" roots. The American Medical Association no longer applies such derogatory terms as "quackery" or "fraudulent" to alternative medicine, except for the most blatantly harmful remedies. The National Center for Complementary and Alternative Medicine (an arm of the National Institutes of Health) has made immense contributions to the acceptance of alternative therapies by supporting investigations, establishing structured frameworks for evaluation, and financing numerous clinical trials. Alternative therapeutic practices may be embraced and institutionalized into one common medical practice only after determining efficacy and, more importantly, safety.

3:25 p.m.

Dietary Supplement Database for Consumers

Hua F. Chang, computer scientist; **Vera W. Hudson,** biologist; **Ying Sun,** computer scientist; **Dorothy Moore,** information specialist; **George Hazard,** chemist; **Jeanne Goshorn,** biologist; Specialized Information Services Division, National Library of Medicine, National Institutes of Health, Bethesda, MD

Objective: The objective of this poster is to present a new database in complimentary medicine. The Dietary Supplements Labels Database is presented as an information resource that focuses on brands of dietary supplements, their ingredients, and references links on specific ingredients. The reference links are to related health information. The database contains information on over 1,000 individual brands of dietary supplements such as vitamins, minerals, botanicals, amino acids, energy/weight loss products, and specialty supplements. The database is designed for consumers and will enable them to search for brands, active ingredients, uses, and manufacturers. The purpose of this poster is to demonstrate the features and navigation of this new resource.

Methods: The information was collected from labels and manufacturers' Websites of dietary supplements in the marketplace. This database consolidates and centralizes the information needed to make informed decisions about supplements.

Results: The Dietary Supplements Labels Database provides an opportunity to educate and empower the consumers to make informed decisions about dietary supplements. It enables the users to compare information on different brands of dietary supplements, including dosage form, active and inactive ingredients, amount of active ingredients per unit, suggested dose, health claims, warnings, percentage daily value, manufacturer or distributor contact information, and other label information.

3:45 p.m.

Overcoming Skepticism: A Committee of Experts Bridges the Gap between the Library's Complementary and Alternative Medicine Resources and Health Care Professionals

Lilian Hoffecker, AHIP, reference and education librarian; **Catherine Morton Reiter, AHIP,** head, Collection Development; Denison Memorial Library, University of Colorado and Health Sciences Center–Denver

Objective: To describe how an interdisciplinary committee of experts has helped build a special collection of complementary and alternative medicine (CAM) resources and how the collection in turn is helping to inform health care professionals.

Description: Recognizing the growing need for access to authoritative CAM resources, the library established an endowed collection of CAM materials in 1994 with assistance from a group of alternative and conventional medicine specialists. In a field in which evidence-based information was difficult to find thirteen years ago, this group functioned initially as a selection committee. But as the field expanded, its role evolved to serve increasingly in an advisory capacity and focus primarily on marketing of the collection and education about

CAM. Throughout its existence, the committee of doctors, nurses, and doctoral researchers has been invaluable as a source of credibility for the collection in a field that is still trying to find its footing in the health sciences. This paper describes the committee's initial and current roles, its function in developing the collection, the challenges faced in working with the committee, and the ways this group of experts has helped bridge the gap between the library's CAM resources and its users.
Conclusion: A committee of experts may be helpful in establishing and maintaining credibility for a controversial collection and for assuring that the collection meets the needs of users.

4:05 p.m.
Producing and Organising Complementary and Alternative Medicine Evidence for a National Resource
Anelia Boshnakova, information specialist, NLH Complementary and Alternative Medicine Specialist Library, Royal London Homoeopathic Hospital, London, United Kingdom; **Karen Pilkington,** senior research fellow, University of Wesminster, London, United Kingdom; **Janet Richardson,** reader, Nursing and Health Studies, University of Plymouth, Plymouth, United Kingdom; **Peter Fisher,** clinical lead, NLH Complementary and Alternative Medicine Specialist Library, Royal London Homoeopathic Hospital, London, United Kingdom
Objective: To produce a national online source of quality-assured information on complementary and alternative medicine (CAM) for health professionals, CAM practitioners, and patients.
Methods: The first stage of the project involved scoping the extent of research evidence available on a number of complementary therapies. The second phase required organisation of CAM evidence in a suitable format for health professionals. Based on preliminary work conducted during the first phase, the overall approach involved categorising information by therapy and condition. Consultation with a wide range of key stakeholders confirmed that a simple taxonomy was considered to be the most acceptable method of organising this information. Following this, further searches for relevant systematic reviews were conducted. A process of developing introductory articles on each therapy was initiated. These provide a short background including clinical uses and links to further information. Other features currently being developed include a news and events section, links to patient information and educational material, and answers to questions from primary care clinicians. The therapies covered in the resource are also being extended. Usability testing with end users will guide any additional development.
Results/Outcome: The CAM Specialist Library was launched in May 2006 and is one of twenty-seven active specialist libraries that are part of the UK National Library for Health. The first usability testing has been conducted and resulted in changes to the organisation of information on herbal products and the decision to present information as a series of key topics. The introductory article on acupuncture will form the basis of an annual evidence update for 2007, while "National Knowledge Weeks" to be held in June and October to coincide with major relevant awareness events will focus on homeopathy and CAM in low back pain respectively.
Conclusion: The CAM Specialist Library (www.library.nhs.uk/cam/) has the potential to be the key source of up-to-date quality information on CAM for a range of users. Further work is required to fully engage potential users in the development.

International Cooperation Section

The Information Revolution Goes Global: Increasing Information Access in Developing Countries

In conjunction with Public Health/Health Administration, Veterinary Medical Libraries Sections; Outreach SIG
Grand Ballroom, Salon C

3:05 p.m.
Experiences in Information Access in Developing Countries
Robert Parker, adjunct associate professor and senior research advisor, Saving Newborn Lives Initiative, Save the Children, Bloomberg School of Public Health, Johns Hopkins University, Kennett Square, PA
Presentation: Over a forty-year career as a public health researcher and practitioner working with colleagues in developing countries, I have found that access to international information has been a significant obstacle for professionals in these countries who wish to carry out basic as well as applied research. Equally, if not more important, has been the lack of up-to-date information for policy makers or program managers affecting implementation of badly needed health care programs at the national or community levels. In the past, the lack of access to information in developing countries has affected health care in a number of specific ways. Examples will be provided that include difficulties in finding funding for research, research findings being unacceptable for publication internationally, and slow acceptance and application of new findings from other countries that could improve health care in developing nations. However, the development of increased electronic access to scientific and programmatic literature in the last few years may have changed this situation significantly. Comparing three examples from different periods during the last fifty years provides a possible view of how recent increased access to literature online has made a difference in health care delivery in developing countries. It is certain that variations in access to international literature was not the only factor affecting these examples, but there likely was a major

shift in the rapidity of acceptance of new information due to its availability electronically in the most recent example. The following examples of interventions that currently are provided at the village level in developing countries will be discussed. Approximate timelines will also be presented illustrating the time that elapsed from the initial presentation of findings in international literature to the widespread acceptance of these interventions in developing countries.

- oral fluid therapy for dehydration due to childhood diarrhea
- improved care of newborn infants

3:25 p.m.

Sister Libraries as Extended Families: An Innovative Model from the Kaiser Permanente Libraries and the University of Zimbabwe College of Health Sciences Library

Lynn Van Houten, AHIP, manager, Library Services, Health Sciences Library, Kaiser Permanente Medical Center, Vallejo, CA; **Agnes Chikonzo,** deputy librarian and acting university librarian, College of Health Sciences Library, University of Zimbabwe, Hirare, Zimbabwe

Presentation: The nineteen Kaiser Permanente Health Sciences libraries in Northern California have formed a Sister Library connection with the University of Zimbabwe College of Health Sciences Library. This sister library relationship has been in existence since December 2005. This paper will discuss a new model for sister libraries, one in which a group of libraries in a large health care system join together to provide information resources to a library in a developing country. It will discuss the organization and function of this unusual sister library project and future areas of cooperation. Data from the library will be presented showing development of the program and improved resources and access. The college of health sciences library serves 2000 students. The college educates physicians, dentists, nurses, physical therapists, occupational therapists, pharmacists, laboratory technicians, and community health workers. Medical students constitute about one-quarter of the students. The library uses email to disseminate information on different health issues to provincial hospitals in Zimbabwe.

3:45 p.m.

The Level of Internet Access and Information and Communications Technologies Training for Health Information Workers in Sub-Saharan Africa

Lenny Rhine, assistant director, Collection Management, Health Science Center Libraries, University of Florida–Gainesville; **Grace Ajuwon,** reference and information services librarian, E. Latunde Odeku Medical Library, College of Medicine, University College Hospital, College of Medicine, University of Ibadan, Ibadan, Nigeria

Background: During the past decade, there has been considerable discussion about the potential of information and communications technologies (ICTs) to bridge the information gap between developing and industrialized countries. Two of the key variables necessary for the successful use of Internet-based information in developing countries are easy access to the Internet and technical ability to access and appraise relevant information. Few studies had explored the level of Internet access and ICT competencies of health information workers in Africa.

Objective: The main objective of the study is to appraise the level of Internet access to information and technical ability of health information workers in sub-Saharan Africa.

Methods: The study was descriptive, and data gathering was by means of a standardized 26-item, self-administered questionnaire posted to 5 email lists. Participation in the study was limited to members of the 5 email discussion lists, namely: AHILA-NET, HIF-NET, AFRO-NET, FAME, and NLA-On Online Forum. In addition, participants at the 10th AHILA Congress (Mombassa, Kenya; October 2006) completed the printed version of the questionnaire.

Results: A total of 121 respondents participated in the survey, of these, 33.1% were Kenyans. Of those who have Internet access, 67% reside in capital cities in their country. A large majority (85.1%) claimed they had Internet access at work, and 21% used it for work-related purposes. Seventy-two respondents sought health information for research purposes. Google was the most popular search engine used "often" by 71% of respondents. There are significant gaps in the knowledge and use of Internet-based health information resources. While PubMed was used "often" by 49% of respondents, HINARI, INASP Gateways, and other health organization's Websites had "never'" been used by 31.4%, 34%, and 43% of respondents, respectively. Regarding the acquisition of ICT skills, many of the respondents (32%) were "self-taught"; however, majority (88%) expressed a strong interest in obtaining further training.

Conclusions: The response substantiates that it is feasible to conduct research online among African health information workers. The data validate the need for continuing education for effective utilization of Internet-based health information. The study reveals a disparity of Internet access between individuals in capitol cities, large towns, and rural areas.

4:05 p.m.

Invited Speaker Panel

After presenting individual material, the invited speakers will participate in a panel discussion.

Leadership and Management Section

Joining the Revolution: Strategies for Marketing Yourself

In conjunction with Corporate Information Services Section; New Members SIG
Grand Ballroom, Salons K and L

3:00 p.m.
Joining the Revolution: Strategies for Marketing Yourself
Julie Cohen, professional certified coach, Philadelphia, PA
Presentation: Are you at a crossroad in your career? Have you been thinking about applying for a better job but are uncertain how to showcase your skills and experience? If so, plan to attend this session, and bring your resume! The program will begin with a presentation by Julie Cohen that will help you overcome common stumbling blocks encountered by job seekers. Afterward, preregistered participants will have the opportunity to meet individually with one or more senior library managers with hiring experience for a ten-minute "speed mentoring" session. Cohen is a career and personal coach in the Philadelphia area. She helps her clients clarify and achieve their professional and personal goals, including greater career satisfaction, life balance, leadership development and personal growth. Formerly an internal executive coach at Cap Gemini Ernst & Young, she was part of the design team responsible for developing and implementing a national coaching program. Cohen also coaches individuals around leadership skills, team development, effective communication, job transition and performance feedback results. She has a bachelor of arts degree in economics from the University of Pennsylvania and a master of Science degree in counseling from Villanova University. She is a graduate of Corporate Coach University International's and Coach University's Training Programs, is a past president of the Philadelphia Area Coaches Alliance and a member of the International Coach Federation (ICF). Cohen has earned the Professional Certified Coach (PCC) designation from the ICF. More information about Julie can be found at www.JulieCohenCoaching.com.

Pharmacy and Drug Information Section

Medicare's Prescription Drug Benefit: Overview, Resources, and a Role for Health Information Professionals (EMBASE.com Lecture)

In conjunction with Corporate Information Services Section
Rooms 303 and 304

3:00 p.m.
Medicare's Prescription Drug Benefit: Overview, Resources, and a Role for Health Information Professionals
Richard Stefanacci, founding executive director, University of the Sciences in Philadelphia, Philadelphia, PA
Presentation: Richard G. Stefanacci will provide a basic overview of the Medicare prescription drug program, including the impact of Medicare's new prescription drug benefit on drug coverage, the quality of health care under Medicare part D, and issues and challenges facing patients, pharmacists, and providers. Along the way, Stefanacci will highlight the information that patients and clinicians need but might not know to ask. Helpful resources will be provided as well as examples of the important role the health information professional can play in improving health outcomes. Stefanacci is founding executive director of the Health Policy Institute at the University of the Sciences in Philadelphia.

Research Section

Evidence-based Librarianship: How Evidence-based Medicine Foundation Principles Can Be Applied to Medical Library Operations

In conjunction with Hospital Libraries Section
Grand Ballroom, Salons A and B

3:05 p.m.
Tailored Messaging for Action: Preliminary Findings from Canada's First Knowledge Brokering Trial
Maureen Dobbins, associate professor, McMaster University, Hamilton, ON, Canada; **Kara DeCorby,** Research Coordinator, McMaster University, Dundas, ON, Canada; **Paula Robeson,** knowledge broker; **Donna Ciliska,** professor; **Helen Thomas,** associate professor; McMaster University, Hamilton, ON, Canada
Objective: A national knowledge transfer (KT) strategy is needed to support decision makers' (DM) uptake of high-quality evidence. This randomized controlled trial (RCT) evaluated an innovative KT strategy in promoting evidence-informed decision making among DM in local public health units and regional health authorities across Canada.
Methods: This RCT investigated 3 progressively more intense KT interventions: (1) access to an online registry of systematic reviews at health-evidence.ca, (2) registry access plus targeted messages sent by email, and (3) registry access, targeted messages, and knowledge brokering services, focused specifically on uptake of evidence pertaining to physical activity and health body weight promotion among children and youth. Public health units (n = 108, or 76%) were recruited and stratified by population served using Statistics Canada

data prior to randomization. The intervention occurred January-December 2005. A knowledge utilization survey was administered at baseline, one month following baseline, and immediately post-intervention. The final data collection period will occur January 2007, one year post-intervention.
Results: Pilot-testing of the survey in June 2004 among DM (n = 23) resulted in minor revisions. No significant differences were identified between groups at baseline. Good follow up (81.5%) was achieved. Preliminary findings indicate that health units that received tailored messages by email (group 2) provided significantly more programming supported by research evidence immediately following the intervention than those exposed to health-evidence (group 1) and the knowledge broker (group 3), $P < 0.009$. No difference was found between groups when the intervention was measured in a global outcome as "extent to which research influenced any decisions related to healthy body weight in children."
Conclusions: Results demonstrated that tailored messaging can be effective in promoting evidence-informed decision making. Hypotheses concerning lack of effect measured in the broker group will be discussed. Findings also provide an opportunity to discuss measurement issues in KT intervention research.

3:22 p.m.
Formative Comparative Evaluation of Traditional and Recent Quality-content Filters for Answering Clinical Questions with MEDLINE

Yin Aphinyanaphongs, reseach fellow, Department of Biomedical Informatics; **Rebecca N. Jerome,** assistant director, Eskind Biomedical Library; **Constantin Aliferis,** assistant professor, Department of Biomedical Informatics; Vanderbilt University Medical Center, Nashville, TN

Objectives: To evaluate and compare the usefulness of MEDLINE citations, Pubmed's Clinical Query Filters, and machine learning filters to identify articles that answer clinical questions.
Background: Previously, we built machine learning models that identified high-quality MEDLINE articles with superior performance compared to Pubmed's Clinical Query Filters using a methodology-oriented evidence-based medicine corpus as gold standard. In this study, we compared unfiltered MEDLINE, Pubmed's sensitive and specific Clinical Query Filters, and the machine learning models using clinical questions and a human librarian gold standard.
Methods: We encapsulated machine learning models in a special-purpose search engine (EBMSearch). We randomly chose ten treatment questions from a university clinical knowledge database. Highly experienced medical librarians had independently developed Pubmed queries and selected MEDLINE citations that answered each question. We used these citations as our gold standard. Using each librarian Pubmed query, we evaluated how well unfiltered MEDLINE, sensitive and specific Clinical Query Filters, and EBMSearch identified the selected MEDLINE citations. We measured retrieval performance using average precision at seen relevant documents and hit curves.
Results: Of the ten internal medicine treatment queries, one query returned no gold standard articles. Of the remaining nine, EBMSearch had superior performance at average precision at seen relevant documents in identifying gold standard articles at higher rank (i.e. position within search results) for seven queries. Both the sensitive and specific clinical query filters performed best for one query each. The queries with unfiltered MEDLINE were never superior in identifying articles to the best of the other methods. Hit curve analysis also supports these results.
Conclusions: This formative study suggests that using the machine learning models in EBMSearch as an advantageous tool for searching the medical literature. Expanding the number and scope of clinical questions and evaluating user-derived queries are interesting areas for future research.

3:30 p.m.
Hospital Librarians and Evidence-based Health Care

Cleo P. Pappas, AHIP, assistant information services librarian and assistant professor, Library of the Health Sciences, University of Illinois–Chicago

Objective: The purpose of this survey was to identify institutional and individual characteristics that affect the implementation of evidence-based health care practice (EBHC) by hospital librarians.
Methods: The methodology employed was a descriptive survey. Participants were the 1,000 members of MLA's Hospital Libraries Section. Questions in the survey were designed to determine association between the use of EBHC and other factors. It was hypothesized that geographical location of the hospital, the number of years worked as a hospital librarian, education level of librarian, number of hours worked per week as a hospital librarian, institutional financial support of librarian's continuing education, physician attitude, hospital size and librarian participation in hospital educational activities would be directly related to the receptivity, exposure, and practice of EBHC by the hospital librarian. To measure association with EBHC, questions regarding librarian participation in EBHC classes, their length, sponsorship and accreditation were asked. The URL of an online survey provider (SurveyMonkey) was distributed to the 1,000 members of MLA's Hospital Libraries Section. The survey was approved by the institution's institutional review board, and it was pilot tested before distribution by email.
Results: A total of 206 librarians responded for a participation rate of 20.6%.Responses came from 42 states with the greater numbers coming from California, Pennsylvania, Illinois, and New Jersey.
• 76.2% reported holding a masters of library science.
• 44.7% reporting more than 20 years of experience as a medical librarian.

• 20.9 % of hospital librarians reported offering formal EBHC classes.
• 59.7% reported taking a formal class in EBHC.
• 90.8% stated they keep current by attending meetings.
•The greatest obstacle to practicing EBHC indicated was "lack of time" at 42.7%, followed by "lack of understanding of statistical concepts" at 32.5%. 89.3% reported being interested in learning more about EBHC.
Conclusions: Librarians participating in the survey represented an experienced population and expressed a positive attitude toward EBHC. Protected time both to develop comfort with statistical concepts employed in EBHC and to practice EBHC might serve to increase their implementation of EBHC.

3:56 p.m.
Gathering the Evidence: Exploring the Value of Information-specialist-in-context Services to Two Clinical Areas
Kate M. Anderson, specialized services librarian, J. Otto Lottes Health Sciences Library; **MaryEllen C. Sievert,** professor emerita and research consultant; **E. Diane Johnson, AHIP,** head, Information Services, J. Otto Lottes Health Sciences Library; **C. Trenton Boyd, AHIP,** head, Veterinary Medical Library; **Deborah H. Ward, AHIP,** director, J. Otto Lottes Health Sciences Library; University of Missouri–Columbia
Objective: To determine the efficacy of including a librarian on clinical teams in pediatrics and veterinary medicine through a combination of quantitative and qualitative methods. Data on the impact of the services will help us in discussions with decision makers regarding ongoing financial support and expansion of services to other clinical departments.
Methods: In October 2005, we launched clinical library services to the department of child health and to the department of veterinary medicine and surgery. From the start of the new services, an Access database has been used to track information requests, including number and types of questions, time spent, and qualitative feedback received on answers that were provided. At the six-month mark, two outside researchers conducted structured interviews with fourteen residents and faculty to gauge the impact of the service. The interviews included the critical incident technique and solicited information on ways to enhance the clinical librarian services.
Results: The Access database has become a valuable tool that incorporates both objective measures (e.g., increase of questions asked, numbers of referrals and repeat patrons) and anecdotal evidence of impact (e.g., the "Kudos" field). The use of the critical incident technique served to differentiate the purpose of questions asked. While the veterinarians asked research questions, the pediatricians focused on clinical matters.
Conclusions: The information-specialist-in-context services have created new and positive partnerships between the departments and the health sciences libraries. Differences between the department of child health and the department of veterinary medicine and surgery have necessitated substantially distinct services; however, the same measurement framework was useful in assessing both services, giving a picture of service usage, time commitments, impacts, and potential new opportunities.

4:13 p.m.
Enhancing the Systematic Search Process for Quality Information Retrieval and Delivery: Filters and a Reporting Tool for Librarian Searchers for the Family Physicians Inquiries Network (FPIN)
Susan E. Meadows, librarian IV and adjunct associate professor, Family and Community Medicine, University of Missouri–Columbia; **Kristin Hitchcock,** project coordinator, Department of Preventive Medicine, Northwestern University, Chicago, IL; **Joan Nashelsky,** project assistant, Center for Human Rights, University of Iowa–Iowa City; **Deborah H. Ward, AHIP,** director and adjunct instructor, Health Management and Informatics, J. Otto Lottes Health Sciences Library, University of Missouri–Columbia
Objective: This paper describes outcomes based on enhancements to and creation of new search filters and search guidelines for use by members of the Family Physicians Inquiries Network (FPIN) Librarian Community.
Methods: Librarians collaborate as coauthors for the FPIN Clinical Inquiries and are responsible for the search methodology used to identify relevant evidence-based results. The FPIN search strategies incorporate filters designed for evidence-based retrieval of topics related to therapy, diagnostic processes, and prognosis. Using feedback from FPIN librarians, the original FPIN filters were revised and new filters for diagnostic testing and prognoses, along with search guidelines, were created. A tool to facilitate systematic reporting of the search results was also implemented.
Results: The outcome of this work provides librarians with evidence-based tools for use in their work as coauthors for the Clinical Inquiries series. The creation of these filters and a report form facilitate a systematic approach to information search and delivery service that achieves a standard of uniformity in retrieval and quality of content for all Clinical Inquiries. These tools have been adapted for use by librarians in other contexts of their work.
Conclusions: The FPIN librarian search tools can be applied to other areas of literature retrieval. These systematic approaches to evidence-based information and delivery service further our collaboration with physician colleagues and open doors to other partnerships.

Poster Session 1
Sunday, May 20, 2:00 p.m.–3:00 p.m.

1

Expenditures for Library Resources in Academic Health Sciences Libraries: A Ten Year Overview

Carlene Drake, library director, University Libraries, Loma Linda University, Loma Linda, CA

Objective: This poster compares expenditures for various types of library resources in five similar academic health science centers, over the past ten years.

Methods: Five academic health sciences centers with similar demographics and program offerings to our academic health science center were selected. The libraries are all associated with medium-sized academic health science centers. The Association of American Medical Colleges Medical School Profile Report system was used to help select the libraries. A comparison of the data reported to the Association of Academic Health Sciences Libraries (AAHSL) annual statistics in the category of Expenditures-Information Resources/Collection Development was analyzed. Trends in increases and decreases for specific resources, monographs versus serials versus electronic resources, over the last ten years were examined and charted.

Results: Spending for all resources among the 5 libraries increased 47%. Monograph spending decreased 37%. Spending for serials increased 46%; and database spending increased 63%.

Conclusions: As overall spending has increased, there has been a definite shift of expenditures from monographs to serials and databases. The AAHSL statistics did not begin reporting database/electronic spending until 1999. Prior to that access to "External Information" was reported as part of the total collection spending. The total number of monographs held by AAHSL libraries has decreased 3.5% and the total number of serial titles as reported has increased 69%. Among the 5 libraries analyzed, the percentage of spending for monographs decreased more than the AAHSL total and percentage of spending for serials and databases increased more than the AAHSL total. Our library collection expenditures were typical of the changes seen in academic health science center libraries over the 10 years analyzed.

2

Assessment of Departmental Journal Requests and Impact on an Academic Health Sciences Library Collection: An Unanticipated Benefit

Anne M. Linton, AHIP, director; **Kathe S. Obrig,** associate director, Library Operations; Himmelfarb Health Sciences Library, The George Washington University, Washington, DC

Objective: During the 2006/07 budget preparation cycle, the medical center budget office and the health sciences library worked together to review each subscription request submitted by individual departments. The review process served primarily to eliminate duplicate requests for titles already available campus-wide in electronic format. Dollars saved were used to support additional electronic resources purchased by the library.

Methods: A subscription assessment form that identified requestors, titles, and costs was created and incorporated into the budget packet for each department. A similar form was already in use for software requests. All subscription assessment forms were returned to the library for review by the serials librarian, library director, associate vice-president for educational resources, and assistant vice president for health economics. Requests for departmental titles were denied if the journal title was already held electronically by either the health sciences or academic library as long as the following criteria applied: (1) online content equaled or exceeded print content; (2) no embargoes were in effect; (3) content was easily available at the desktop at the table of contents level; and (4) titles supported major medical center programs. Titles free with society memberships were not considered for denial.

Results and Conclusions: Ninety-three forms were received from thirty-nine departments during the initial budget review. Fifty percent of these requests were for journal titles that are fully available in electronic format; these requests were denied. Additional links were added to the library's electornic resources page as needed to make all titles easily accessible. Of the remaining requests, a majority were approved for departmental purchase. Three new nursing titles were added to the library collection, and dollars saved by the entire process were used toward the purchase of a major citation index. Following a formal presentation on the process, medical center chairs and the library engaged in a year-long process of fine-tuning the library's collection to meet changing departmental needs and teaching faculty how to use electronic journals effectively.

3

Is Our CD/DVD Collection Worth All This? A Cost-per-use Study of Accompanying Materials

Marie R. Kennedy, head, Metadata and Content Management, Norris Medical Library, University of Southern California–Los Angeles

Objective: The acquisitions routine of reviewing the contents, examining the license agreements, and processing medical texts that are published with accompanying CD-ROMs (CDs) or DVDs is costly. Is the cost of this process worth it? This research is designed to provide a quantitative assessment of the process to assist in decision making for possible future acquisition practices related to accompanying material.

Methods: A study was conducted over three months, tracking the time required for the cataloging and processing of texts with accompanying material. We gathered circulation statistics about the CDs or DVDs stored in the media area of the library as well as CDs or DVDs kept in books. We determined an average processing time for each text with an accompanying item and compared it with the average circulation of the CDs or DVDs, to establish a time cost-per-use. We

also considered monies spent on processing supplies to establish a supplies cost per use.
Results: We analyzed the data to find a time cost-per-use of 3 minutes 30 seconds. We calculated a supplies cost-per-use of $1.25 for a CD or DVD that is separated from the text, and a cost per use of $0.40 if the license agreement permits the CD or DVD to be retained in the text. The analysis supports the intuition of librarians that have suggested they spend more time cataloging and processing texts with accompanying materials. The methodology for the time study and analysis of data provides a framework that may be employed at institutions to quantify their own procedures, to make informed decisions about their cataloging and processing workflows related to texts with accompanying materials.

4
What More Can We Learn from Statistics? Revolutionizing In-house Statistical Collection through Automation

Charlie S. Lackey, AHIP, assistant director, Cataloging and Collection Services; **Virginia M. Carden, AHIP,** administrative research librarian, Administration; **Robert James,** associate director, Access Services; Medical Center Library; **Ken Mitchell,** IT analyst, Library Information Systems Support, Perkins Library; **Richard A. Peterson, AHIP,** deputy director, Administration; **Marcos A. Rodriguez,** information services specialist, Applications and Web Services, ITS; Medical Center Library, Duke University, Durham, NC
Objectives: This poster will show the use of an integrated library system (ILS) to automate the capture and reporting of in-house use statistics. The traditional model involved the use of paper and tick marks. Automating the process will allow accurate numbers for collection development, journal usage, external statistical reports, and offsite storage decisions.
Methods: In 2005, an ILS report was generated listing titles and publication years by decade to project offsite storage needs. This report demonstrated the capabilities of the ILS and the library decided to utilize the software to automate the gathering of in-house statistics. At the beginning of 2006, the Library researched possible options by querying the ILS email list and colleagues nationwide. No viable solutions were identified; however, the university library's information technology department developed a preliminary solution using the ILS and a macro. The Library evaluated and purchased a barcode scanner to collect data and this formed the basis for an in-house collection and reporting process implemented in fall 2006. The process now involves staff training, selecting sampling periods, barcode scanning, importing the data into the ILS, and producing a customized report. This report contains accurate in-house circulation counts and lists relevant bibliographic and item information.
Results/Conclusion: With the implementation of our new electronic in-house statistical count, we have been able to improve the counting of library material usage. The new procedure provides us more descriptive information. Item-level information is now available. We have been able to more efficiently utilize our staff's time in collecting and reporting the statistics. By using a more efficient and effective method to do our statistics, we are able to use the information gathered to assist with collection management and offsite storage decisions. It is our intention to make the best use of all modules that Aleph has available. Macros developed in-house and supporting documentation are available to other Aleph users.

5
Determing a Core Journal Collection in an Academic Health Sciences Library

Jonathan M. Lord, AHIP, collection development librarian; **Joy Nuckolls,** acquisitions specialist; **Daniel T. Wilson,** assistant director, Collection Management and Access Services; Health Sciences Library, University of Virginia–Charlottesville
Objective: To develop an institution-specific list of core print journals that are essential to support the research, patient care, and educational activities of faculty, staff, and students.
Methods: We identified a need to develop a list of essential journals that we would maintain both print and online subscriptions to. Standardized core journal lists like the Brandon/Hill or *Abridged Index Medicus* (AIM) were too general and did not reflect specific research and patient care programs. A list of core journals would serve multiple purposes: It would be integrated into a comprehensive library disaster plan. It would guide current and future decisions on journal collection maintenance, especially when to drop print in favor of online access. We proposed a number of criteria on which to base the core journal decision making: current shelf space required to house print, total print volumes owned, usage of print, duplicate print copies at other local libraries, online availability of current and back issues, current online usage, whether or not title is on the *AIM* list, PDF availability, ISI impact factor, and ISI citation half-life. All journals in our collection were evaluated based on these criteria.
Results: Out of 1,100 current subscriptions, 170 journals were identified as core print titles and will be retained by the library. Non-core print journals were reviewed, and print subscriptions were discontinued for 2007. Non-core print holdings in the library stacks that duplicated online content were identified for withdrawal. Starting in 2007, print subscriptions consisted of either core journal titles or titles where an online-only subscription was not available. When the project was completed in February 2007, 1,211 print journal titles encompassing approximately 35,000 volumes were withdrawn from our collection. We were able to remove an entire range of journal shelves, freeing up significant library space for purposes other than storing print journals.

6

A Small Scale Multi-type Library Consortium for the Purchase of Electronic Resources

Virginia M. Tanji, director; **Annis Lee Adams,** electronic resources/information services librarian; **Luree Ohigashi Oasay,** technical services librarian; Health Sciences Library, John A. Burns School of Medicine, University of Hawaii–Manoa, Honolulu, HI

Objective: This poster reports on the development of a multi-type library consortium, Medical Libraries Consortium of Hawaii, functioning as a "buying club" to purchase medical electronic resources at a significant discount for all participants, which include an academic health sciences library, other small university and community college libraries (totaling eight academic libraries), and thirteen hospital libraries.

Methods: The setting is Hawaii, a small state, with several unaffiliated hospital libraries and university and community college libraries that previously all had access to a wide range of electronic resources through institutional memberships to a large private medical library, which was an independent unit of a large hospital system. This library was downsized and at the same time, a brand new, state-funded academic health sciences library opened. The smaller hospital libraries, wanting to expand their electronic collections, needed to find an affordable way to license online resources. A loosely organized buying club was formed to benefit all participants in purchasing access to online medical resource packages. Purchases can be made a la carte and currently ten different resources are available from which to select. This consortium could serve as a model for a regional, multi-type library buying club with little administrative oversight needed.

Results: Organizational meetings were held to determine the level or interest and develop a list of possible purchases. At the outset, it was agreed that purchases could be made a la carte and that all purchases would be negotiated by the academic health sciences library and that vendors would be asked to bill participating institutions directly. Currently, thirteen hospital libraries and eight academic libraries participate. The total monetary value of these purchases is for calendar year 2006 was $295,260.

Evaluation Method: Data are presented to demonstrate the range of resources the smaller libraries have access to. The satisfaction among the membership is revealed by the fact that only two libraries dropped out (one institution was dissolved and the other sold) and several libraries joined after the initial purchases had been completed. A survey was conducted to determine the satisfaction level consortium participants

7

A Research Study to Develop a Source List of Traditional Chinese Medicine Journals

Naomi C. Broering, AHIP, FMLA, dean of libraries; **Gregory A. Chauncey,** project consultant; Library; **Stacy Gomes,** academic dean, Academic Administration; **Thomas Haines,** coordinator, Doctoral Program, Administration; **Jack Miller,** president, President's Office; Pacific College of Oriental Medicine, San Diego, CA

Objective: This research study addresses a gap in consumer health information services regarding complementary and alternative medicine journals, specifically traditional Chinese medicine, Oriental medicine, herbs, nutrition, and related disciplines. The goal is to develop a journal checklist using standard library practices and selection criteria. Objectives are: (1) To create a selection list that identifies Chinese and Oriental medicine journals for collection development. (2) To develop an electronic matrix with hyperlinks to journals and publishers.

Methods: The complex sequential steps undertaken included the following: (1) Journals were identified using authoritative sources including Ulrich's Periodical Directory, online vendor lists, the MEDLINE journals database, and journal holdings of oriental medical libraries. (2) Health databases searched to determine if online access included the National Library of Medicine's PubMed, MEDLINE, National Center for Complementary and Alternative Medicine, and Alt Health Watch. Google was searched to identify publisher contact information. (3) Data entry involved selection of MS Excel for ease of use and organizational capability including automatic alphabetization and chronological listing. (4) Hyperlinks were added to each journal and publisher, when available, by verifying them in Pub Med, MEDLINE, EBSCO, and Scopus. (5) Plans to disseminate the matrix includes access through the library's Web page, distribution to medical libraries, poster presentation with handouts, and publication.

Results: The journal matrix, supported in part by the Medical Library Group of Southern California and Arizona, resulted in a checklist of over 100 journals and periodicals available either in print and/or electronic databases. The matrix chart includes: A. hyperlinked titles, ISSN, original date, hyperlinked publishers, online access date, and indexing database. B. Checkmarks for abstracts and fulltext access. C. Some foreign language titles. D. Information gaps for obscure titles. E. A separate abbreviated publishers list with hyperlinks.

Conclusions:

Lessons Learned: Some journal titles changed, were were discontinued, or difficult to locate. Research took longer than anticipated, because an extensive review was conducted of several disciplines, including Oriental and Chinese medicine, natural medicine, herb, Nutrition supplements and related fields. MEDLINE, Scopus, and EBSCO served as verification sources because they include full bibliographic records.

Future Plans: Evaluate this basic resource for future growth. Distribute the matrix by CD or electronically upon request.

8

Staying Ahead of the Curve... A Continuous and Systematic Approach to Evaluating Electronic Resources

Karen S. Grigg, assistant director, Collection Services; **Charlie S. Lackey, AHIP,** assistant director, Cataloging and Bibliographic Services, Technical Services; Library, Duke University Medical Center, Durham, NC

Objective: How can the Duke Medical Center Library (DUMCL) create a systematic approach to regular, ongoing evaluation of current e-resources that includes user feedback and expertise across library departmental staff to improve purchasing and implementation of e-resources?

Methods: Our population of interest consists of a collaborative, inter-departmental team of DUMCL librarians, faculty, staff, and students. In response to a ever-increasing renewal prices of crucial electronic databases, the library has developed a systematic approach to reviewing UpToDate and comparable products and plans to apply this approach to all of our e-resources on a regular basis. This poster will outline steps involved and the outcome of our review. The steps include evaluating use and feedback of current products, scanning the marketplace for competing products, assembling a team of reviewers, securing the trials, obtaining price quotes, creating review criteria, dividing teams into subteams that evaluate each database using the same criteria, reassembling and comparing databases as a larger group, promoting trials and soliciting feedback from users, and creating a final report to guide our decisions. Plans to measure effectiveness of evaluation of e-resources using a follow up survey and/or focus groups of library users will be discussed.

Results: Librarians involved with the review process concluded that this process is useful to justify subscription decisions, even if the decision is made to continue on the current course. Librarians also find that an ongoing, systematic review of databases engenders better knowledge of the marketplace. DUMCL's approach to database evaluation, along with results of our UpToDate evaluation will be included.

9

The Long Tail: A Usage Analysis of Pre-1993 Print Journal Literature

Jeff Williams, head, Collections and Access Services, Biomedical Library, University of California–San Diego, La Jolla, CA

Objective: This poster will share a usage analysis of an academic biomedical library's pre-1993 print journal collection. This analysis is relevant for biomedical libraries balancing access to older biomedical literature with restricted shelf space, as well as those wondering if access to electronic backfiles for older biomedical journal literature eliminates the need to retain print volumes.

Methods: In July 2003, in preparation for a renovation and expansion project, the library moved all of its pre-1993 journal volumes offsite, with the exception of twenty-one heavily used titles. More recent volumes with stable electronic access were moved offsite as well. These offsite volumes were available by request and were paged twice a day back to the library via an online request form. Knowing this request information could be useful in deciding what journal volumes to bring back to the library at the completion of the project, selected information from the online request form was automatically recorded in a database. In the spring of 2006, an analysis was made of these data.

Results: Significant usage of this offsite journal literature occurred. By July of 2006, over 88,000 journal volumes were requested back to the library. Analysis of these requests showed that although usage of older literature dropped off as expected, there was a "long tail" of usage, with 50% of the requests being for literature published before 1986. As expected, the availability of electronic journal backfiles dramatically reduced the chance that print journal volumes would be requested back to the library.

Conclusions: Taken as a whole, older biomedical print journal literature appears to be of continued value to the biomedical research community. Health sciences libraries should work to retain access to this material, with electronic access being an efficient replacement for print for libraries coping with limited space.

10

Deciding What to Keep in Print: An Essential Step in the Change to an Online Journal Collection

Michele M. Shipley, assistant director, Digital and Branch Libraries; **Angela Dixon,** head, Collection Management; **Christopher Hoolihan,** head, Rare Books and Manuscripts; Health Science Libraries and Technologies, University of Rochester Medical Center, Rochester, NY

Objective: To develop a clear set of criteria and a systematic process for identifying core journals in the library's collection for which both print and online formats will continue to be purchased.

Methods: The library's serials committee searched the library literature, surveyed other librarians through email discussion lists, and sought input from other library staff. After the committee identified the criteria to be used in decision making an evaluation process consisting of nine factors was created. An Excel spreadsheet that stores the data for each journal and automatically awards a point score was developed. As a pilot project, the process was applied to all library subscriptions from the publisher Elsevier. The setting is an academic health sciences library and two affiliated branch libraries with approximately thirty staff members.

Results: The pilot project was successful, but the serials committee needed to conduct a final review of the journals selected by the evaluation process to be retained in print in order to ensure that these journals were the most important ones in their specialty area. Print and online formats were ordered for 20% of the Library's Elsevier journals in 2007. The remaining 80%

of the Elsevier journals were changed to online-only subscriptions. The library was able to add over 20 new journal subscriptions with the money saved.
Conclusions: The evaluation process is an effective tool for deciding which journals should be retained in print as well as online formats. The process will be applied to journals from other publishers for 2008 renewals.

11
Joining the Digital Revolution: The Creation of a Collaborative University-wide Digital Infrastructure from the Ground Up

Danielle P. De Jager-Loftus, librarian, Lommen Health Sciences Library, Sanford School of Medicine of The University of South Dakota–Vermillion
Objective: To identify the intellectual, organizational, and technical components necessary to create a common digital framework and infrastructure.
Methods: The University of South Dakota's (USD's) Lommen Health Sciences Library, Sanford School of Medicine, and I. D. Weeks Library will join forces to look at ways the university's growing digital collections can be incorporated into a common framework and infrastructure. Communication, coordination, and the use of incentives for collaborative work will provide an opportunity to develop outstanding digital resources. Collections in various stages of digitization range from a handful of taped interviews from the school of medicine's centennial celebration, to 3,200 taped interviews from the South Dakota Oral History Project and the American Indian Research Project, up to 30,000 negatives and photographs from the USD Photograph Collection. The National Music Museum's Witten-Rawlins Collection of Early Stringed Instruments and the Mahoney Music Collection also contain several items to be digitized. Key issues to explore are selection, metadata standards, intellectual access, and housing, protecting, and preserving collections. Purchase of a commercial software package and the location of server and storage space are additional issues that will be addressed to meet our needs concerning creation, storage, and services of our special, rare, and unique collections.
Results: Further exploration produced a formal collaborative partnership between The University of South Dakota's I. D. Weeks Library, Lommen Health Sciences Library, National Music Museum, and the South Dakota Oral History Center. Collectively, the partners submitted a proposal to the Institute of Museums and Library Services (IMLS) to research, design, and create a comprehensive plan to digitize materials. The partnership is focusing on a leadership model that orchestrates and mediates teamwork, disseminating the capability to create information collections by self-directed and self-managed teams.
Evaluation: There are two stages of assessment we will address. First, as part of the planning phase, we will look at ways to evaluate and study collaborative services from multiple perspectives using quantitative and/or qualitative methods. Second, once the digital library's human and technical components are identified, long term viability requires both development and application of appropriate digital library assessment tools.

12
A Multimedia Digital Repository Needs Assessment and Evaluation: Comparing 2003 and 2007

Sharon Dennis, librarian, Multimedia Development, Spencer S. Eccles Health Sciences Library, University of Utah–Salt Lake City; **Sebastian Uijtdehaage,** director, Research, David Geffen School of Medicine, University of California–Los Angeles
Objective: The Health Education Assets Library (HEAL) is a digital library containing over 20,000 freely available health sciences multimedia education resources. The HEAL team conducted a needs assessment survey of health sciences educators in 2003 and then again in 2007.
Methods: The survey in 2003 was promoted to health sciences educators through relevant health sciences education email lists. In 2007, the survey was again promoted using the relevant email lists. It was also sent to over 4000 HEAL users who had signed up for the HEAL email list. The objectives of the survey were to determine support for the digital library, get input about collection development, identify the multimedia formats that are most commonly needed in health sciences education, determine which obstacles for sharing exists and how incentives for sharing can be created, and determine whether the digital library met user needs over the four year period. The 2007 survey received Institutional Review Board (IRB) approval in February 2007 and was conducted in February and March 2007. Both surveys were conducted online and took less than ten minutes to complete. A comparison of the results of the two surveys will be presented.
Results: In 2003, 356 participants responded to the survey. Over 90% of the participants agreed that a national digital repository for sharing teaching materials is desirable. Seventy-five percent wanted a standardized method for cataloging multimedia. Eighty percent searched for multimedia on the Web regularly. The majority of participants (95%) felt that peer review was an important component of a digital repository. Participants also answered questions about multimedia formats (images, interactive learning tools, patient cases, videos, and animations were the most popular) and collection development.
Conclusions: These results will be compared with the survey completed in March 2007. The same questions were repeated as well as questions specifically about the usefulness of HEAL itself. The complete results of the 2007 survey can be viewed on the HEAL Website at www.healcentral.org.

13
Organizing Electronic Resources with a Database-Driven Website

Joseph Harzbecker, AHIP, head, Reference and Interlibrary Loan; **Keven M. Jeffery,** information services librarian and Web coordinator; **Lauren Maggio,** coordinator, Library Education and Information Management; **David Flynn,** information services and education librarian; **Mary McKeon Blanchard,** associate director, Library Services; Alumni Medical Library, Boston University Medical Center, Boston, MA

Objectives: During a 2004–2005 Website redesign the library identified the need for an improved presentation of electronic resources. Many of these resources were not well represented in the catalog and the growing online collections were a challenge to manage on the existing static Website. The library therefore adopted a database-driven solution complete with subject indexing to allow greater access to electronic resources.

Methods: Online content—including electronic books, electronic journals, indexes, and Web resources—were evaluated and placed in a MySQL database. A set of Web-based forms were then created using Adobe ColdFusion to manage these resources. Librarians generated a set of approximately one hundred broad subject headings based on the existing static subject guides and Medical Subject Headings. Each resource was indexed by subject and a set of Web page templates was designed to display the resources. Electronic holdings were accessible through a set of searchable interfaces and were presented as a collection on database-generated subject guides. The library also tracked usage of e-resources by logging each time a resource was visited from the Website.

14
Anatomy of a Digitization Project: Dissecting the Process

Lisa A. Palmer, catalog librarian; **Mary E. Piorun, AHIP,** associate director, Library Systems; Lamar Soutter Library, University of Massachusetts Medical School–Worcester

Objective: This poster describes the library's first digitization project: digitizing 300 doctoral dissertations in-house for an institutional repository. The Library hopes to provide a showcase for the school's research, teaching, and scholarship; promote open access to research; and make available an easy way for faculty and researchers to promote and distribute their work.

Methods: The library director established a team to investigate institutional repository products. The team created a chart assigning weights to important criteria to evaluate various systems. In 2006, the library purchased a license for ProQuest Digital Commons, a hosted system. As a manageable first project, the team focused on digitizing the 300 dissertations produced by one of the graduate schools. The intent was to populate the repository quickly, generate visibility, and gain support across the medical school. The team worked with the graduate school to develop a permissions form and a process to contact alumni. The Library Director decided to scan the dissertations in-house rather than outsource. The team made technical decisions about software and equipment for scanning and creating searchable text, using optical character recognition (OCR) technology, deciding what metadata to collect, and reusing data from the library's online public access catalog.

Results: The project is currently well under budget. As of February 2007, more than 65% of the alumni contacted have given permission for their dissertations to be digitized. The 247 dissertations added to the repository have been downloaded more than 6,300 times in just 8 months. The project was profiled in the school's internal newsletter, leading to increased visibility and interest. Another graduate school recently agreed to deposit their dissertations in the repository. Continued challenges include managing workflow, documenting policies and procedures, managing copyright issues, and creating a plan to market and promote the repository on campus.

Conclusion: The library's first digitization project has been successful due to library funding, support, and management, the skills of team members, the purchase of a hosted product, and the partnership with the graduate school. Future success will be indicated by continued funding, increased faculty and department participation, and greater campus awareness.

15
A Collaborative Venture in Sharing Educational Materials

Richard Usatine, professor; **Mary Moore,** director, Libraries; UTHSCSA Library, University of Texas Health Science Center–San Antonio

Objective: Charting the Future, the Association of Academic Health Sciences Libraries' key publication on the future of health libraries, challenges us to strengthen partnerships and help develop needed knowledge products. Repositories to support teaching are specifically mentioned. The product is a collaborative service of the library. It allows sharing of conference materials, PowerPoint presentations, learning modules, digital images, and more.

Methods: The product was developed with faculty and library partners from several universities. Its development is funded by the National Library of Medicine. The technical platform and educational taxonomy were developed by the leadership team. The site is open to anyone. All contributions are screened and submitters may request peer review. Materials are indexed with the educational taxonomy and Medical Subject Headings. The product also provides online environments for group discussions and group Web spaces. There is a wiki function that is currently being used to develop online clinical teaching cases for medical students. Formative program evaluation is ongoing and includes usability testing. Library partners have been involved with development, indexing, and usability testing, as will be described.

16
Library Website 2.0: Integrating Wiki Software to Enhance Content of Library's Website

Justin C. Robertson, education coordinator and information services librarian, Reference; **Judy Burnham, AHIP,** interim library director; **Jie Li, AHIP,** assistant director, Public Services and Education; **Ellen N. Sayed, AHIP,** head, Collection Development; Baugh Biomedical Library, University of South Alabama–Mobile

Objective: The purpose of this project was to utilize wiki technology to enhance the content of the Website and generate a collaborative relationship with the library's primary patrons by developing a subject Webliography.

Methods: The Medical Specialties pages (i.e., physical therapy, and pediatrics) targeted for this project were originally constructed in a static HTML format. Each topic was subsequently linked from this index to other relevant static HTML pages.. The goal was to convert these static HTML pages into an interactive, wiki format so library patrons could submit relevant links, basically assisting the librarians with this virtual Webliography project. After installation of the software, the librarians assessed the existing pages for relevancy, dead links etc., and then decided which material should be migrated to the new, subject-specific wiki pages. Each librarian was responsible for several medical specialties (generally related to their liaison departments) with the library Website coordinator overseeing the entire migration process. The faculty were then invited to contribute their favorite Web links to the site.

17
Putting Wikis to Work in Libraries

Nancy T. Lombardo, systems librarian; **Allyson Mower,** institutional repository coordinator; Spencer S. Eccles Health Sciences Library, University of Utah–Salt Lake City

Objective: Wikis are a prominent collaboration tool in the Web 2.0 toolkit. Libraries can take advantage of wikis to make cooperative team work more efficient and effective. The Eccles Health Sciences Library at the University of Utah has found wikis to be a highly effective way to enhance collaboration and efficiency while writing grant proposals, developing strategic plans, and developing procedure manuals.

Methods: The Eccles Health Sciences Library utilized a variety of free wiki tools to improve collaboration on a number of documenting projects. This poster will describe and compare the wiki tools and the benefits to the collaborative efforts. Methods used for each specific project utilizing this collaborative software will be covered. The projects to be outlined will include: the writing of a grant proposal, including the preparation of a logic model defining the proposed project, the preparation of the strategic plan for the organization carried out by three teams, and the development of the procedures manual for the public services department. In addition to benefits, the poster will describe obstacles and challenges the groups encountered when working with the Wiki tools. Recommendations will be suggested for other libraries wishing to utilize these tools in their own organizations.

18
Leveraging Search Data as a Strategic Tool for Developing and Refining Specialized Portal Content

Christopher Ryland, coordinator, Special Collections; **Rebecca N. Jerome,** assistant director; **Jerry Zhao,** system software specialist; **Qinghua Kou,** health systems analyst programmer; Eskind Biomedical Library, Vanderbilt University Medical Center, Nashville, TN

Objective: To describe the process of determining and evaluating future directions, via search log analysis, for an online portal that provides access to the electronic historical, archival, and unique biomedical resources of a large academic health sciences center.

Methods: Library staff have compiled and informally assessed digital library use data monthly since the inception of the portal in 2005, but no comprehensive analysis of the data has been conducted, and its usefulness for portal development has not been systematically tested. To assess the utility of this data, library staff are analyzing twelve months' worth of data to develop key findings for use in strategic development of the portal. Data for analysis include: page requests, digital library resource "click-throughs," and text-based queries. Standard descriptive statistics will be employed to identify relatively popular resources and method of access. For text query data, staff will export search terms into a database and identify query patterns, including query length, spelling accuracy, and likelihood of retrieval. Such analysis will allow evidence-based, data-driven portal development and refinement.

Results: Results confirmed several anecdotal observations of user behavior but also drew attention to potential areas of portal development. As expected, some of the most used resources address the history of nutrition (29% of resource uses; 1,218/4,261) and Vanderbilt University Medical Center (VUMC) (18%; 763/4,261). In line with this finding, analysis of search queries confirmed a high frequency of related terms (e.g., "scurvy," "goodpasture"). Three hundred thirty-seven of 1,554 (22%) readily identifiable queries related to nutrition and 220 (14%) related to VUMC history. Unexpected results include the high rate of searches related to nursing history and theory (13% of all readily identifiable searches; 207/1,554), especially when compared to the rate of nursing resources accessed in the portal (3%; 131/4,261). Similarly, the frequency of anatomy resources used (22%; 951/4,261) was unexpected. These results suggest areas of future development for the portal. Users' spelling errors and the length of queries do not appear to be significant issues.

19

Creating a Revolution in Hyperbaric Medicine

Viriginia R. M. Carden, AHIP, administrative research librarian, Medical Center Library; **Russell S. Koonts,** director, Medical Center Archives; **Richard A. Peterson, AHIP,** deputy director; **Charlie S. Lackey,** asisstant director, Cataloging; **Patricia L. Thibodeau, AHIP, FMLA,** association dean, Library Services and Archives; Medical Center Library, Duke University, Durham, NC; **Gene W. Hobbs,** director, Rubicon Research Repository, The Rubicon Foundation, Durham, NC

Objective: Hyperbaric medicine is specialized research area, but access to its literature has been difficult and important materials scattered around the world. Duke University Medical Center Library and Archives (MCLA) had an opportunity to make such materials more accessible through a digital repository when the Undersea and Hyperbaric Medical Society (UHMS) donated its library to Duke and a partnership was developed with the Rubicon Foundation.

Methods: UHMS donated its collection of hyperbaric materials to MCLA, and along with an agreement for the library to provide reference and document delivery services to society members. The collection consists of government documents from around the world, reprints of articles, original manuscripts, images, books, journals, and other documents relating to diving and hyperbaric medicine. MCLA has established guidelines for adding materials to its collections and has developed creative ways for making print reports accessible through the Web. Papers from key society leaders and major figures in the field were given to archives, and they have created Web-based finding aids providing access to these unique resources. The Rubicon Foundation was created to focus on locating hyperbaric information resources and making digital versions of important resources available.

Results: Duke University MCLA is now able to locate and provide copies of documents to society members and those interested in the field. By partnering with the Rubicon Foundation, MCLA will be able to make electronic copies of many difficult-to-find materials available through a digital repository. Due to the visibility and stability of the repository, Rubicon and UHMS continue to identify and successfully gain permission to add other national and international resources to the digital collection. An outgrowth of this work has been discussions with the society and other groups about making runs of medical journals available in digital format through the repository and PubMed Central.

20

Revolutionizing Consortium Access with Athens Single Sign-on

Robin R. Sewell, head, Systems and Networking, Arizona Health Sciences Library, University of Arizona–Tucson

Objective: The Arizona Health Information Network (AZHIN) is a consortium of thirty-four member health service organizations that range in size from academic institutions to small medical clinics. The goal of this project was to improve access to resources on-site and off-site by using a single sign-on product and improve the security of the resources by implementing a password management system.

Methods: In the past non-Internet protocol authenticated on-site and off-site access required AZHIN members to use a different username and password for each vendor's product. Athens was selected for its ability to interact with vendors, its single sign-on access to resources, and its password and account management features. Resource access management through Athens permissions sets simplified any changes to the available resources and provided a way for organizations to use Athens authentication for resources they purchase separately. This implementation had several challenges related to the custom delivery of resources accessed through dynamically generated Web pages and the use of a custom log-in method. Another challenge was the management of variations in URLs used by vendors for IP and Athens authentication, especially in the context of LinkSource, EBSCO's link resolver, and A to Z journals list.

Results: Athens is currently in use by twenty-seven AZHIN member organizations. The existing vendor-based password system will be discontinued at the end of June. Three of the larger academic institutions use local proxy systems for authentication and are not using Athens. Many of the obstacles could have been overcome by requiring all users to log into Athens regardless of their ability to IP authenticate. We chose to take the more difficult route to provide seamless access to resources when ever possible. This meant using cookies to provide the correct URL, IP or Athens, depending on the user's authentication method and using EBSCO data to present a custom A to Z journal list. The LinkSolver solution was less than ideal and involved the creation of custom links that would allow access to the correct URL for people who had authenticated using Athens.

21

Lawton Digital Archive: Planning and Implementation

Rachel R. Resnick, research librarian, Polisher Research Institute, Abramson Center for Jewish Life, North Wales, PA

Objectives: This poster describes a digitization planning project to identify unpublished documents of M. Powell Lawton (1923–2001) containing relevant gerontological research material and to learn how to create a digital archive to make the documents accessible; and a digitization project to create, publicize, and evaluate the archive. The projects have been partially funded with federal Library Services and Technology Act (LSTA) funds administered by the Pennsylvania Office of Commonwealth Libraries.

Methods: Researchers familiar with Lawton's work were surveyed regarding whether they would like to obtain access to his unpublished documents and to learn what types of documents would be of interest, how they would like to access them, what they would do with them, and how they would like to learn about the archive when it became available. Project staff investigated digitization: metadata creation, technical details of scanning, scanners, and relevant software, etc.; and compared outsourcing versus in-house production costs. Five survey respondents served as document reviewers, reading a set of documents of interest to researchers and recommending several for digitization. With the second LSTA grant, we purchased the hardware and software needed and created the archive. This poster is part of the publicity plan.
Results: Survey respondents were interested in presentations, among other documents, and preferred online access. Thirty-three conference presentations were evaluated for digitization. Fifteen documents were selected that the document reviewers believed sufficiently add to the knowledgebase that they merit formal publication and that the investigators were able to put into the context of Lawton's body of work. The Lawton Digital Archive is available at www.accesspadr.org; a survey about the collection will be available through October 2007 on www.surveymonkey.com/s.asp?u=406072837115. The survey will examine various aspects of the online collection, from the users' perspective: usability, functionality, reliability, efficiency, portability, and maintainability.
Conclusions: There were mixed experiences associated with the scanning process, use of CONTENTdm software, and dealing with HSLC, which manages the AccessPA Digital Repository.

22
The Informationist and Information Specialist Revolution: Career Pathways for Physicians?

Peggy Schaeffer, project coordinator, School of Information and Library Science, University of North Carolina–Chapel Hill; **Patricia L. Thibodeau, AHIP, FMLA,** associate dean, Library Services; **Robert James,** associate director, Access Services; Medical Center Library, Duke University, Durham, NC; **Barbara M. Wildemuth,** Francis Carroll McColl Term professor; **Claudia Gollop,** associate professor and associate dean, School of Information and Library Science, University of North Carolina–Chapel Hill

Objective: How can physicians and medical students be recruited to pursue degrees or careers in information or library science? What do practicing physician informationists say about this career choice? With support from the Institute of Museum and Library Services, a collaborative Duke-University of North Carolina team is studying how to motivate medical students to seek a master's degree in information science or library science.
Methods: Two studies are being conducted. In August 2006, the researchers used a Web survey to query second-year Duke University School of Medicine students about an optional second degree in information science or library science. The survey assessed their awareness of and interest in the existing dual degree program available through the University of North Carolina. In addition, approximately forty physicians with information roles were interviewed and asked about their careers in information science, what education they have had, what preparation they recommend for information roles, what the optimum skills and knowledge for such positions are, and what opportunities they foresee for doctors in the information realm.
Results: Through the survey, we determined that the recruitment efforts were successful (72%-81% awareness), and that 16 (22%) of the students would like the option of a medical informatics degree program. Four students from this class have applied to the master's in information science program for fall 2007.
Conclusion: Interviews with the physician informationists probed to see if those without formal academic training in information science or a related field had regrets about the lack of such a credential. Interviewees identified information science skills and training needed (database skills, information organization and classification, and online searching were often cited as critical) and described the growing demand for physicians with information skills to participate in designing clinical applications, as well as in industry and policy roles.

23
Consumer Health Information on Websites of Hospitals: Any Changes after Hurricane Katrina?

Dee Jones, AHIP, head, Cataloging, Medical Library, Louisiana State University Health Sciences Center–Shreveport

Objective: To survey Websites of hospitals to determine if consumer health information (CHI) is available online and compare these results with a similar study carried out by the author in 2003. To assess the effect of Hurricane Katrina on the total number of hospitals that are currently operational. To evaluate the accuracy, currency, and quality of the CHI.
Methods: Identify which of the inpatient hospital facilities have a Website and compare data, gathered in 2006 to data in the 2003 study. It is known that the number of hospitals and population figures, especially in the area, have decreased. How this will affect CHI is yet to be revealed. Website presence will be correlated with specific demographic factors such as number of beds, health care system affiliation, type of hospital, urban/rural setting, and population. Sites with CHI will be analyzed to determine the number and type of internal and external links. The sponsorship of external links will be categorized as to government, nonprofit, educational institution, or commercial. A list of all CHI external links will be compiled and compared with MLA's "Top Ten Most Useful Websites."

24
Clinical Information Resources: Utilizing New Technologies in Content Delivery

Jenny Pierce, public services librarian; **Janice Skica,** director; Health Science Library, School of Medicine, University of Medicine and Dentistry of New Jersey–Stratford

Objective: Historically, the library and internal medicine department have worked together to address the educational goals of the department's graduate medical education program. However, distributed clinical settings and the constraints of the eighty hour workweek have reduced the amount of time housestaff is available to attend educational sessions conducted by the library. In this project, our objective was to create new formats for the integration of scholarly information and informatics skills utilizing new technologies and to promote evidence-based clinical practice skills in the graduate medical education (GME) program.

Methods: Combining attendance at sessions of morning report with online supplements makes the most productive use of both staff and informational resources. After reviewing online options, library staff decided to use the university's portal's group function to deliver content and support the educational program. This site includes copies of presentations delivered at morning report, as well as information for other GME programs. The portal is available to all interns, residents, students, and faculty in the department, without regard to time or place. A librarian's attendance at morning report provides attendees with the opportunity to request information or support for clinical or research issues. The librarian has also been providing training at morning report.

Results: The public services librarian has become a valued member of the educational program for the department of internal medicine. Presentations at morning report on topics related to evidence-based medicine and information resources are integrated into the schedule. Residents have become more involved and invested in creating content for the group (adding links, recommending resources, sharing announcements). GME staff has begun using the group for scheduling, journal club, and distribution of required resident forms. The group is viewed as a repository of essential education resources and support and a tool for addressing American Osteopathic Association/Accreditation Council for Graduate Medical Education core competencies. Flexibility of the format was demonstrated when a new educational initiative, "Learning the Guidelines," was successfully integrated.

Conclusion: This project demonstrated the integration of new technology into GME. Using both oral presentation and Web portal technology, the library has increased house staff knowledge of clinical resources, EBM, and library services in these areas.

25
Diagnosing Differential Diagnostic Resources in a Pediatric Clerkship

D. Elizabeth Irish, AHIP, assistant director, Education and Administrative Services; **Enid M. Geyer, AHIP,** associate dean, Information Resources and Technology; Schaffer Library of Health Sciences, Albany Medical College, Albany, NY; **Richard H. Sills,** professor, Pediatrics, Department of Pediatrics, Upstate Medical University, Syracuse, NY

Objective: To integrate the use of differential diagnostic resources to support clinical decision making in a pediatric clerkship through (1) introducing computer-assisted learning in pediatrics program (CLIPP) cases and (2) comparing and analyzing the differences/similarities between the CLIPP case and DXplain diagnosis (DDx).

Methods: To expand the clinical integration of LaGrange Medical Informatics (LMI) curriculum, meetings were held with the third-year clerkship directors. A collaborative partnership developed between LMI and pediatrics as the director wished to incorporate CLIPP cases to increase differential diagnostic training in the eight-week clerkship. Since September 2004, a one-hour session is taught by pediatric faculty or residents with library faculty assistance. The pediatrics facilitator guides the students through a CLIPP case, soliciting responses to questions and providing a framework for the disease. The LMI assignment requires the students to complete a CLIPP case, run the same case through DXplain, and compare the results. At the end of each rotation, an evaluation is distributed. In June 2006, the third- and fourth-year students were also surveyed to determine the usefulness of the CLIPP cases.

Results: Three hundred thirty-one assignments submitted between 2004–2006 were reviewed. Of these, 257 assignments compared the DDx of a CLIPP case to the same case run in DXplain; 74 compared DDx of a real patient case to DXplain results. Of the CLIPP cases, 74% found the diagnosis in the top 5 of "common" or "rare" diseases in DXplain categories, while 66% running a real patient diagnosis in DXplain found the same diagnosis in the top 5. Students identified difficulty entering terminology and social history as reasons for not arriving at the same or similar DDx. Students recognized that DDx tools complement rather than replace physician expertise.

Conclusions: (1) CLIPP cases are a valuable tool to build on students' DDx skills and clerkship knowledgebase. (2) DXplain helps students identify components needed to build a reliable DDx. (3) DXplain combined with clinical judgment provides helpful guidance in formulating a DDx.

26
The Journey Project

Monica Leisey, social work informationist; **Jean P. Shipman, AHIP,** director; Tompkins-McCaw Library, Virginia Commonwealth University–Richmond

Objective: This paper describes the Journey Project designed to improve cancer patients' health literacy by providing cancer patients information concerning

their condition, their treatment, and the health care system in which they are accessing care. The project is a partnership between a social work informationist and a cancer resource center.
Methods: The Journey Project was created as a way to increase health literacy among cancer patients receiving chemotherapy. Health literacy including information about the patient's condition, treatment, and the health care system provided the basis on which a notebook to be used by patients was conceptualized and created. Working closely with an oncologist, the social work informationist offered and provided health information access. Patients who were interested were provided a Journey notebook in which they could store and manage information about their cancer treatment. The notebook included sections to be completed with the help of the social work informationist such as contact information for their care team, symptom and side effect information, pain management information, medication management information, and maps of the health care system. This presentation will describe the planning and implementation of the project, the tools created to facilitate the process, and the challenges encountered in conducting the project.
Results: Although finding information about cancer diagnoses and treatment was a fairly easy task, gathering information about the health care system proved to be more difficult. At the beginning of the project, no resources existed that facilitated accessing the various types of information a cancer patient might need. Gathering the information took approximately four months and many interviews. The completed notebook was presented to the director of oncology services and to nurses, the psychologist, and the social worker for their input. Working across disciplines proved to be both educational and frustrating as each professional had expectations of the project based on professional values and goals. Implementing the project relied on the flexibility of oncologists and their nurses to provide access to patients while they were in the examination room. Patients seemed to find the notebook useful, however using other Journey resources, counseling and information provision, seemed to be relationship dependent.

27
Pathways to Partnerships: A Pilot Pediatric Information Prescription Program

Angela Dixon, head, Collection Management; **Mary Beth Klofas,** head, Information and Access Services; **Marilyn Rosen,** reference librarian; **Julia Sollenberger, AHIP, FMLA,** director; Health Science Libraries and Technologies/Edward G. Miner Library, University of Rochester, Rochester, NY
Program Objective: The Ask A Medical Librarian program objective was to deliver targeted, individualized information to in-patients, outpatients, and their families from trusted sources such as books, journals, pamphlets, and selected high-quality Internet sites. This was accomplished through the use of an information prescription over a seven-month period in three pediatric units.
Setting: The pilot was conducted in an academic health sciences library serving a school of medicine and dentistry and a school of nursing and a 740-bed teaching hospital, which includes a 124-bed children's hospital.
Participants: Librarians collaborated with health care providers in the pediatrics department.
Program: What would you do if a poster promoting librarian assistance with health questions was ripped off the wall by a pediatrician who opposed patients getting information directly from the library? The library director, cognizant that patients are getting information and misinformation from the Internet, proposed partnering with the pediatrics department to develop an information prescription program. A task force was created to design the form and to establish procedures for submitting and filling requests. The librarians also formulated goals and objectives, as well as evaluation tools for providers and patients. Multifaceted publicity was also incorporated into the program.
Results/Conclusions: During the 7-month pilot, 34 requests for information were submitted by providers and filled by librarians. To determine if the pilots' goals and objectives were met, surveys were conducted with both providers and patients or families. The surveys revealed that 100% of both providers and patients/families were either satisfied or very satisfied with the service. Based on the positive response that was received, the Ask A Medical Librarian Information Prescription service is being expanded to the entire department of pediatrics in 2007.

28
Jumping into Battle: Bringing the Information Revolution to the Bedside

Cheri Smith, senior informationist, Harrison Medical Library, Johns Hopkins Bayview Medical Center, Baltimore, MD
Objective: To determine the feasibility of establishing a limited clinical librarianship program at Johns Hopkins Bayview Medical Center. This medical center hosts a highly competitive medical residency program associated with the Johns Hopkins Medical Institutions.
Methods: An attending physician approached the library director with a proposal to incorporate a librarian into the team performing rounds on the medicine ward. During the pilot stage a staff librarian was appointed to observe procedures during rounds, to collect questions that arose during rounds, and to determine whether the medical staff on the rounding team would accept the librarian as a team member. The librarian was scheduled to round daily for the initial two-month pilot period with subsequent reevaluation of the most reasonable schedule in terms of time expended vs. time available in her schedule. The librarian recorded on a PDA all questions arising during rounds. She researched answers to those questions and sent search results together with selected articles to team members for review and discussion.

Results: The presence of a librarian on clinical rounds was well-accepted by the medical team. A two-day-per-week schedule was agreed on. Team members requested that search histories be included with results for greater educational benefit. The librarian was named Teacher of the Year for the institution. The director of the burn unit, after hearing of the medicine rounds, requested a clinical librarian attend his weekly burn rounds. During medicine rounds, the librarian noted that classic articles were recommended for reading by team members. After consultation, a classic articles database was created and made available to all departments via the medical center intranet.
Conclusion: Implementation of a limited clinical librarian program is feasible and may result in unanticipated benefits. While librarians may initially see their main contribution as supplying clinically relevant material, clinical staff state that the librarian's contribution adds enormously to the educational value of rounds.

29
Morning Report and All That: New Services to a Child Health Department

Kate M. Anderson, specialized services librarian, J. Otto Lottes Health Sciences Library; **MaryEllen C. Sievert,** professor emerita and research consultant, **E. Diane Johnson, AHIP,** head, Information Services; **Deborah H. Ward, AHIP,** director; J. Otto Lottes Health Sciences Library; University of Missouri–Columbia
Objective: We have recently developed a clinical library service for interns, residents, and faculty of the department of child health. As a visible presence in the department, the clinical librarian pushes the boundaries of traditional library services, in effect adding an information specialist to the clinical team.
Methods: The clinical librarian attends morning report, an educational conference for interns and residents, three days a week. The librarian listens for the gaps in knowledge during the conference, searches for answers to questions both expressed and implied, and reports findings to the group. The librarian also teaches sessions on search techniques and evidence-based resources. As an adjunct to tracking quantitative data on the time spent and the number and nature of questions asked, two outside researchers interviewed five residents and faculty, using the critical incident technique to gather structured feedback on the impact of this new service.
Results: Questions related to morning report, and questions unrelated to morning report, have continued to increase. The interviews supported the importance of the clinical librarian, especially for the residents, and all were enthusiastic about the presence of the librarian during morning report.
Conclusions: Consistent participation in morning report has led to new services and contacts both within and outside the morning report conference. Based in part on the presence of the clinical librarian, one session per week has been formalized into an evidence-based medicine morning report. The faculty also felt that the inclusion of the librarian was a positive factor in increased board performance.

30
Clinical Medical Librarian Services for Nurses

Clista Clanton, AHIP, education coordinator; **Ellen N. Sayed, AHIP,** head, Collection Management; Baugh Biomedical Library, University of South Alabama–Mobile
Objective: Establish a clinical medical librarian (CML) service for nurses. While CML programs have typically been offered to physicians, experience at this institution indicates a growing interest from nursing faculty and staff in both utilizing the services of librarians and learning more effective information management tools. Approached by a department of nursing faculty member interested in furthering evidence-based practice amongst nurses, the biomedical library will implement a clinical librarian service targeting nurses. This program will also investigate if CML services offered to nurses should or do differ substantially in nature from CML services offered to physicians.
Methods: The setting is an academic teaching hospital that is part of a two hospital system at a university with colleges of medicine, nursing and allied health. Two medical librarians with CML experience in rounding and protocol/clinical pathway development will allocate up to 8 hours per week each to this CML pilot project. Upon the recommendation of the hospital clinical practice committee, the librarians will be integrated into selected hospital committees.

31
Broaden Your Reach: Instant Messaging from the Reference Desk: It's Worth It

Dan Kipnis, senior education services librarian; **Gary Kaplan,** information services librarian; Academic and Instructional Support and Resources, Thomas Jefferson University, Philadelphia, PA
Objective: An urban academic university started a pilot period offering instant messaging (IM), first using AOL (AIM), MSN, Yahoo!, and then adding Google talk and Meebo chat from their library Website. Our poster will outline lessons learned and successful strategies for implementing IM simply and easily.
Methods: The information services staff started with a three-month pilot period using IM and saved all transcripts for analysis. The poster will examine the collection of saved transcripts to search for reference question patterns asked by our community.
Results: The first 100 IM transcripts and 32 survey responses were analyzed. Data were collected and will be reported for the following: most popular time of day and day of week to ask IM questions, types of questions asked, average length of interactions, and frequency of personal introductions by librarians and users. Additional data analysis will include number of unique users, repeat

users, the use of IM lingo, and user satisfaction.
Conclusions: From the launch of the service, it took 13 months to reach 100 IM interactions. During that period, we introduced successive upgrades and improvements to the service: expanding hours and staffing, adding additional IM networks, and continuing marketing efforts. IM service is a natural extension of traditional reference services including telephone, email, and personal interactions. Despite the low volume of questions, the low costs and high level of user satisfaction justifies the continued exploration of the service.

32
Putting Library Resources on Our Users' Desktops

Sadie Honey, information and Web services librarian; **Leslie Kleinberg,** Web and print publications coordinator; **Jason Randell,** Web developer; **Julia K. Kochi,** director, Digital Library and Collections; Library and Center for Knowledge Management, University of California–San Francisco
Objective: This poster will describe the creation, rollout, and promotion of a series of browser toolbars and a browser plug-in designed to place library resources at the point of need.
Methods: The library serves an academic health sciences campus that is geographically distributed. Faculty, staff, and students are located at two major campuses as well as other locations throughout the region. There is an increased reliance on electronic access to library resources. It is increasingly less likely that people will make the trip to the physical library, especially as electronic resources become more prevalent. We hope to increase visibility and use of library resources by placing access to them in the users' environment. With this aim, the library created tools that can be integrated in the users' Web browser, including three toolbars and a search plug-in. The tools have inspired creative promotional materials and approaches in addition to our normal avenues for marketing library services. Promotional efforts have included collaboration with campus organizations outside the library, creating new relationships and opportunities for future collaboration.
Results: When showcasing the tools at orientation fairs and library events the response has been very positive. Challenges include the technical learning curve for creating and hosting these tools.
Conclusion: The tools are a first step toward integrating library resources in the environment of our users. Future research is planned to measure installation rate of the tools and the impact of the tools on usage of library resources.

33
What's in a Name? Reference Services in Academic Health Sciences Libraries

Jodi L. Philbrick, doctoral candidate and adjunct faculty; **Ana D. Cleveland, AHIP,** professor and director, Health Informatics Program; School of Library and Information Sciences, University of North Texas–Denton
Objectives: The objectives of this study are:
1. to identify how academic health sciences libraries classify their reference services departments
2. to determine if any geographical correlations exist in how academic health sciences libraries classify their reference services departments
3. to uncover whether the size of the library plays a role in how libraries classify their reference services departments
Study Population: Websites of academic health sciences libraries represented in the Membership Directory of the Association of Academic Health Sciences Libraries (www.aahsl.org/new/about/directory.cfm)
Methods: The researchers will:
1. analyze the Websites of academic health sciences reference librarians to identify how they classify their reference services departments
2. compare and contrast the classification of reference services departments in academic health sciences libraries based on geography and size
Results: Based on preliminary data analysis, the researchers anticipate that most academic health sciences libraries use the term "reference" to classify their reference services departments. Other terms that are used include information, education, and outreach. The researchers also expect that geography will not play as big as a role as size in how libraries classify their reference services departments.

34
Creating and Implementing a Database to Revolutionize the Management of Electronic Document Delivery Requests

Karen L. Hanus, assistant director, Services and Collections; **Alfred Kraemer,** assistant director, Library Systems and Office of Research IT; MCW Libraries, Medical College of Wisconsin–Milwaukee
Objective: To describe the development and implementation of a new service, Library on Request, which is an electronic document delivery service, and the MySQL database created to manage the incoming requests. The poster will specifically address the system developed to allow users of PubMed to order document delivery requests without using Loansome Doc.
Methods: For years, Medical College of Wisconsin (MCW) Libraries' users have been able to request document delivery service electronically, but the request systems merely generated emails, which were then printed and processed in paper form. In 2005, a document delivery management database was developed at the MCW Libraries and methods for importing document delivery requests directly into the database were developed. Users can submit requests in batches from Ovid or PubMed or they can submit single requests via a Web-based form. PubMed users submit requests by using the "order" function in PubMed that would normally send the user to Loansome Doc. Users are taken

to a Web-based form after selecting the "order" function. After filling out the form, a PHP script communicates with PubMed to download the citation information into our database, and the script matches that information to the requesters' information.
Results: In less than 1 year since the database has been available, the library has received over 23,000 requests in the new database management system.

35
Using a Wiki for the Reference Desk

Rebecca Raszewski, reference librarian, Hahnemann Library, Drexel University, Philadelphia, PA
Objective: To develop a wiki-based resource that will serve as a means of communicating reference desk policy, procedure, and assistance to staff.
Methods: During the spring of 2005, the wiki was introduced as a tool to encourage communication among the three library branches. At first, the wiki was viewed as a new scheduling tool for health sciences library reference desk coverage. The reference librarian realized that the wiki could serve as a replacement for the *Reference Desk Manual*, which was created in 2003. Inspired by a colleague's suggestion of creating reference-oriented bookmarks, the reference librarian examined recommended Websites on resources such as MLANET and government and library Websites. Categories of links, pertaining to topics such as consumer health, general reference, librarian resources, statistics, and university departments were created. A Subject Guide table, which highlights books in the collection, was designed. The Brandon/Hill list was used as a model for subject categories, and items on reserve were examined for particular titles. The reference collection was studied for important materials, including online editions.
Results: The Health Sciences Reference Desk Wiki has three sections: a help section, the manual, and a log (created in 2006). The reference desk calendar, which was accessed over a thousand times since its inception, is now available through Microsoft Outlook. The print and Wiki Reference Manuals are being updated simultaneously. Electronic books have been integrated into the subject guide and are being updated when new editions become available. The wiki now serves as a major resource for evening and weekend supervisors, for regular reference staff, and as a tool for library school students being trained to provide reference services. The reference librarian has conducted wiki training for all library staff to familiarize them with the wiki and with the reference information it includes.

36
The Next Generation of Academic Health Sciences Reference Librarians

Jodi L. Philbrick, doctoral candidate and adjunct faculty; **Ana D. Cleveland, AHIP,** professor and director, Health Informatics Program; School of Library and Information Sciences, University of North Texas–Denton
Objectives: The objectives of this study are:
1. To identify what qualifications academic health sciences libraries desire in hiring reference librarians.
2. To compare and contrast the qualifications with the Health Information Knowledge and Skills in the Platform for Change, the MLA educational policy statement.
Study Population: Job postings on MLANET Jobs (www.mlanet.org/jobs/jobs.html).
Methods: The researchers will:
1. Analyze the qualifications listed in job postings for academic health sciences reference librarians over a seven-month period.
2. Compare and contrast the qualifications listed with the health information knowledge and skills in the Platform for Change.
3. Determine if there are any areas in the job postings that are not addressed in the Platform for Change, which may help with the creation of the new MLA educational policy statement.
Results: Based on preliminary data analysis, academic health sciences libraries are looking for reference librarians who have an American Library Association-accredited master's of library science, knowledge of health sciences resources, teaching experience, technology expertise, and interpersonal and communication skills. The qualifications that academic health sciences libraries desire in reference librarians compare very well with the Health Information Science Knowledge and Skills in MLA's Platform for Change.

37
The Geography of Virtual Reference Services in Academic Health Sciences Libraries

Jodi L. Philbrick, doctoral candidate and adjunct faculty; **Ana D. Cleveland, AHIP,** professor and director, Health Informatics Program; School of Library and Information Sciences, University of North Texas–Denton
Objectives:
1. To identify how many academic health sciences libraries offer some form of virtual reference services for their users.
2. To find out what forms of virtual reference services academic health sciences libraries are offering.
3. To uncover how many academic health sciences libraries have privacy policies in relation to their virtual reference services.
4. To determine the geographical distribution of virtual reference services and associated privacy policies in academic health sciences libraries.
Methods: The researchers will:
1. Examine the Websites of the libraries identified above to determine how many offer some form of virtual reference services.
2. Study the Website of the libraries to identify what forms of virtual reference services they are offering.
3. Determine if the libraries who offer virtual reference services have privacy policies associated with the services.

4. Analyze the data gathered to find out the geographical distribution of virtual reference services and associated privacy policies in academic health sciences libraries.
Study Population: Websites of academic health sciences libraries represented in the Membership Directory of the Association of Academic Health Sciences Libraries (www.aahsl.org/new/about/directory.cfm).
Results: Preliminary data analysis shows that a large majority of academic health sciences libraries offer virtual reference services, with Web forms being the most popular method of delivering virtual reference services. Relatively few academic health sciences libraries have privacy policies that are directly associated with the virtual reference services they offer. The researchers anticipate that virtual reference services and associated privacy policies are evenly distributed geographically.

38
Revolution at the Library Service Desk

Beverly Murphy, AHIP, assistant director, Marketing and Publications; **Richard A. Peterson, AHIP,** deputy director; **Hattie Vines, AHIP,** information and education services librarian; **Megan von Isenburg,** associate director, Public Services - Information Services; **Elizabeth Berney,** library service desk manager; **Robert James,** associate director, Access Services; **Marcos A. Rodriguez,** information services specialist, Information Technology Services; Medical Center Library, Duke University Medical Center, Durham, NC
Objective: The library service Desk (LSD) was initially created to provide "one stop shopping" for patrons seeking assistance with reference questions, interlibrary loan requests, circulation of materials, and other services. In the past year, the LSD model has expanded to feature an on call reference service, integration of technical services staff, revised core competencies, and the use of innovative technologies. This poster will describe how a revolution in customer service provision has led to an evolution of library services.
Methods: The revolution began in 2002, when the reference and circulation desks were eliminated to create a single service point. To prepare public services staff to offer both reference and circulation services, responsibilities were broadened. Core competencies in each area were developed, and staff were cross trained. In 2005, an analysis of staffing and work patterns across the library demonstrated a need to build on the original model. To better utilize staff and ensure coverage of the LSD, a pilot project was implemented, wherein reference librarians were moved to on call backup roles and technical services staff were added to the LSD schedule. Core competencies were refined, and documentation for procedures was mounted and maintained in a new content management system.
Conclusions: Library staff continue to evaluate and refine the LSD service model. Immediate plans for evaluation include implementing the LibQUAL+ Survey and conducting patron focus groups. Information from both these activities may lead to the creation of new services and roles for Library staff. The revolution continues...

39
The More Things Change, the More They Remain the Same: Qualitative and Comparative Analysis of Reported Library Issues from 1985–1986 and 2005–2006

Rebecca McKay, AHIP, outreach and education coordinator; **Christine Foster, AHIP,** associate director, Library Services; Medical Sciences Library, Texas A&M University–College Station
Context: Technology has changed much about the daily activities in the library. Email systems allow quick and effective electronic communication. But what about the content of these messages; has there been substantial change over the last twenty years in the information that is conveyed? In 1985 and 1986, important communication between staff members at the circulation desk in the library was accomplished via a notebook, the circulation log book. Staff members made entries to other staff to remind them of library activities or to note problems. This poster presents analysis of the content of the messages in the circulation log compared to the current library communication from email messages and the patron suggestion box.
Objective: To compare the content of the 1985–1986 circulation log book with the content of problems reported by staff via email messages and patron suggestion box submissions from 2005–2006 to determine if the messages as well as the media has changed over the years.
Methods: A qualitative approach using content analysis of the 1985–1986 circulation log book, 2005–2006 emails reporting patron problems or complaints, and patron suggestion submissions using thematic categories.

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Ask Sassy Systems...

Angela D. Anderson, assistant systems librarian; **Mararia K. Adams,** head, Systems; Medical Library, Louisiana State University Health Sciences Center–Shreveport
Objective: This poster displays an approach that the systems librarians took to help the library faculty and staff gain control and exploit the potential of the available technological resources.
Methods: Even experienced computer users are often anxious when confronted by computer glitches. Ask Sassy Systems… was created as a light-hearted way to present information that dispels the myth that only the systems librarian possesses the secret knowledge to troubleshoot common computer problems. We borrowed a page from Dear Abby and created Ask Sassy Systems… as a biweekly emailed computer advice column for library personnel. Sassy presents common computer problems in a humorous way, gently educating readers

and leading them to a solution without triggering their "technophobia."
Results: After many issues, library personnel are enthusiastic about Ask Sassy Systems... The chatty advice column format is comfortable and unthreatening, bypassing many users' mindset that "I'll just never be able to understand these technical issues." An unanticipated outcome has been that as time has passed, we have begun receiving unsolicited questions for Sassy to cover in the next installment.
Conclusions: Ask Sassy Systems... has become a valuable component of our library's staff training program. Charts and graphs will be used to illustrate our findings. To preserve the Ask Sassy emails, a blog has been created.

41
Harnessing the Power of E-journals: Designing, Implementing and Evaluating an Electronic Tables of Contents (ETOCS) Program for Clinicians—2001–2007, a Six-year Project Review and Analysis

Susan M. Robishaw, AHIP, assistant director; **Claire A. Huntington,** reference librarian; Health Sciences Libraries, Geisinger Health System, Danville, PA
Purpose: To increase clinicians' use of electronic journals by making electronic tables of contents (ETOCS) sign-up and utilization easy and rewarding.
Population/Setting: Staff physicians, residents, and librarians in a geographically disperse integrated health system.
Brief Description: Librarians designed an easy-to-use system for physicians to request and receive ETOCS. Journals are selected from the library's electronic full-text subscriptions that offer an email alert feature. Requests are submitted electronically to the librarians who enter the clinicians' requests with the individual e-journal publishers. Each time a new journal issue is published, clinicians receive the ETOCS in their email inbox. They can immediately access the complete articles by clicking on the live links, making this a useful and rewarding experience and, thus, promoting the use of electronic health literature.
Methods: Design, market, and implement an easy-to-use system to generate and fulfill ETOCS requests. Develop databases and queries to track requestors and journals requested. Evaluate results using process observations and statistical analysis of requestors and journals requested.

Poster Session 2

Monday, May 21, 2:00 p.m.–3:00 p.m.

1

Setting a Firm Foundation: Developing a Course in Global Health Informatics for a Master's Program in Global Health

Marcus A. Banks, AHIP, library associate; **Karen Brewer, AHIP, FMLA,** director; Frederick L. Ehrman Medical Library, School of Medicine; **Van B. Afes,** director, Waldmann Dental Library, College of Dentistry; New York University–New York

Objectives: This poster describes how colleagues in the health sciences libraries at New York University (NYU) developed a course in global health informatics. The course was required of all students in a new master's program in global public health. This program represents a collaborative effort among five professional schools. Developing the course raised the profile of the libraries in NYU.

Methods: Based on an extensive review of the public health literature, the course director developed a seven-lecture course. Two of the lectures focused on skills in information seeking and evidence-based public health. The other lectures presented informatics applications that are useful for managing public health interventions in resource-poor regions. The course director and project assistant identified experts in the university community to deliver these lectures. Students in the global health program are professionals who have already obtained a graduate degree. The informatics course aimed to deliver practical content to proficient adult learners. We anticipated that students would emerge from the course with new skills in information management and a better understanding of the role of contemporary health sciences librarians. A survey of the students evaluated the extent to which we achieved these objectives.

Results: The first version of the course was conducted successfully in the spring semester of 2007. Core topics included an overview of public health informatics, evidence-based searching in PubMed, an introduction to other evidence-based resources, epidemiological data procurement and management; geographic information systems, genomic implications for public health, ways to obtain quality information in resource-poor locations, and the importance of lifelong learning.

Conclusions: Public health graduate programs rarely devote such explicit attention to teaching search skills. This course successfully integrated the health sciences libraries into the underpinnings of a visible new graduate program at NYU and raised awareness of the essential value of information-seeking skills. During the first session of the course, several students expressed the opinion that taking the informatics course earlier would have provided them with beneficial knowledge for their other courses.

2

Looking Around to Look Ahead: A Review of Medical Library Online Tutorials

Rozalynd P. McConnaughy, assistant director, Education and Outreach; **Allison LoCicero,** Web services librarian; **Briget Livingston,** dead, Access Services; **Steven Wilson,** coordinator, Center for Disability Resources Library; School of Medicine Library, University of South Carolina–Columbia

Objective: To identify and analyze online tutorials, which are freely available on medical libraries' Websites, to plan the redesign of a library's instructional programs.

Methods:

Subjects: The Websites of 124 medical libraries in the United States were analyzed. The authors focused solely on libraries supporting the medical schools listed on the Association of American Medical Colleges (AAMC) Website.

Methods: Using a list of ten questions, the authors collected data from each site related to the online tutorials that the libraries linked to and the online tutorials they created. Information obtained about the online tutorials that the libraries created included the topics of the tutorials, the software that was used to create the tutorials, presence of feedback surveys, interactive tutorials, and more. The data were compiled in an Excel spreadsheet for analysis.

Results: Overall, 63% of the libraries linked to tutorials that were created by vendors or other libraries, with the National Library of Medicine's PubMed tutorial being the most popular; 59% of the libraries created freely available tutorials (274 in all) with evidence-based medicine being the most popular topic. HTML editors were the most commonly used applications to create these tutorials; nineteen tutorials were interactive; 10% included quizzes; and, 24% of the tutorials included surveys or other feedback options.

Discussion/Conclusion: Although the majority of libraries observed are creating tutorials, most of the tutorials have a simple design that does not require responses from the user. Course-integrated tutorials and tutorials that are password-restricted possibly had a more sophisticated design. Based on our findings, the authors plan to create tutorials that encompass the features most libraries do not include, such as interactivity, quizzes, evaluations, and printable handouts.

3

"Sneaking In" Library Instruction: Using a "Non-Library" Instructional Video to Demonstrate How to Find Books and Journals in the Health Sciences Library

Sarah McCord, AHIP, electronic resources and reference librarian, Health Sciences Library; **Jonathan K. Reynolds,** clinical assistant professor, College of Pharmacy; Washington State University–Pullman

Objective: The objective of this project was to increase students' awareness of both proper conduct at a formal

ceremony and the availability of library resources for information needs beyond those found in traditional academic work.
Methods: The health sciences library primarily serves the colleges of pharmacy and veterinary medicine. The college of pharmacy has 194 students on the main campus, and each year conducts a formal White Coat Ceremony to mark the entry of new students into the professional program. A college of pharmacy faculty member wished to include the library in one scene of a humorous instructional video on proper conduct at the college's White Coat Ceremony. The librarian and the faculty member worked together to craft scenes that showed how to use the catalog to find a book in the library, introduced the current journals section, and conveyed library conventions such as shelving journals by title and discouraging patrons from reshelving materials. Humorous book and journal titles were used, in keeping with the light-hearted spirit of the video. Pharmacy information technology staff assisted with filming and editing, and library cataloging staff created temporary catalog records.
Results: Placing instructional interaction in a video not specifically billed as "library instruction" increased students' awareness of and comfort with library resources. In subsequent mandatory library tours and database instruction classes, students consistently referred to first being introduced to policies, concepts, or resources while watching the video.

4
Summer in the City: Developing Health Information Literacy Skills of Minority College Students

Nancy R. Glassman, AHIP, systems librarian; **Racheline G. Habousha, AHIP,** head, Public Services; **Karen Laul,** cataloger; **Leigh M. Mihlrad,** electronic resources librarian; **Aurelia Minuti,** head, Reference and Educational Services; **Rachel Schwartz,** reference librarian; **Karen Sorensen,** reference librarian; D. Samuel Gottesman Library, Albert Einstein College of Medicine, Bronx, NY
Objective: To partner with faculty in the Summer Undergraduate Mentoring Program (SUMP) of Albert Einstein College of Medicine's Hispanic Center of Excellence (HCOE). HCOE is a federally funded initiative to recruit minority undergraduate students to pursue careers in medicine and to motivate them to address minority health issues and disparities. As part of this initiative, librarians focused on developing students' health information literacy skills, specifically, improved competency in searching the medical literature and identifying resources relevant to minority health issues.
Setting: D. Samuel Gottesman Library serving the school of medicine, graduate school of biomedical sciences, and graduate school of psychology.
Population: Minority college students participating in the SUMP.
Program:
1. library overview and tour
2. survey to assess students' information-seeking skills
3. two-hour training session on PubMed searching and identifying relevant print and electronic resources
4. toolkit to guide students in their independent research
5. biweekly search clinics to assist students in formulating search strategies, focusing results, retrieving full-text journal articles and statistical information, and preparing electronic presentations of their final projects
6. access to the training room for independent research with librarians "on call"

Results: Medical informatics training by librarians greatly improved the students' information literacy skills, as demonstrated by the excellence of their final projects. The students developed the ability to find, use and evaluate relevant articles, statistics, authoritative Websites, print resources, etc. SUMP mentors noted students' increased confidence in their medical informatics skills and grasp of scientific and medical information.
Conclusions: This kind of collaboration between librarians and faculty enhances students' education. Librarians will continue to do medical informatics training as part of future SUMP programs. Librarians will build on the success of this program to customize future training to support the clinical and research activities of residents, faculty, and students.

5
What's the Current Status of Nursing Informatics Education?

Ana D. Cleveland, AHIP, professor and director, Health Informatics Program; **Jodi L. Philbrick,** doctoral candidate and adjunct faculty; **Xuequn Pan,** doctoral candidate and teaching assistant; **Michael Robertson,** doctoral candidate and teaching assistant; School of Library and Information Sciences, University of North Texas–Denton
Objectives: The objectives of this study are:
1. to explore the development of nursing informatics education by surveying the literature
2. to identify and analyze curricula of nursing schools regarding the integrating of informatics
3. to investigate the nature of the nursing informatics courses

Study Population: Websites of nursing schools that are members of the American Association of Colleges of Nursing
Methods: The researcher will:
1. review the literature on nursing informatics education
2. examine the Websites of nursing schools identified above to determine how many integrate informatics in their curricula
3. analyze the nursing informatics course offerings

Results: Nursing informatics developed in the 1980s, and, by surveying the literature, it is easy to see how rapidly it has grown in the past decades. Preliminary data analysis shows that many nursing schools have integrated informatics into their curricula. Most of the courses are

specifically focused on nursing informatics, while other courses focus on data or information management or information systems. Some courses have a broader scope and address health care informatics in general.

6
Give Us Liberty! A Health Sciences Library Carves a New Path in Professional Medical Education

Valeri Craigle, librarian, Health Sciences Library, University of Southern Nevada, South Jordan, UT

Objective: A spirit of independence is alive in institutions that are dedicated to the education of today's pharmacists, nurses, and allied health professionals. This spirit is also reflected in libraries that support these revolutionary programs designed to train the next generation of patient-centered medical professionals. This poster will outline the strategic vision of a health sciences library serving a school of pharmacy and nursing as it expands its programs and services into the western United States.

Methods: In developing services and resources that meet the challenges of evolving models in health sciences education, a health sciences library, serving a school of pharmacy and nursing, provides access to a unique collection of print and electronic resources—one of the most comprehensive of its kind in the region—and customized services targeted specifically to meet the didactic and experiential needs of students and faculty. As the school grows and expands its facilities into a neighboring state, librarians at the main and satellite campus continue to develop a specialized collection, foster partnerships with consortia and library organizations in their home states, and increase opportunities for the exchange of ideas and materials that benefit other institutes of medical education in the region.

7
Where the Rubber Meets the Road: Integrating/ Embedding Library Instruction Services into an Innovative Health Sciences Summer Course

Mary M. Henning, assistant temporary librarian/ Wyoming liaison, National Network of Libraries of Medicine, Libraries, University of Wyoming–Laramie

Objective: Even though traditional library-based instruction usually involves an on-campus classroom setting, taking services out of the library and to the user may not seem revolutionary. However, the approach explored in this poster refreshes the model and rediscovers the role of the academic librarian as roving informationist providing evidence-based answers to specific questions from students throughout a three-week course.

Methods: Illustrated is the "embedding" of a librarian into an innovative health sciences summer course providing students with unique opportunities for in-depth study of living independently and transcending limitations that can come with age or disability. The course, an experiential, immersion experience with students adopting a "persona" and then viewing class experiences through the lens of that persona, incorporated presentations by specialists, demonstrations of assistive technology and field visits. The librarian was integrated into classes and field visits, traveling with the class to rural agencies including the Wind River Indian Reservation and Wyoming State Training School. Following each field experience, she conducted an evidence-based research session to enhance critical thinking and journaling about each topic. Throughout the class, she assisted students in focusing on information and material corresponding to issues presented by the persona description and was available for individual consultation.

Results: The librarian's close involvement with the course through planning, class attendance, and participation in the field visits helped make the students, faculty, and the librarian herself more aware of the synergistic nature of the research partnership. On a practical note, the field visits provided first-hand knowledge of the working environment and patient resources at the visited agencies and of the information needs of the medical staff. This enhanced contact with administrators and staff at the state agencies and generated invitations to return and demonstrate health care information resources to staff.

Conclusion: Overall, the librarian's participation in the course encouraged a closer research relationship between the University of Wyoming Libraries and the UW College of Health Sciences, while increasing the students' familiarity with health information resources and contributing to a research knowledgebase for them to use later as they become health care professionals in rural areas of the state.

8
Can a Health Sciences Librarian in a Pediatrics Department Increase In-training Exam Scores?

Sarah Towner Wright, director, Information Management, Department of Pediatrics/Health Sciences Library, University of North Carolina–Chapel Hill

Objective: To determine if an established and dedicated clinical librarian program in a pediatric residency program can significantly increase in-training exam scores taken by second- and third-year residents.

Methods: The seventy residents of a three-year pediatric residency program have available to them a dedicated part-time clinical librarian with affiliation to the academic health sciences library on campus. The residents at the end of each year of residency are given a brief ten-question online survey asking: how often they use the learning center and the departmental educational and training Website, how useful the various components of the librarian's services are to them, and how beneficial the librarian's services are to them in assisting with their patient outcomes. The results of this survey, especially the questions regarding the usage of the learning center, are then being compared to the second and third year in-

training exam scores, which are taken at the beginning of each year of residency.
Results: When in-service exam scores are compared to the results of the residency survey, these results were noted: (1) residents who physically frequented the learning center had slightly higher exam scores; (2) residents who used the center's Website at least several times a week for research had higher exam scores; and (3) residents who found the services of the learning center and the librarian to be at least "very useful" had higher exam scores.
Conclusions: By surveying pediatric residents at the end of each year of residency regarding the usage of the learning center, its librarian, and its Website, data regarding the usage of the center and its correlation to in-service exam scores has become evident. Having a tangible measurement of the impact of the learning center has been an important step in showing the benefit of a dedicated librarian and learning center in a pediatrics department.

9
Going the Distance with Moodle: Outcomes of the MLA Continuing Education Institute for Developing Web-based Instruction

Andrea Ryce, resource sharing/network coordinator, National Network of Libraries of Medicine, Pacific Northwest Region, University of Washington–Seattle; **Dolores Judkins, AHIP,** head, Research and Reference Services, Oregon Health & Science University–Portland; **Gail Kouame,** consumer health coordinator, National Network of Libraries of Medicine, Pacific Northwest Region, University of Washington–Seattle; **Michele Spatz,** director, Planetree Health Resource Center, Mid-Columbia Medical Center, The Dalles, OR
Objective: The purpose of this poster is to report on the experience and outcomes of participants in the MLA Continuing Education (CE) Institute for developing Web-based instruction.
Methods: Sponsored by MLA and the National Network of Libraries of Medicine, Greater Midwest Region, the MLA CE Institute was held in Chicago in March 2006. During five days of intensive training, scholars were able to transfer their MLA-approved CE courses to Web-based formats. Features of Moodle, an open source software program for developing Web-based courses, were highlighted. Topics covered throughout the week of the Institute were: "Online and Adult Learning," "Course Design," "Communication and Collaboration," and "Course Evaluation." Presenters will discuss challenges faced in converting face-to-face classes to the online environment and will highlight their individual Web-based CE courses.
Results: All of the courses developed as a result of the institute are certified for MLA CE contact hours. A brief and informal survey was administered in February 2007 to determine the status and availability of these courses, Out of seventeen institute participants, fourteen responded. The results are as follows: fourteen course participants have completed the development of their online courses. Thirteen participants are in the process of offering their course for the first time, and one participant has offered her course twice. Twelve participants have confirmed that they will offer it again in 2007.

10
Integration of Simulators into Clinical Skills Education for Medical Students

Brenda L. Seago, AHIP, director, Computer Based Instruction Lab, School of Medicine, Virginia Commonwealth University–Richmond
Objective: To collaborate with university and health system faculty to develop and integrate PDA usage in clinical skills education. While teaching the use of PDAs and the establishment of PDA user groups in libraries is common practice, the school of medicine has taken PDA applications further by partnering with clinical faculty and medical center HIS to develop and use programs that integrate PDA usage into the clinical curriculum.
Methods: Funds were requested from the dean in the school of medicine and approved to purchase fifty PDAs for a pilot project to test the use of the M3 Passport system, which allows students to document diagnoses and procedures observed and completed during all third year clinical clerkships for Liaison Committee on Medical Education accreditation. The pilot will also include use of Patient Keeper software so students on internal medicine (IM) rotations will have wireless access to download their encrypted patient records. PDAs will be distributed to third-year medical students at the beginning of their hospital-based IM rotations and training will be provided monthly. PDAs will be collected, information saved in a database, evaluations collected, and PDAs redistributed monthly throughout the year.

11
A Pocketful of PDAs: How Much Instruction Do Medical Students Need?

Rose Guerrieri, library director, Kent State University-Trumbull Campus, Warren, OH
Objective: Do medical students find a two-hour instruction session in the use of PDAs to be of value? Does the session teach them skills and concepts that they already have?
Methods: Program evaluation. To evaluate the value of a mandatory two-hour instruction on the use of PDAs, third-year medical students filled out a questionnaire immediately before and after the instruction session. The instruction took place at the beginning of the third year, to prepare the students to use medical reference software on PDAs in the clinical setting. The questionnaire included queries on general PDA skills and specific use of the reference software. The instruction included hands-on exercises and were given to groups of twenty students at a time, over a period of two days. All third-year students are required to use the PDA software

during their clerkships. The same questionnaire is filled out by students four months later, when all students have completed at least one clerkship. In addition to group findings, responses of each individual is anonymously tracked.

13
Tablet PC Use Revolutionizes Teaching and Student Learning

Jeanne M. Le Ber, education services; **Julie Quilter,** library specialist; Spencer S. Eccles Health Sciences Library, University of Utah–Salt Lake City

Objective: This poster reports the successful use of tablet PCs for delivering course content. The library assessed faculty use of the tablets, identified faculty who were innovative users of the devices and asked them what features they used and how the use of the tablets changed their delivery of instructional content. Their students were asked to comment on the faculty's use of the device and how the use of the tablet engaged them in the learning process.

Methods: The library purchased sixty-six tablet PCs for faculty checkout and use in the classroom and provided this tool to assist faculty in updating their presentations and delivery of course lectures and materials using innovative tablet features. The tablet PC's special electronic medical record pen and Windows Journal features allow for the dynamic annotation of instructional materials. In addition, tablets can be used to convert handwriting to typed text and voice to text. After the class session, the notes and annotations are saved and posted to the course Website allowing students to easily review course content.

Results: The initial four-question survey identified the most commonly used tablet tools. Focus group input provided a detailed picture of creative and innovative ways faculty used tablets in their teaching. Student input provided the learner's perspective highlighting advantages and challenges of this technology. This information was used by library faculty to revise and improve the basic tablet PC course that is offered to all faculty who check out tablets.

14
Three-year Summative Analysis of First-year Medical Student Library Instruction

Brenda Faye Green, associate professor and coordinator, Instructional Services; **Jasmine M. Bagay,** computer information specialist; **Richard Nollan, AHIP,** associate professor and coordinator, Reference and Outreach Liaison Services; Health Sciences Library and Biocommunications Center, University of Tennessee Health Science Center–Memphis

Objectives: This poster describes and evaluates library instruction provided to first-year medical students at a large urban health sciences center. This curriculum-integrated instruction included a two-hour lecture and required hands-on exercises. This poster presents a summative program evaluation, including a three-year analysis of attendance, exercise submission, utilization of resources, and student assessment of the session.

Methods: Over a 3-year period, over 460 first-year medical students were enrolled in a library instruction module accessible through the Blackboard course management system. The module provided access to the curriculum, exercises, survey instrument, and faculty contact information. Students received a two-hour traditional lecture that provided basic information about the library with an emphasis on accessing, retrieving, and disseminating relevant health care information. Following the lecture, students were required to complete and submit hands-on exercises that demonstrated the skills mentioned above. Each year, students also completed a 10-question survey available on Blackboard to assess the session. Library faculty and staff analyzed and compared statistical trends in attendance, both correct and incorrect submissions of exercises, utilization of resources, and student assessment of the sessions across the three-year period to evaluate program effectiveness and opportunities for improvement. Although the number of attending students varied, attendance for these classes ranged from 95–100% of class enrollment. Of the 450 who attended, 440 (98%) submitted the results of their assigned exercises. Over the three year period, students were given assignments, following a lecture, in one or more of the following resources MD Consult, Ovid EBM databases, STAT!Ref, and PubMed MEDLINE. Of the total submissions, 362 (82%) were correct. Some 78 (18%) participants submitted results based on only a single database, usually PubMed, thereby rendering their submission incorrect. 6 (4%) of the total attendees did not turn in exercises. Database statistics indicate a significant increase in use during the 30-day period following the lecture. Immediately following the lecture, on a 5.0 Likert scale, 3.6 % of survey respondents said the lecture and demonstrations were useful. Also, 43 of 66 respondents said they would recommend the workshop to others.

15
Lesson Learned: The Librarian-Faculty Partnership in Informatics for Health Care

Lin Wu, reference librarian, Health Sciences Library and Biocommunications Center; **Cynthia K. Russell,** professor, College of Nursing; University of Tennessee–Memphis

Objective: To demonstrate how a health sciences librarian and nursing faculty member co-taught an informatics course to equip undergraduate nursing students with basic knowledge and evidence-based nursing skills to locate, access, retrieve, and evaluate information using library and the Internet resources necessary to answer clinical questions, to create patient handouts, and to evaluate Websites and their information critically.

Methods: This poster describes the first collaborative effort between the health sciences librarian and the

nursing faculty member to integrate information literacy into a first-year nursing informatics course in a state university health sciences center. "Informatics for Healthcare," a two-credit hour course delivered over a period of ten weeks, included four face-to-face three-hour sessions. The topics of the librarian's one-hour sessions were "Being a Smart Googler," "Searching CINAHL with Full Text," and "Searching MEDLINE in Two Platforms." Spread over three class meetings, these sessions paralleled students' need for information to develop WebQuest team projects. Evaluation of this cooperative effort included students' anecdotal comments and formal course evaluations, nursing faculty members' comparisons of group products produced last year with this year's, and the health sciences librarians' observations.
Results: On course evaluations, students reported having a better understanding of how to access and utilize many of the library resources and databases in their course work. They believed that having a librarian as course faculty was helpful as they were more confident in their abilities to conduct literature searches and were more likely to visit the library for assistance. Compared to last year's group, students in this class demonstrated significant gains in information literacy skills in their creation of patient handouts and evaluations of Websites.
Conclusions: The integration of a health sciences librarian into the teaching of "Informatics for Healthcare" has been positive. Students learned about the library's varied resources; the librarian, in turn, has a much clearer picture of the information needs of the students. More effort should be put into integrating library components into the curriculum and tying students' assignments with library resources to answer clinical questions.

16
A Librarian and a Nurse Educator Team to Teach and Assess Evidenced-based Practice Searching Skills to Nursing Students

Danielle M. Carlock, AHIP, reference and instruction librarian and health and life science specialist, Library at the Polytechnic campus; **Jonna Anderson,** clinical assistant professor, College of Nursing and Healthcare Innovation; Arizona State University–Mesa
Objective: A nurse educator and a librarian partnered to teach nursing students how to conduct CINAHL and MEDLINE searches using keywords and controlled vocabulary.
Methods: Study setting is a year-round bachelor's degree in nursing program at a large metropolitan university. The study population consisted of 60 nursing students. Teaching methodology included a mixture of lecture or demonstration and hands on instruction over several semesters. Instruction was assessed with the use of a performance assessment. The assessment required students to execute a specific search in CINAHL using controlled vocabulary. Search histories were collected and graded against a rubric. This assessment was conducted 2 times; after the initial teaching session and after 2.5 hours of additional instruction.
Results: The mean score on the assessment given after only 2 hour of instruction was 60%. After an additional 2.5 hours of instruction, which included graded homework and in class assignments, the mean score on the same assessment was 88%.
Conclusion: After 2 hours of instruction, students were not able to demonstrate that they learned the desired skills. However after 2.5 additional hours of instruction, which included graded assignments, students were able to perform very well. Based on the outcomes of this study we recommend the following: One-shot sessions should not be relied upon to teach evidence-based practice searching skills; as much as 4 hours are necessary. Instruction should be spread out over several semesters. Hands-on practice should be guided through the use of graded in-class exercises. When assessing searching skills, performance assessments should be used in place of tradtional tests or surveys.

17
The Response-shift Bias: Pretest/posttest versus Pretest/retrospective Pretest Evaluation of Information Literacy Training Programs

Marie T. Ascher, AHIP, head, Reference and Information Services; **Diana J. Cunningham, AHIP,** associate dean and director; Health Sciences Library, New York Medical College–Valhalla
Objective: To test for a response-shift bias among public health workers who participated in informatics training. A series of training courses aimed at improving informatics competencies among public health workers was conducted between October 2005 and January 2006. Self-reported proficiency at baseline (pretest) was compared to collected posttest scores. Using this methodology, any evidence of gains in proficiency was weak and in several cases even showed a decline in competency! Thinking that this was a possible case of "I know now what I didn't know then," researchers tested for a so-called "response-shift bias."
Methods: During follow-up focus groups, a posttest/retrospective pretest questionnaire was distributed with a self-addressed stamped envelope, with an incentive to return. In contrast to a pretest/posttest design, the posttest/retrospective pretest design asked "What is your proficiency for each competency today?" and "What was your proficiency for each competency one year ago?" This enabled a comparison, for those participants, between results obtained using a pretest/posttest methodology versus a retrospective pretest/posttest methodology.
Results: Seventeen valid surveys were returned by focus group participants. The results show that for all respondents and for all twenty-six competencies there was an average overall gain from the aware to knowledgeable level. All respondents except one reported increased overall proficiency. Most importantly, there were higher than average levels of improvement on the competencies originally indicated to be most relevant, the trainers'

target competencies. Overall, there was significant improvement across competencies compared to what was indicated by the original pretest/posttest design.
Conclusions: The use of the posttest/retrospective pretest provided results that mirrored the highly positive satisfaction survey and focus group results in this study. The original pretest/posttest design did not account for a change in the awareness and understanding of the subject. Trainers should consider employing a posttest/retrospective posttest methodology when utilizing self-report measures to evaluate the effectiveness of training programs.

18
A Quiet Revolution: Evaluating a Personal Librarian Program to Better Meet the Evolving Information Needs of Students

Judy M. Spak, AHIP, curriculum support librarian; **Janis Glover, AHIP,** education services librarian; Cushing/Whitney Medical Library, Yale School of Medicine, New Haven, CT

Objective: To evaluate a personal librarian program on the ten-year anniversary of the program and to inform practice moving forward.
Methods: The Cushing/WhitneyMedical Library has offered a personal librarian program to medical center students since 1996. This outreach program matches students to a professional librarian as they matriculate, a relationship that is maintained until the student graduates. Personal librarians offer individualized assistance for almost anything—from library policy/procedure questions to thesis research. The program requires minimal effort on the part of the librarians and students who utilize the expertise of their personal librarians are extremely satisfied. We continue to add other student groups to the program. A short survey—including yes/no, Likert scale, and open-ended questions—was used as the instrument to gather data. The goals of the survey were to evaluate student satisfaction with the program and to ascertain how we could improve the program. An invitation to participate was emailed to all school of medicine students.
Results: The survey results have given us a better understanding of what the students expect and need from the personal librarian program. We have created a Website and are in the process of arranging more opportunities to meet our personal students.

19
Changing the Way We Do Distance Education: Experiences with the Access Grid and Personal Interface Grid to Deliver Online Seminars

Sharon Dennis, librarian, Multimedia Development, Spencer S. Eccles Health Sciences Library, University of Utah–Salt Lake City

Objective: The MidContinental Region (MCR) of the National Network of Libraries of Medicine (NN/LM) wished to offer its members new methods of participating in distance education. The MCR conducted a distance education event using the Internet 2 Access Grid, a high-end videoconferencing system that allows groups at various sites to participate in the event and interact seamlessly with other videoconference sites.
Methods: The MCR has an Internet 2 Access Grid onsite at the University of Utah Spencer S. Eccles Health Sciences Library. The Access Grid can be used for distributed meetings, collaborations, and training. Multiple participants located at multiple sites can see and hear each other almost as if they were in the same room. The Access Grid hardware consists of cameras, projectors, microphones, control equipment, and a large projection screen. An Access Grid set up is costly and requires special expertise. The MCR supplied three of its resource libraries with personal interface grids (PIGs), a method for connecting to Access Grid events that is lower cost and easier to operate. A distance education event was held at the four sites. The success and challenges of holding the event will be reported.
Results: As of February 2007, two of the PIG sites at the MCR resources libraries were operational and successfully tested with the Eccles Library Access Grid. An third resource library faced challenges with getting the necessary permissions to open ports on their firewall. During tests with the Eccles Library AG and the two operational PIGs at the resource libraries, the groups were able to communicate seamlessly, almost as if they were in the same room. A distance education event was scheduled for April 2007; results of this event will be reported.
Conclusion: Testing in advance of the distance event showed that hardware and software can be operated by librarians or information technology personnel at the remote sites with a minimal amount of training. Challenges with firewalls may need to be overcome. Once the PIG is operational the system provides a high-quality videoconferencing system for distance education and collaboration.

20
Information Revolution: Getting the Militia Battle-ready: Improving the Information Skills of Medical Residents

Rick Wallace, assistant director, Outreach and Public Services, Quillen College of Medicine Library, East Tennessee State University–Johnson City

Objective:
Question: How effective is East Tennessee State University (ETSU) medical library in preparing its residents to be information masters when they get into private practice?
Methods:
Design: The study was designed as an effectiveness study using survey instruments to determine the information-seeking behaviors, information skill levels, information training adequacy, and sufficiency of information services/resources provided for ETSU resident physicians to prepare them as information masters when they get into private practice.
Setting: The population is ETSU residents, who were enrolled in a residency program in the spring of 2006 at

an academic medical center.
Participants: ETSU has nine residency programs. There were 220 medical residents at ETSU. The whole population was surveyed as well as 150 attending physicians who work with residents.
Interventions: Two survey instruments were utilized to discover information that will lead to better user satisfaction with ETSU information training and information resources/services, thus measuring quality. One aspect of this is better understanding the clients' information-seeking behaviors.
Main Outcome Measures: Quantitative analysis was performed with the SPSS software program. The data was analyzed using descriptive statistics. Inferential statistics were used to analyze relationships and differences
Results: ETSU residents frequently had information needs yet infrequently sought answers. When they sought an answer they were usually successful. They preferred electronic resources and indicated time was their greatest barrier. The majority were PDA users. They believed evidence-based medicine was very important to their practice and indicated that the information received from the library changed their patient care. Most indicated a desire to have a clinical medical librarian for their program. The most frequently used resources were Google and the Web, yet they indicated these had low clinical value.

21
"Open Access" Curriculum Study: Can We Improve the Way Medical Students Learn?

Anne Powers, AHIP, information and education services librarian; **Connie Schardt, AHIP,** associate director, Public Services - Education Services; **Megan von Isenburg,** associate director, Public Services - Information Services; **Patricia L. Thibodeau, AHIP, FMLA,** associate dean, Library Services; **Brandi Tuttle,** information and education services librarian; Medical Center Library, Duke University, Durham, NC
Objective: The medical center library and school of medicine are conducting a grant-funded randomized controlled trial to determine whether information skills training and ready access to educational technologies can improve educational outcomes for medical students.
Methods: Participating medical students in their first-year gross anatomy course and second-year obstetrics/gynecology rotation were randomized into a full intervention group, a partial intervention group, and a control group. The first two groups received training in team building, and the full intervention group also received training from the Library in information management, use of anatomy and ob/gyn resources, and evidence-based medicine (EBM) concepts. The library selected multimedia resources, developed subject guides, and helped ensure that electronic resources were readily available in the gross anatomy lab and clinical rotation sites. Librarians conducted sessions addressing appropriate use and evaluation of knowledge-based resources, and students worked in teams to answer scenario-based questions ("Celebrity Body Parts") and teach selected resources to one another. EBM training by a librarian at the start of the students' ob/gyn rotation covered clinical question formulation, PubMed searching, and critical appraisal. Performance on examinations and feedback from students and faculty observers will be used to evaluate the program.
Results: Preliminary analysis of data from the first year of the study showed that the group receiving both team building and information management training scored much higher on the gross anatomy exam than the other study cohort and control group (the groups not receiving training from the library), suggesting that the library interventions made a difference in their academic performance. Students subjectively reported that the exposure to resources available from the library Website and hands-on practice using the resources were very beneficial to them, though they found some of the selected anatomy and ob/gyn resources far more useful than others.

22
Moving to Moodle: Creating Online Instruction from an MLA Continuing Education Class

Marty Magee, NN/LM Nebraska and education liaison, McGoogan Library of Medicine, University of Nebraska Medical Center–Omaha
Objective: Translating online instruction from an established class requires not only knowledge of instructional content, but the ability to master a course management system (CMS) and addition of materials to stimulate self-directed learning. To bring an MLA continuing education (CE) class to a wider audience, a class was converted to online content.
Methods: In March 2006, MLA , in conjunction with the National Network of Libraries of Medicine (NN/LM), Greater Midwest Region, hosted the MLA CE Institute, inviting selected participants to translate their previously delivered MLA CE in-person classes into online content. The week-long institute included instructional theory, "how to" presentations, practical application opportunities, and informal networking. Moodle, a course management system, which is a free, open source software package, was chosen by Regional Medical Library participants, as the platform for development. "Thinking like an MBA: Time, Money, Resources, and Change Management in the Library" was one class translated into this new environment.
Results: Development of the this online class necessitated a more structured approach to teaching, a cognizance of specific lecture content, and addition of interactive exercises such as discussion boards, chat rooms, and software trials. The class required about eighty hours of development and about forty hours of administration or teaching during the first month-long class for ten students.
Conclusion: Building on coursework, consultations with MLA CE Institute participants, and further study and

practice, the instructor was able to develop the original content into a tighter online structure, requiring students to take a more self-directed approach in learning. Students, some of whom were taking their first online class, were complimentary about the content and business perspective and helpful in suggesting options for future classes. By offering this class in the wider online venue, librarians are no longer limited to a geographical locale or travel costs to access the class.

23
Searching Skills, Information Resource Use, and Clerkship Grades: Is There a Relationship?

Melissa L. Just, AHIP, director, Graff Library, City of Hope, Duarte, CA

Research Question: What is the relationship among fourth-year medical students' measured and self-reported MEDLINE searching skill level, rate of MEDLINE and other information resource usage, perceived importance of MEDLINE, and clerkship grade?

Methods: First-year medical students at the University of Southern California participate in a year-long MEDLINE searching project as part of the medical school curriculum. Three times during the year, students are assigned a clinical scenario and question for which they must conduct a literature search, then submit their search strategy and selected articles that answer the clinical question. The assignments are graded by librarians using a locally developed grading instrument. For this study, the assignment was repeated during the fourth year neurology clerkship. In addition to the literature search assignment, students completed a questionnaire asking them to estimate their searching skill level, report resource usage, and rate the importance of MEDLINE. Data collected for the study included literature search assignment scores, search recall, search precision, search *F*-measure (a score that harmonizes recall and precision), self-reported searching skill level, perceived importance of MEDLINE, and clerkship grade. The researcher determined the relationships among all of the collected data using the Pearson product-moment correlation coefficient (Pearson *r*).

24
Are We There Yet? Arriving at a Thorough Literature Review

Esther Y. Dell, AHIP, associate librarian, Penn State College of Medicine, Hershey, PA; **Suzanne M. Shultz,** director, Library Services, Philip A. Hoover, M.D., Library, Wellspan Health at York Hospital, York, PA

Objective: The literature review is an integral part of the research process. It is the most exhaustive among the various levels of searching, encompassing multiple databases, indexes, electronic resources, and textbooks. This poster focuses on the researcher's question: "How do we know when the search is 'complete'?"

Methods: Searchers identify from a carefully designed and executed literature review what others have learned as well as areas of knowledge that remain undiscovered. Retrieval results help formulate a clear hypothesis, provide justification for funding solicitation, and supply foundation and background for future publication. This poster examines how the researcher determines the end point of an inquiry, with the goal of creating a framework that will aid in the evaluation process for the searcher, novice and seasoned alike. A series of questions is included which may serve as a guide throughout the process, along with a checklist of essential search components.

Results/Conclusion: Subject expert and librarian collaboration provides the skill set necessary to confidently conclude a thorough literature review.

25
Library Partners with MedHome Portal to Create Change

Jeanne M. Le Ber, education services, Spencer S. Eccles Health Sciences Library, University of Utah–Salt Lake City; **Alfred N. Romeo,** care coordinator specialist and MedHome portal manager, Utah Integrated Services Project, Utah Department of Health–Salt Lake City; **Chuck Norlin,** chief, Division of General Pediatrics, School of Medicine; **Susan Roberts,** computer graphics designer, Spencer S. Eccles Health Sciences Library; University of Utah–Salt Lake City

Purpose: The library partners with the MedHome Portal (www.medhomeportal.org) development team to provide expertise in Website design, usability testing, information management, user education, and tutorial creation. The MedHome Portal provides online access to information, resources, tools and services that address the provision of care to children with special health care needs (CSHCN). The portal ensures access to current, relevant and reliable information to improve and transform the delivery of health care to these special children.

Description: Funded by a grant from the National Library of Medicine, the portal development team meets twice a month to plan, review, discuss, and implement upgrades to the MedHome Portal. Building a functional and technically robust and searchable Website that addresses the questions, needs and concerns of providers, patients, families, educators, and others is an essential component of the development process. The ultimate goal of the portal is to answer site users' questions by improving access to information, practice tools, and local services. Active promotion of the portal is integrated with training and evaluation efforts. The portal team seeks collaborators interested in linking the site with Web services or developing mirror sites with local resources and page frames.

Results: This poster is presented in the hopes of stimulating ideas, discussion, and collaborations to improve the implementation of the site and to study its impact on physicians, care, families, and children with special health care needs. The portal team seeks collaborators interested in accessing the information on the portal and posting it to their Websites through Web

services or developing mirror sites with local resources and page frames.

26
Analysis of the Reporting of Search Strategies in Cochrane Systematic Reviews

Daphne Plaut, AHIP, librarian, Kaiser Permanente Center for Health Research, Portland, OR; **Kathleen A. McGraw,** assistant department head, User Service, Health Science Library, University of North Carolina–Chapel Hill, **Margaret J. Anderson,** public services librarian, Public Health Library, University of Texas Health Science Center–Houston; **Loan Nguyen,** research librarian, Education Resource Center, Baylor College of Medicine, Houston, TX; **Kay E. Wellik, AHIP,** director, Library Services, Mayo Clinic Arizona, Scottsdale, AZ; **Adriana Yoshii, AHIP,** information services librarian, Health Science Center Libraries, University of Florida–Jacksonville

Background: The Cochrane Handbook provides instructions for documenting the search strategy for a systematic review, listing the elements of the search strategy that should be included in the description. The purpose of detailed documentation of the search is to ensure that the process is replicable.

Objective: To analyze recently published Cochrane reviews to determine whether the guidelines for describing search strategies are being followed.

Methods: Sixty-nine of eighty-three new reviews added to the Cochrane Database of Systematic Reviews in first quarter 2006 were randomly selected for analysis. Thirteen were excluded because the search strategies depended solely on Specialized Registers of trials. The remaining fifty-six reviews were analyzed for the seven elements of a search strategy description listed in the handbook.

Results: Of the fifty-six reviews analyzed, none included all seven elements of the search strategy description. Four reviews included six elements. One review included only two elements. The fifty-six reviews that were analyzed represent thirty-one different Cochrane Review Groups.

Conclusion: The Cochrane guidelines for reporting search strategies are not being consistently employed by groups producing Cochrane reviews.

27
The Use of Ground Rules to Facilitate Interactions between Principal Investigators and Librarians when Searching for Alternatives to Laboratory Animals

Ann R. Viera, veterinary librarian, Pendergrass AG-VET MED Library, University of Tennessee–Knoxville

Objective: Principal investigators (PIs) are required to search for alternatives to laboratory animals as part of submitting protocols for review by animal care committees. Most PIs and members of animal care committees do their best to continually improve, ensuring that all alternatives to painful procedures are explored and documented in the protocol. Librarians are consulted by PIs for assistance with alternatives searches, a process that can seem confusing or even daunting to the PI.

Methods: Setting ground rules, a well-known best practice used by facilitators to keep interactions appropriate, could help for the few consultations to which a PI might bring more than the usual amount of impatience and frustration to a search consultation. By setting ground rules for alternatives searches, using them in consultations, and asking that they be adopted and posted on the institution's animal care committee Website, librarians become part of the solution to problems beyond their control that impact the quality of alternatives searches and the quality of the interactions between librarian and PI.

28
Analyzing Similarity Functions in Ovid MEDLINE and PubMed

Rebecca S. Graves, AHIP, educational services librarian, J. Otto Lottes Health Sciences Library; **Gabriel M. Peterson,** research sssistant; University of Missouri–Columbia

Objective: While database producers offer functions that allow searchers to automatically find related articles, how well these functions work or compare is unknown. This project explored how PubMed's Related Articles and Ovid's Find Similar similarity functions work and how they compare to each other.

Methods: The data on how the systems work was drawn from descriptions provided by PubMed and Ovid. Then a search was run for an article on both Ovid and PubMed, and the similarity function was executed on the same citation on each system. Articles were restricted to 1965–2005 and English language. Sets retrieved by the similarity function were judged for relevance only if they returned between 15 and 300 hits on the systems. Two searchers independently evaluated each of the citations and abstracts for relevance. Disagreements were decided by a third person. Overlap, precision and relative recall were calculated. Relative recall was calculated by combining the relevant items for both systems and treating it as total recall.

Results: The 2 similarity functions differ in their processing and presentation of results. When 3 sets were compared, overlap was found to be low (between 4%-11%). Precision varied between 75%-94% on Ovid and between 43%-93% on PubMed. Relative recall was 50%-100% for PubMed and 12%-50% for Ovid. When a user requires high recall, PubMed is obviously the system to use. However, when a user requires only a few relevant items, the lower recall and comparable or better precision with Ovid suggests it might be a better choice.

29
Reduction Search Strategies for Animal Research

Melissa A. Ratajeski, reference librarian, Health Sciences Library System, University of Pittsburgh, Pittsburgh, PA

Objective: The Animal Welfare Information Center (AWIC) suggests using a two phase approach when conducting literature searches for animal research alternatives. Phase one retrieves articles similar in research focus to the proposed study, where reduction and refinement alternatives may be uncovered in methodology sections. This poster presents novel strategies to retrieve articles focusing on animal reduction, rather than those that briefly touch on the topic.
Methods: Literature searches were conducted in the databases Ovid MEDLINE, Ovid Agricola, and Embase.com to retrieve bibliographic information regarding animal alternatives—including refinement of surgical procedures, reduction of animals used, and possible animal replacement models—for a study investigating the use of ultrasound to visualize arteriosclerosis in the rabbit animal model. Results from a search utilizing the phase one AWIC model were examined for relevancy and compared with results retrieved with novel search strategies utilizing "statistical keywords," the adjacency operator, and subject headings such as "animal use reduction," "sample size," and "research design."
Results: The majority of articles retrieved with the AWIC phase one approach were relevant to the researcher, as they contained information regarding specific surgical techniques, various animal models for arteriosclerosis research, and the study's animal sample size. However, most of these articles did not thoroughly address any methodologies to reduce the number of animals used in the study. In comparison, articles retrieved using the novel search strategies described above, focused on ways to reduce animal numbers through such methods as employing factorial research designs, using non-invasive imaging techniques, and/or discussed the general concept of the "3Rs," a discussion especially useful for new research investigators.
Conclusion: The Animal Welfare Act (AWA) requires research investigators to put forth a "good faith" effort to locate animal research alternatives. To meet these requirements, investigators or information professionals need to search several databases and use a combination of search strategies.

30
Magnet Again! The Library's Role in Collaboration to Maintain Magnet Status

Barbara J. Iobst, AHIP, library director; **Linda M. Schwartz,** library information specialist; Library Services, Lehigh Valley Hospital and Health Network, Allentown, PA
Objective: Attaining magnet status is tough, maintaining magnet status can be tougher. This paper explores the role of the library in collaboration with nursing to demonstrate continued - and expanded - progress in meeting the goals of magnet status.
Methods: The library actively aids nursing services in maintaining magnet status. Together with bedside scientists and researchers, library staff educate administrative, nursing, and ancillary health care personnel in evidence-based research skills. Collaborative approaches include: workshops on evidence based practice (EBPx); classes on EBPx searching; assisting EBPx project teams; individual reviews of search strategies; assistance with focusing clinical questions via patient, intervention, comparison, outcome (PICO), evaluation of resource quality; and current awareness. Librarian information specialists are playing a major role in planning the integration of digital library content, clinical decision support, and EPOC with the computer-assisted physician order entry/electronic historical medical record and contribute to institutional initiatives to incorporate evidentiary tables and outcome measures for all clinical practice guidelines. They have been charged with locating clinical decision support tools. Ongoing educational programs assist library and clinical staff with maintaining current knowledge in EBPx, research skills, data collection, and other pertinent topics.

31
The Literature Search Process for an Integrative Review

Joanne Rich, information management librarian; **Amy L. Harper,** health sciences library fellow; Health Sciences Library, **Elizabeth J. Bridges,** assistant professor, Biobehavioral Nursing, School of Nursing; University of Washington–Seattle
Objective: To describe the process of conducting a literature search for an integrative review (an evidence summary) of the reported characteristics of patients encountered in the deployed military setting in order to create a list of competencies for nurses throughout the US military.
Methods: The University of Washington Health Sciences Libraries serve an academic community of six health sciences schools throughout a five-state region. The librarians work as liaisons to specific departments or schools that often involves collaboration on specific projects. One such project was to conduct a search of unclassified literature as part of a grant-funded integrative review. Because of the special nature of the topic, we drew on traditional and nontraditional resources from a variety of sources. We used the services and resources of two different military libraries and their librarians. We searched bibliographic, report, and research databases and Websites covering biomedical, nursing, psychological, military, and governmental scopes. We used the bibliography of the grant proposal to identify the main concepts and initial subject heading terms when possible. For bibliographic database searching, search results were tested against the "gold standard" of the proposal's bibliography. The literature search process also involved hand searching, citation tracking, and informal networking.
Results: The literature search process turned out to be a very creative process. The topic called for use of a broad range of databases, both general and specialized, offering

varying levels of controlled vocabularies and varieties of terms to address the topic. After initial search results were obtained, better search strategies were created based on breaking sample results into "useful" and "not so useful" sets of citations that could be mined for additional search terms to include or to exclude. Sample useful citations from earlier databases were identified in subsequent databases to provide another source of search terms for inclusion. Military specific journals, such as Military Medicine, were hand searched for articles that either described the characteristics or care requirements of the target population. Validation of the completeness of the dataset was ascertained using citation tracking from seminal articles identified by the study principal investigator.

32
ReleMed: A Sentence-level Search Engine for MEDLINE

Mir S. Siadaty, assistant professor, Department of Public Health Sciences, School of Medicine, University of Virginia–Charlottesville; **Karen K. Knight,** medical education librarian; **Andrea S. Horne,** assistant director, Information Services; Claude Moore Health Sciences Library, University of Virginia Health System–Charlottesville

Objective: To present ReleMed, a search engine that uses sentence-level search capabilities and relevance sorting of MEDLINE retrieval to provide highly specific results.

Methods: The volume of data available through a MEDLINE search has obvious advantages but produces new searching challenges, including the need to increase retrieval specificity while maintaining an acceptable sensitivity. Even for very modest retrieval mechanisms, it is quite possible to increase a query's specificity. However, this will often decrease sensitivity, causing truly relevant records to be missed. We have created a solution in the form of a sentence-level search engine that uses a relevance score to sort results. Called ReleMed, this free search engine operates on the premise that search words occurring in the same sentence imply a relationship between the words and that searchers with multi-term queries will find these records more relevant than those where their words appear together, but not in the same sentence.

Results: ReleMed's results include the most relevant articles at the beginning of the set; in PubMed, they are mixed with false positives throughout the results. In one search, the average precision for the first 69 articles from ReleMed was 90%, for PubMed, it was 52%. Using 3 multi-term sample searches, the first 10 results in both ReleMed and PubMed were scored as "relevant" or "irrelevant." In the first example, the precision of ReleMed was 90%, but only 40% in PubMed. In a second example, precision for the initial hits was 70% versus 20%, respectively, and in a third example, precision was 60% versus 30%.

Conclusions: By using sentence-level matching, ReleMed delivers higher specificity, reducing false positive articles. Also, by displaying results by relevance, the most useful articles are shown first. Finally, by highlighting matched search terms in its display, ReleMed reduces the time spent scanning and eliminating results.

33
Poultices, Potions, and Prayers

Cynthia R. Kahn, AHIP, reference and instruction librarian, Himmelfarb Library, George Washington University Medical Center, Washington, DC; **Gail Kouame,** consumer health information coordinator, National Network of Libraries of Medicine, University of Washington–Seattle

Background: Conventional medicine has recently begun to study and incorporate alternative therapies into practice. Interestingly, many of these therapies have historical legacies. This poster explores wound healing through several lenses: the healing process, the time period, and the associated artifacts. The first step in the healing process is blood coagulation. The natural resources—animal, vegetable (plant), and mineral—used in the ancient and medieval world had properties that induced clotting. These ideas are preserved in the *Ebers Papyrus* (Egyptian, 1700 BC) which mainly discusses wounds and how to treat them. The next step in the wound healing process is debridement, the removal of dead or damaged tissue. The use of maggots for myiasis, the infestation of live human and vertebrate animals with dipterous larvae, was first documented by Ambroise Paré (1510–1590) in the 16th century. The final stage of wound healing is cleaning and bandaging. Johnson & Johnson (J&J) "expanded the company's offerings of plaster casts with an antiseptic surgical dressing made from absorbent cotton gauze" after learning of British surgeon Joseph Lister's (1827–1912) revolutionary understanding of wound sepsis. "Modern Methods of Antiseptic Wound Treatment" was published by J&J in 1888.

34
MLA's Oral History Project: Celebrating Thirty Years of Health Sciences Library Visionaries

Joan Stoddart, AHIP, deputy director, Spencer S. Eccles Health Sciences Library, University of Utah–Salt Lake City; **Marlyse H. MacDonald,** evening librarian, North Carolina School of Science and Mathematics–Durham

Objective: Commemorating the 30th anniversary of the Oral History Committee and Oral History Project (1977–2007), this poster will highlight the process of completing an oral history and acknowledge the many contributors involved in making the Oral History Project successful.

Methods: The Oral History Project reflects the work of over 150 volunteer MLA members. Begun in 1977, the Oral History Project has produced sixty-two oral histories that have been taped, transcribed, edited, summarized and distributed for use in historical research. The project allows readers to learn the history of the association and

of the profession through the words of those who shaped it.
Results: MLA's Oral History Project is an inspiration to younger members of the association who will lead health sciences librarianship into the 21st century.

35
Bibliotherapy: Patient Libraries/Reading Programs. One Component of the Moral Treatment Revolution in Mental Health Care

Ruthann Gildea, AHIP, director, Library Services, Isaac Ray Library, Butler Hospital, Providence, RI; **Leonard Levin, AHIP,** manager, Educational Programming, Lamar Soutter Library, University of Massachusetts Medical School–Worcester
Objective: We will examine the utilization of bibliotherapy in 19th century psychiatric "asylums" focusing on 2 respected institutions; Butler Hospital and Worcester State Hospital as well as the writings of their respective superintendents, Isaac Ray and Samuel B. Woodward.
Methods: Merriam-Webster's Dictionary defines bibliotherapy as "the use of reading materials for help in solving personal problems or for psychiatric therapy." "Bibliotherapy" first appears in the literature in conjunction with the work of Anna Freud in the early 20th century. However, it was being used extensively in the practice of the "moral therapy" movement in mental health institutions in the 1800s. In the many new US public and private psychiatric hospitals that were being founded at that time, superintendent/physicians saw reading as one of many "occupational therapies" that would assist in the recovery of the institutionalized patient. We will examine primary resources describing patient library services, focusing specifically on the works of Woodward, Ray, and others of the thirteen "revolutionary" founders of the group that eventually became the American Psychiatric Association and that held its first meeting in Philadelphia in 1844.
Results: Were "cheap novels" a cause of insanity (as Ray wrote) or a diversion from the "depression of spirits" as proposed by prominent Philadelphia physician Benjamin Rush (1745–1813)? Would newspapers "help" patients stay current or would they or "hurt" by exposing them to horrors of life outside? These were some of the questions being asked by leaders of America's early psychiatric institutions. Nonetheless, bibliotherapy was a foundational treatment of the moral therapy era, and it appears that most if not all new institutions of the time had therapeutic reading programs and/or patient libraries. While neither Woodward nor Ray wrote extensively on this subject in their annual Reports or correspondence, there is ample evidence in the primary literature of the importance of bibliotherapy. We will demonstrate this through the use of quotations, images, sketches, and examples of items on the shelves of patient libraries in the early to mid 1800s.

36
Reviving the Past: Creating an Institutional Oral History Collection

Colleen M. Kenefick, AHIP, librarian; **Susan E. Werner,** informatics librarian; Health Sciences Library, Stony Brook University, Stony Brook, NY
Objective: It is a rare health sciences institution with a resident archivist or a structured method for recording its own personal history. Without a systematic process for recording individual experiences and personal perspectives, a valuable source of information is being lost forever. Many early leaders already have retired and to capture remaining institutional memory, an oral history collection was established.
Methods: The 2005 MLA Oral History Project Manual was used as a model for this ongoing project. Organizational support was obtained so participants were willing to participate in this recognized effort. The institutional attorney was consulted to determine the use, content, format policies, disclaimers, intellectual property issues, release forms, and embargo periods. Invitations were then extended in writing to selected founding administrators and faculty for an interview that would capture their recollections and insights. To minimize the influence of the interviewer, a standard list of questions was compiled for all participants along with methods for follow-up questions. Once the tapes are transcribed and edited, transcripts are sent to interviewees who are encouraged to add or delete any material. Practical considerations include preservation of tapes and transcripts, related written material, organization, cataloging, and access to the collection.

37
Ringing in a New Service: The Library as a Partner in Publishing

Holly K. Grossetta Nardini, liaison activities librarian; **Denise P. Hersey,** liaison activities librarian; **Lynn H. Sette,** reference librarian; Cushing/Whitney Medical Library, Yale University, New Haven, CT
Objective: To establish an innovative, in-house Biomedical Writing Center, which would support the research and publishing activities of the biomedical community and bolster the open access movement. Services would include workshops on writing abstracts and presenting papers, automatic submission of papers to PubMed Central, on-site editorial assistance and referral to professional biomedical editors, and clerical support for journal submissions and citation management.
Methods: Combine observational evidence, interview data, and a formal survey to determine the desirability and sustainability of different services. Determine fees and a cost model. Seek seed money for start-up costs. Survey campus resources to plan coordinated and targeted outreach and instruction sessions to postdoctoral graduates, faculty, and researchers. Reach out to local and regional medical editors for inclusion in a resource and referral guide. Explore programs offered commercially or at other institutions to avoid false steps.

Use the feasibility study and establishment of the service as "teachable moments" in liaison and outreach activities. Increase awareness of the library's role in knowledge creation, dissemination, and preservation, and promote open access through kick-off events for the service and an ongoing marketing campaign.

38
Publishing Patterns in Four Veterinary Medicine Journals

Jill Crawley-Low, head, Veterinary Medicine Library, University of Saskatchewan–Saskatoon, Canada

Objective: To examine the citations published in four peer-reviewed veterinary medicine journals over the course of five years to determine the publishing characteristics of the journals and the authors who submit their research. This project is a comparative study of veterinary publications in different geographical regions.

Methods: Four veterinary journals were chosen for inclusion in this study for their broad coverage of the veterinary medical literature. They differ from journals that limit their publishing output to a specific discipline in veterinary medicine (e.g., veterinary pathology) or journals that focus on specific types of organisms (e.g., *World's Poultry Science Journal).* The journals were also selected for their geographic coverage of the world's published veterinary research—journals originating in North America, Australia, and Europe. The journals under review are *American Journal of Veterinary Research (AJVR), Australian Veterinary Journal (AVJ), Canadian Journal of Veterinary Research (CJVR),* and *Research in Veterinary Science (RVS).* The period of review was 2001–2005.

Results: The 4 journals showed similar patterns of publishing multi-authored papers. The majority of papers published in *AJVR* and *CJVR* (75%) were by 3 or more authors, while the majority of papers in RVS (77%) were authored by 2–6 authors, and by 1–4 authors in AVJ. Another similar pattern for all 4 journals was in the authors' institutional affiliation. The majority of contributors to all 4 journals were from academia, ranging from 93% for *AJVR* to a low of 67% for *AVJ.* The other categories were government, commercial, and other.

Conclusion: Geographical affiliation of authors was also considered and the results were somewhat predictable. The *AVJ* published the majority of its articles by authors from that geographic region that includes Australia, New Zealand, Tasmania, etc. The *RVS* represented a publishing platform for European (68%) and Asian (19%) authors. The *AJVR* and *CJVR* did the same for North American authors.

39
Journal of Neuro-Ophthalmology: Librarian on Board

Gale A. Oren, AHIP, associate librarian, Kellogg Eye Center, University of Michigan–Ann Arbor

Objective: To outline ways in which a journal may benefit from the contributions of a librarian on staff, and to describe the model of librarian participation at the *Journal of Neuro-Ophthalmology (JNO).*

Methods: The editor-in-chief of JNO, Jonathan D. Trobe, is a senior faculty member of the University of Michigan, Department of Ophthalmology and Visual Sciences. *JNO* is published quarterly by Lippincott, Williams, and Wilkins, and is the official journal of the North American Neuro-Ophthalmology Society (NANOS). In 2001, a model of a librarian (the author of this poster) joining the staff as a consulting editor was proposed and agreed upon and has evolved into the current model as presented here.

Results: Librarian contributions include coordination of the book-review process, accuracy checking for references in the articles published in the journal, and updating of the professional meeting calendar. Also, occasional presentations are made at board meetings informing the editorial board about topics of interest. These will be described in detail, as well as lessons learned.

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Fostering Professional Development and Critical Appraisal for Journal Peer Reviewers

Rebecca N. Jerome, assistant director; **Nila A. Sathe,** associate director; **Taneya Y. Koonce,** assistant director; **Nunzia B. Giuse, AHIP, FMLA,** director; Eskind Biomedical Library, Vanderbilt University Medical Center, Nashville, TN

Purpose: To describe the development of a tutorial addressing techniques and considerations for peer reviewing papers for a professional journal.

Setting/Participants/Resources: The tutorial is designed for use by members of the journal's editorial board and guest reviewers to facilitate the peer-review process.

Brief Description: Given varying levels of experience in this journal's editorial board, we developed a reviewer tutorial to foster insightful, high-quality reviews of submitted papers. The tutorial encompasses administrative information about the process of peer reviewing as well as instruction in analyzing and critiquing an article. Reviewers view a series of slides illustrating the typical submission-review-disposition workflow and specific information about critiquing an article's methodology and approach, results, conclusions, and implications. Each tutorial segment (e.g., statistical methods) includes brief questions to allow reviewers to test their understanding of the topic discussed. The tutorial serves as an effective refresher for reviewers familiar with the process of analyzing articles as well as a thorough orientation for novice reviewers. Information professionals in general may find the tutorial useful for honing their understanding of critically appraising literature.

Results/Outcome: The tutorial was pilot tested with several evidence-based librarianship librarians to evaluate content appropriateness, readability, and utility. This group found the tutorial to be a detailed overview of the reviewing process and noted the review examples as particularly useful in illustrating key issues. After further

refinement, the tutorial will be formally launched with the *Journal of the Medical Library Association* editorial board in April 2007. In the future, the tutorial will also serve to acquaint potential peer reviewers with the editorial team's expectations and useful techniques for evaluating manuscript submissions. The tutorial fulfills a knowledge management function as well, documenting the team's editorial procedures to share with incoming editors.
Evaluation Method: Evaluation techniques include a brief feedback form that assesses quality and coverage of the review process and suggestions for additional topics. Additional evaluation measures may include pre- and post-assessments and analyzing answers submitted to questions integrated in the tutorial to assess content retention.

41
The Open Access Revolution: Patterns in Faculty Free Full-text Publications

K.T.L. Vaughan, librarian, Bioinformatics and Pharmacy; **Carol G. Jenkins, AHIP, FMLA,** director; Health Sciences Library, University of North Carolina–Chapel Hill; **Virginia M. Carden, AHIP,** administrative research librarian; **Patricia L. Thibodeau, AHIP, FMLA,** associate dean, Library Services and Archives; Medical Center Library, Duke University, Durham, NC; **Stefanie E. Warlick,** liaison and outreach services librarian, Health Sciences and Human Services Library, University of Maryland–Baltimore

Objective: Open access (OA) continues to be a major issue in scholarly communication. A preliminary analysis and comparison by two academic libraries indicated trends in journals and disciplines interested in OA. Due to changing embargo periods and increased awareness, further evaluation of the data was done to identify additional patterns in OA publishing among biomedical faculty.
Methods: An initial study of free full-text articles in PubMed indicated preliminary trends in biomedical disciplines publishing in OA journals, as well as specific journals popular among this population. However, due to varying embargo periods, some articles may have been "set free" by publishers after the searches were completed. In addition, major national policy initiatives as well as campus activities may have increased awareness of OA among institutional authors. An additional six months of data has been added to this follow up study. The data were analyzed to determine the number of "born" versus "set" free articles, authors' disciplines, and which journals they selected. Results from the preliminary and subsequent data analyses were compared to determine if the extended time period revealed different trends.

Poster Session 3

Tuesday, May 22, 1:00 p.m.–2:00 p.m.

1

Collaborating to Start an Online Nursing Journal Club

Rose Campbell, AHIP, medical librarian, Library; **Sherrie Schuldheis,** director, Nursing Research, **Christine Valdez,** registered nurse; Portland VA Medical Center, Portland, OR

Objective: To support evidence-based practice and increase participation in nursing journal clubs by developing, implementing, and evaluating an online nursing journal club.

Methods: The library worked in collaboration with the nursing research committee to assess the needs of nurses currently unable to attend traditional face-to -ace nursing journal clubs. Because barriers to attendance were both temporal and geographical, we proposed an online journal club that would provide both synchronous and asynchronous communication in tandem with the face-to-face journal clubs. The team then collaborated with the hospital's information technology staff to evaluate a number of platforms to see what software solutions would meet the needs of the practicing nurses as well as conform to technical constraints of the hospital's network. After a platform was selected, a pilot nursing journal club was tested. Participants' satisfaction with the educational value of the nursing clubs was recorded both before and after the introduction of the online component of the nursing journal clubs.

Results and Conclusions: Hospital wide implementation of new programs requires input and collaboration with many functional groups. Getting buy-in from individuals in these groups is essential to create momentum to carry the project forward. Early adopters are enthusiastic about the Online Nursing Journal club. Continued promotion by nursing opinion leaders is needed to expand use.

2

Assessment of Information Needs for Speech Language Pathologists and Audiologists

Ruiling Guo, AHIP, health sciences librarian, Idaho Health Sciences Library; **Janene Willer,** clinical associate professor, Department of Communication Sciences and Disorders, and Education of the Deaf; **Barbara A. Bain,** professor, College of Health Professions; Idaho State University–Pocatello

Objective: To present the outcomes of information needs assessment of speech language pathologists and audiologists (SLP/A). To identify specific needs for training in information resources searching and evidence-based practice (EBP).

Settings/Participants: The state is a rural state. Of the state's counties, 47.7% are classified as rural or frontier counties and are "medically underserved." The state has a shortage of speech-language pathologists and audiologists. SLP/A may have little time or knowledge to search health information for their decision making as they serve patients; 80.3% of SLP/A graduated from their graduate programs before 2000.

Methods: Potential participants were professionals listed in the 2005 Speech Language and Hearing Association Membership Directory; 217 surveys, with letters explaining the purposes, were distributed. All participants had options to return the survey: online (WebCT), email attachment, and mail. The survey was also distributed to interested professionals attending the 2006 annual state convention. Reminder emails and letters were sent 3 weeks later to professionals who had not returned the survey. Data were analyzed descriptively and statistically using SPSS.

Results: A total of 217 surveys were distributed. The total response rate was 38.71% (84/217).

- 96.43% of SLP/A had no problem using computer and accessing the Internet.
- However, 86.9% of SLP/A had insufficient knowledge and skills in searching PubMed.
- 47.62% of SLP/A did not know about evidence-based practice (EBP).
- 52.38% of SLP/A were interested in learning EBP.
- 47.62% were interested in learning to search PubMed and related databases in the field of speech language pathology and audiology.

Conclusions: The survey results indicated that the combined distribution methods increased the total response rate. SLP/A need educational programs on EBP and EBP database searching. Given the nature of the geographic features in the state, developing online tutorials of how to access and search EBP resources may be necessary to reach SLP/A across the state.

3

A Tiered Approach to Providing Evidence for Standardized Care Pathways and Order Sets

Taneya Y. Koonce, assistant director, Eskind Biomedical Library; **Shannon Potter,** protocol analyst II, Institutional Review Board; **Jack M. Starmer,** assistant professor, Biomedical Informatics, Department of Biomedical Informatics; **Annette M. Williams,** associate director, Library Operations; **Nunzia B. Giuse, AHIP, FMLA,** director; Eskind Biomedical Library; Vanderbilt University Medical Center, Nashville, TN

Objective: This paper describes an ongoing initiative to integrate library services into a multidisciplinary, institution-wide project to develop and revise computerized, inpatient order sets. To foster order set development directly informed by evidence and support consensus among clinical teams, librarians provided filtered evidence syntheses reflecting the current state of the literature.

Methods: Since 2001, the library has supported clinical teams in developing comprehensive standardized care pathways via targeted evidence syntheses addressing key facets of clinical conditions. More recently, this work has extended into a formal partnership with the

multidisciplinary group that develops, revises, and evaluates inpatient order sets in the institution's physician order entry system. Librarians use a tiered approach to promote evidence-based protocol development: clinicians can access the library-developed Pathways/Order Set Literature Locator (PLL) database of evidence syntheses and search strategies on demand. Librarians also provide training in basic searching skills and identification of key evidence-based medicine information resources to ensure that clinicians can address less complex questions on their own. For questions not answerable by first-line resources, librarians provide expert consultation and evidence synthesis of primary literature on complex clinical topics.
Results: This triaged approach enables the library to prioritize evidence requests by matching complex questions to librarian expertise and experience. Over thirty questions have been submitted since the projects inception in July 2006. Currently, the library is working with the team to leverage the utility of the synthesized information provided by determining the most effective means of integration into the order entry system. Such integration maximizes the penetration throughout the medical center as well as increases the library's exposure.
Conclusions: Given the scope of the project both in terms of the number of order sets scheduled for revision and the multiple facets inherent in each order set, this approach will continue to be one of the library's strategies for integrating evidence into workflow for the foreseeable future. This partnership contributes to the development of order sets informed by best practices as the medical center continues to enhance patient care practices.

4

Project St. Hope: An HIV/AIDS Community Information Outreach Project

Jeffrey T. Huber, professor, School of Library and Information Studies, Texas Woman's University–Houston; **Beatriz G. Varman,** assistant director, Public Affairs, and information services librarian, Information Services, Houston Academy of Medicine-Texas Medical Center Library, Houston, TX
Objective: The overarching goal of this academic/community partnership is to leverage the combined resources and expertise of each collaborating institution to (1) facilitate community access to HIV/AIDS-related information in the area, (2) provide education concerning strategies to maintain a healthy lifestyle while living with HIV/AIDS, and (3) conduct training on use of electronic information resources to support maintenance of a healthy lifestyle.
Methods: Funds for this HIV/AIDS community health information outreach project have been used to develop a mobile laptop computer lab that can be transported between three HIV outpatient clinics located in the area. In addition, project laptops were purchased for the social workers' office at each of the three clinics so that social workers could introduce electronic information resources as part of the client intake process. For programming purposes, an HIV/AIDS educator was paired with a health sciences librarian to conduct a series of five presentations at each clinic. These topic-specific presentations focused on strategies to promote maintenance of a healthy lifestyle for individuals living with HIV/AIDS. Following educational content, the health sciences librarian highlighted electronic information resources that provided additional information on that particular topic. Each presentation concluded with a session evaluation.

5

Supporting Evidence-based Medicine in an Academic Health System: A Unique Partnership between the Center for Evidence-based Practice and the Biomedical Library

Gretchen Kuntz, clinical liaison librarian, Biomedical Library; **Anne K. Seymour,** interim director; Health Sciences Libraries, University of Pennsylvania–Philadelphia; **Craig A. Umscheid,** co-director; **Kendal Williams,** director; Center for Evidence-based Practice, University of Pennsylvania Health System–Philadelphia
Purpose: Describe a partnership between the library and the university health system's center for evidence-based practice (CEP). This partnership supports enhancing health care quality and patient safety through the practice of evidence-based medicine.
Setting: The biomedical library is an academic library in an urban setting. The CEP is part of the university's multi-hospital health system.
Description: The CEP was created to support patient care quality and safety through the use of evidence-based medicine. When a clinical issue arises that requires an evaluation of a drug, device, or process of care, CEP staff will perform a systematic review of the issue alongside interested physicians to produce a guideline or recommendation for action for the health system. From the inception of the center, the CEP directors invited the biomedical library to partner with them to achieve this goal. The clinical liaison librarian is an active collaborator with the CEP directors and staff, engaging in weekly team meetings and project planning, conducting systematic literature searches, and developing a comprehensive training program for literature searching that encompasses standard EBP skills required for all center staff as well as students, residents, and fellows participating in the center's evidence-based medicine elective program.
Results/Outcome: The partnership between CEP and the biomedical library commenced in August, 2006 and that short span has resulted in collaboration on five on-going projects involving thirty-seven searches in multiple databases and the training of two residents who opted for the CEP elective.
Evaluation: Our partnership is a work in progress and currently evaluation is based on feedback from all of the participants. One plan is to incorporate into the CEP elective's electronic course evaluation software, a section

that will include the library training portion of the elective. The CEP directors are working on developing broader evaluation methodologies that will encompass not only the operational functions but also the clinical outcomes resulting from the guidelines.

6
Exploring the Information Needs of Life Science Researchers

Brenda Graves-Blevins, librarian, MU Libraries; **Kate M. Anderson,** librarian; **MaryEllen C. Sievert,** professor and research consultant; J. Otto Lottes Library Health Sciences Library, University of Missouri–Columbia

Objective: To determine the needs of bioscience researchers in a newly established, multidisciplinary center designed to facilitate collaborative research. Because the center houses researchers from departments served by separate libraries, the university libraries formed a task force to evaluate the information needs of this group as a whole. This presented a unique opportunity to look at information needs beyond the boundaries of traditional library services.

Methods: First, two members of the task force held focus group interviews with three groups from the facility: (1) graduate student and post-doctoral fellows, (2) junior faculty members, and (3) senior and administrative faculty. Second, after the interviews the group decided to continue interviewing but using the labs as the contact point.

Results: From the focus group sessions, the interviewers determined: (1) the use of End Note is widespread and many expressed interest in instructional sessions, (2) full-text electronic journals are of paramount importance, (3) a designated librarian should be the contact point for all those in the center, and (4) the researchers preferred the librarian come to the center to provide services to them. Additional data will be presented at the meeting.

Conclusion: Because of the diverse nature of the research, focus groups were an appropriate way to create new connections to these researchers. Meeting with them in their building let them know that the libraries were serious about making new connections. Asking questions about information needs or environment rather than about information use successfully broadened the conversation, and researchers realized that the libraries are about more than just journal access and can be an integral part of their information environment.

7
Vanishing Act: The Disappearance of Web Resources Cited in the Health Care Management Literature

Catherine E. Wagner, Web development librarian; **Meseret D. Gebremichael,** business librarian; **Mary K. Taylor, AHIP,** medical and distance learning librarian; Morris Library, Southern Illinois University–Carbondale

Objective: To document the number of Web resources no longer available at the uniform resource locators (URLs) provided in the citations of five health services/health care management journals, to determine if there was a relationship between a resource's availability at its listed URL and the date of publication, and to determine if differences existed across resource and domain types.

Methods:

Citation analysis: Descriptive survey. Citations listing Web resources from 2002–2004 in *Health Affairs*, *Health Care Management Review, Health Services Research*, *Journal of Health Care Management*, and *Medical Care Research and Review* were studied. Descriptive, correlation, and cross-tabular statistics were used to analyze the data.

Results: As of February 2007, 47.2% of 2,013 URLs were active. The longer the length of time since the publication of a citation, the more likely it was that its URL was inactive ($r = -0.21$, $P = 0.00$). There was no difference whether a URL was active across resource types ($\chi^2 = 5.19$, df = 2, $P = 0.07$). There was a difference whether a Web address was active across all URL domain types ($\chi^2 = 13.26$, df = 4, $P = 0.01$). The .com domain type had the greatest percentage of inactive URLs (58.8%), while the .edu domain had the greatest percentage of active URLs (60.0%).

Conclusions: Health care management researchers who cite Web materials should keep in mind that these resources may not be available at the cited URLs after the publication of their research. We recommend that authors keep copies of all cited Web materials so that others may be able to verify and use the information.

8
An Online Evidence-based Medicine (EBM) Learning Module for Pharmacy Residents of Washington State: The Role of the Information Professional

Joanne Rich, information management librarian, Health Sciences Libraries, University of Washington–Seattle; **Nancy Lee,** primary care specialty resident, HMC Pharmacy Services; **Alvin Goo,** family medicine pharmacist, HMC Ambulatory Pharmacy; Harborview Medical Center, Seattle, WA

Objective: To describe the process of mounting an online evidence-based (EBM) learning module for pharmacy residents from the perspective of the information professional on a clinical pharmacy EBM team.

Methods: The health sciences libraries serve a large academic community of faculty, staff, and students in six health sciences schools. The librarians work as liaisons to specific departments/schools/clinical areas, which often involves collaboration on specific projects. One such project was to assist with the development of a mechanism for enabling pharmacy residents to strengthen their confidence and ability to make sound therapeutic recommendations in a complex, information rich profession. The pharmacy residents were located in a variety of settings throughout the state, many of them in smaller, remote institutions. Without a national or local functional system for extending medical literature evaluation and critical thinking skills training into

residencies, the opportunity for group learning and the creation of a supportive network of similar-minded peers in this area was a challenge. Specific factors shaped the format of the final module: distributed environment, residents' time commitments, need for discussion area, subjective nature of literature evaluation, need for evaluation mechanism, and IRB approval.
Results: The EBM module evolved into a series of several sections covering common disease states and specific clinical problems. The librarian facilitated the creation of the online environment for the module, acted as the blinding investigator, and acted as data collector. Pseudonyms were issued to participants for logging into the modules. Participants were asked to go through each section of the module sequentially as a group. Each section consisted of three parts: a pretest survey to determine participants responses to a clinical question, ways they accessed information in support of the recommendations, and their confidence level with the recommendations; an online discussion forum where specific landmark trials were reviewed; and a posttest survey with clinical questions identical to those in the pretest. The module will serve as a prototype for more widespread use. The faculty investigators facilitated the online discussions. All investigators participated in the evaluation of the module.

9
Evidence Supporting Evidence-based Thinking Across Disciplines

Carol Tierney, education specialist; **Eduardo Mendez,** director, Evidence Based Practice; Health Policy and Clinical Effectiveness; **Barbarie Hill, AHIP,** manager, Pratt Library; **Jerry Edens,** education specialist, Respiratory Therapy; Cincinnati Children's Hospital, Cincinnati, OH
Objective: A 2001 article by Peter French suggests that evidence-based practice lacks consensus and that there is little evidence to support that a new process exists. Disagreement with this finding spurred our inquiry into evidence-based thinking across health care disciplines as evidenced by the incidence of evidence-based terminology in the literature.
Methods: A frequency analysis on the use of evidence-based key terms in Ovid's CINAHL and MEDLINE was conducted. A total of 24,608 articles were found with "evidence-based" in the title, abstract or as keywords. The articles were subdivided into categories by their root suffix: nursing, medicine, practice, care, decision making, health care, respiratory and other therapies. Then each category was tracked by year of publication to determine the rate of occurrence. In addition, the articles were analyzed by publication type to determine the rate of substantive articles such as meta-analyses and randomized controlled trials for each category.

10
Design and Development of an Evidence Database for Social Care of the Aged

Elizabeth Taylor, reference librarian, Library; **Peri Rosenfeld,** researcher; New York Academy of Medicine–New York
Purpose: To present the development and design of an evidence database for social care of the aged. This database is designed to increase access to expert-reviewed, evidence-based articles that demonstrate effective social work interventions and outcomes on care coordination services for the elderly and their family members.
Background: The New York Academy of Medicine's Center on Aging Policy (CAP) is pursuing public policy solutions to demonstrate the effectiveness of social work interventions and so support policies to increase the numbers of qualified social work professionals able to meet the demands of America's growing aged population. The center wants to draw on the value of evidence-based medicine to the social work and social care arenas by developing an evidence-based practice database, particularly with regard to aging.
Methods: The team worked on the following:
1. identification of articles for inclusion through extensive literature searches
2. selection of over 190 articles for review and inclusion, according to 4 identified dimensions
3. development of a review tool to include level of evidence and subject headings, study population, age group, and other limiting search fields
4. identification of expert reviewers
5. assignment of each article to 2 reviewers
6. development of a searchable database

Results: The Evidence Database was launched in October 2006, containing over 190 article reviews. The database makes available to researchers, policy makers, social workers, and other interested parties evidence-based literature on the social care of the aged.
Conclusion: Future developments to improve the database include defining all criteria used to evaluate the articles, examining and redefining the evidence levels and refining the search strategies used to identify articles for inclusion in the database.

11
Thinking Outside the "Stacks": Finding New Opportunities to Evolve Medical Librarianship

Jeffery Loo, doctoral student; **Lonelyss Charles,** second year TRLN doctoral fellow; School of Information and Library Science, University of North Carolina–Chapel Hill
Objective: To remain relevant with the emerging visions of medicine, it is important that librarians harness their skills and evolve quickly to changing demands. Identifying future opportunities and new roles is a difficult process. This poster suggests three methods to creatively find solutions.
Methods: Two medical librarians pursued international opportunities in the medical information field. Reflecting on their experiences, the librarians derived three principles for creative thinking about advancement in

the field. These principles are explained in the context of the librarians' international experiences. One librarian completed an master's informatics program in the United Kingdom, which included a dissertation project at a multi-national pharmaceutical company. The second librarian provided online resource instruction to medical librarians in the developing world for an international organization for world health issues.
Results: In medical librarianship, creative thinking may be fostered by: (1) engaging with research cultures, (2) developing a holistic understanding of users, and (3) integrating library resources and knowledge with nontraditional fields.
Conclusions: Hopefully, these and other creative thinking processes will keep medical librarianship abreast of emerging medical paradigms.

12
Defining the Global Health Librarian

Lonelyss Charles, TRLN doctoral fellow, School of Information and Library Science, University of North Carolina–Chapel Hill; **Patricia L. Thibodeau, AHIP, FMLA,** associate dean, Library Services, Duke University Medical Center Library, Duke University, Durham, NC
Objective: Global health is a discipline of public health that concerns itself with international health issues. This is an important and rapidly expanding field where librarians may position themselves as leaders of global health information and develop a foundation of excellence in this field. This poster outlines the necessary skills for medical librarians to participate in this arena.
Methods: We evaluated several programs and paths in the global health arena. These included the World Health Organization's programs for health information, medical schools at foreign universities, medical reference tools for cross-cultural communication, global health departments at academic institutions, and medical librarian training programs in the developing world. After identifying the roles for information professionals in these programs, a set of core skills for librarians was developed.

13
A CHILI Recipe Contest: Careers in Health Information, Librarianship, and Informatics

Ellis Beteck, associate director, Education and Public Services, Louis Stokes Health Sciences Library, Howard University, Washington, DC; **Brenda Faye Green,** instructional services, Health Sciences Library, University of Tennessee Health Science Center–Memphis; **Charles J. Greenberg,** coordinator, Curriculum and Research Support, Cushing/Whitney Medical Library, Yale University, New Haven, CT; **Deborah D. Halsted,** associate director, Public Services and Operations, HAM-TMC Library, Houston Academy of Medicine-Texas Medical Center, Houston, TX; **Deborah Knight-Kerr,** director, Human Resource Community and Education Projects, Johns Hopkins Health System, Baltimore, MD; **Jeanne Larsen,** assistant director, Reference and Research, Dahlgren Memorial Library, Georgetown University, Washington, DC; **Lisa Massengale,** associate fellow, Welch Medical Library, Johns Hopkins University, New Haven, CT; **Neville D. Prendergast,** associate director, Bernard Becker Medical Library, Washington University, St. Louis, MO; **Nancy K. Roderer, AHIP,** director, Welch Medical Library, Johns Hopkins University, Baltimore, MD; **Stephanie Weldon, AHIP,** reference librarian, Denison Memorial Library, University of Colorado Health Sciences Center–Denver
Objective: In all health professions, minorities continue to be underrepresented relative to the overall population they serve. Existing pipeline projects recruit and prepare underrepresented minority students for health professions by involving them in precollegiate activities and programs. The health sciences librarianship and informatics professions, lacking diversity, also need to develop pipeline activities. What are the best practices for introducing underrepresented minority high school students to health information careers?
Methods: Librarians and diversity officers at eight academic medical centers received a three-year Institute of Museum and Library Services project grant to develop, produce, and evaluate effective ways of introducing students to health information careers. The short, spicy phrase CHILI was chosen to represent "Careers in Health Information, Librarianship, and Informatics." Teams at each academic setting collaborate with local school partners and offer high school students internships, mentoring, and "shadowing" opportunities that introduce students to the fast-paced and high-tech world of contemporary health information professions. The grant partners and MLA have also attended health minority career fairs and sought other influential partners, such as parents, guidance counselors, and both school and public librarians. One outcome of the grant is to share the best "recipes" for tasting CHILI with a variety of interested constituencies, using Web-based technology.
Results: At the mid-point of this three-year project, distinctly different models of best practices are emerging. To create meaningful assessment, a minimum number of measurable common denominators must be created and collected. The long-term goal to track students through both college and library school is both interesting and challenging.
Conclusion/Evaluation Method: A Website, blog, and wiki (www.bioinfo-career.org) are being implemented to share preliminary results and document best practices. During and beyond the conclusion of the IMLS grant, we invite all academic health sciences libraries and informatics programs to share their own techniques and services related to pipeline recruiting efforts to build diversity in the health information professions. Objective based evaluation is also being performed.

16
Who Are We? Creating a New and Cohesive Graphic Identity for the Library

Michelle Frisque, head, Information Systems; **Linda O'Dwyer,** education librarian; **James Shedlock, AHIP, FMLA,** director; Galter Health Sciences Library, Northwestern University, Chicago, IL

Objective: Over the last year the library has been working to revamp and revitalize our graphic identity to create a cohesive look and feel. The aim was to develop a brand vision that is engaging, progressive and professional and could be consistently applied across all library communications from printed brochures to the Website and everything in between.

Methods: A task force was created to set a timetable, meet with designers, and facilitate the process of choosing designs and implementing them into the library's publication cycle. While it is important that the graphic identity be applicable to both print and Web communications, we decided to concentrate on the print publications first. The graphic identity will be applied to the Website in 2007. A design firm was hired to examine the current collection of publications and logos, and they came up with recommendations for the library's logo, typography, color palette, and overall appearance of the library's publications. The final document was called the Brand Vision. The Brand Vision document details the appropriate application of the library's new graphic identity in our various print and electronic publications.

Results: We hired the design firm to create some of our print publications including a library map, bookmarks, and the *Library Guide*. However, we discovered a design firm was not always necessary in applying the Brand Vision to our library's publications. Staff are excited because they are able to apply the Brand Vision to their own library-related publications including memos, faxes, PowerPoint templates, and educational materials. The Brand Vision is doing what we hoped it would do. We have:

- clear and easy to follow guidelines
- a consistent look and feel
- updated and revitalized identity

17
The Changing Role of the Health Sciences Librarian: Supporting Nursing Magnet Initiatives

Pamela White, branch librarian, Health Science Libraries and Technologies, University of Rochester Medical Center, Rochester, NY

Objective: This poster describes the evolution of the health sciences librarian's role supports the efforts of the nursing department to achieve magnet status.

Setting: The health sciences library in this urban community hospital has become integral in nursing's efforts to achieve magnet status from the American Nurses Credentialing Center. Initially, the librarian was involved in gathering information to promote and support these efforts. As the planning evolved, it became apparent that nurses' awareness of, and access to, information resources varied greatly throughout the organization.

Methods:

1. The librarian has been participating in two of the planning teams formed to chart the course of the nursing department's magnet journey.
2. Since one of the essential qualities for magnet certification is the ability of nurses to demonstrate autonomous, evidence-based practice, the librarian is developing a more visible role in working with nurses to retrieve and evaluate high-quality information supporting evidence-based practice. Activities include active participation in two newly developed "councils" which impact nursing practice: the research council and the professional development council.
3. Planning is also underway to develop nursing competencies related to information retrieval and to develop user-focused instruction to help nurses seeking evidence-based literature.

Results: To play an integral role in support of magnet certification, librarians must actively market not only services and resources, but also their expertise. As a result of this increased visibility, the librarian is routinely consulted for help in finding both background information on evidence-based nursing and clinical literature to support practice. Future endeavors, such as a "Barriers to Research" study conducted by the research council, will help to shape the evolving role the librarian plays in supporting evidence-based practice and nursing research.

18
Hospital Library Advocacy in the MidContinental Region

Barbara B. Jones, Missouri liaison, Health Science Library, University of Missouri–Columbia

Objective: Increasingly, hospital libraries across the MidContinental Region are facing budget and staff reductions, professionals being replaced with paraprofessionals, and closure. The MidContinental Chapter of MLA (MCMLA) Executive Committee has established a task force to investigate the status of hospitals across the region. This poster will show a baseline level of information on the status of hospital libraries in the MidContinental Region.

Methods: The MCMLA Library Advocacy Task Force developed an online survey to determine the status of hospital libraries in the region. The survey has been distributed to all MCMLA member hospitals in the region, collecting one response per institution. After compiling results, a follow-up telephone survey was developed and is being conducted with those institutions whose answers indicated problems with budget and/or staff reductions, decrease in professional staff levels, or closure. Programming responding to issues exposed by the online survey and follow-up telephone survey will be developed by the MCLMA Library Advocacy Task Force.

Results: Responses to the survey were received from 55 of the 184 full members in the MidContinental Region.

Respondents included 40 hospital libraries, 8 academic medical centers, 2 associations and 5 others. The majority (12) were from hospitals with 201–300 beds, with the remaining respondents spread evenly over a size range from 0–500+ beds. Eighteen respondents indicated they have a library marketing plan. Seven institutions reported a budget increase in the past year. Ten reported a decrease in overall budget. Twenty-four members reported administrators are a priority user group; two listed administrators as the most important user group.
Conclusions: Results from this survey do not show a clear trend: more study is needed to investigate the factors influencing the success of hospital library programs.

19
Space: Now You Have It ... Now You Don't!

Dave A. Piper, AHIP, digital resources librarian; **Gary A. Freiburger, AHIP,** director; **Mary L. Holcomb,** head, Collection Services; Arizona Health Sciences Library-Tucson and Phoenix, University of Arizona–Tucson
Objectives: The Arizona Health Sciences Library-Tucson is housed in a 4-story, 70,000 square-foot building. In late 2005, the college of medicine administration asked the library to convert its 4th floor into flexible learning space. The library faced these challenges:
• vacating the 4th floor (almost 25% of the library's floor space)
• moving the entire circulating book collection (96,000 volumes = 2 miles)
• fitting the book collection onto a floor that already held the library's print journal collection
• rearranging the journal collection (120,000 bound volumes = about 3.4 miles)
• accomplishing all of this in 8 months' time without significantly disrupting access to the print collections and user study space.
Methods: A multi-pronged solution was devised:
• Journal volumes corresponding to years for which the institution had "assured" archival digital access were removed.
• The amount of journal "growth space" was greatly reduced.
• Several rows of shelving were added.
• 5,000 linear feet of compact shelving were installed.
Under the direction of a project management librarian, the journal collection was measured, removable volumes were identified ,and the new "address" for each title was calculated. Library staff removed 2,800 linear feet of journal volumes (52 tons). Temporary workers rearranged the entire print journal collection and then moved the entire book collection.
Results: The library reduced the print journal collection, creating space to collocate the entire book collection on the third floor. Although third floor study space was decreased, the learning space created on the fourth floor is available as general study space when not being used for learning activities.
Conclusions: Locating books and journals on the same floor and changing the shelving order of journals have improved accessibility. Given the trend toward shrinking journal collections, we believe there is still adequate growth space. Lessons learned:
• Librarians often have project management skills that can be used in a variety of situations.
• Collection space cannot be taken for granted. Although never a small task, repurposing stack space can be a feasible option.
• Libraries must be continually attuned to the evolving needs of their constituents.

20
Changing with the Times? Library Associations and New Librarians

Megan von Isenburg, associate director, Public Services, Medical Center Library, Duke University, Durham, NC; **Dan Kipnis,** senior education services librarian; **Rebecca Pernell,** manager, Access Services; Scott Memorial Library, Thomas Jefferson University, Philadelphia, PA
Objective: To determine what services and programs of national library associations are most valuable to newer librarians.
Methods: As young librarians enter the workforce, many are deciding whether or not to join and become involved with library associations such as Special Libraries Association, MLA, and their regional chapters. What they decide will become increasingly important to library associations as their traditional member base reaches retirement age. To determine what might attract younger librarians, a survey will be sent out to ascertain what services are considered most valuable to this group. The survey will ask librarians to rank various services, programs, and missions of associations by importance, as well as potential reasons why they belong or do not belong to library associations. The survey will be sent to librarians via multiple organizational and library school-affiliated electronic mailing lists. Results will be analyzed according to years in profession and current membership or activity level in library associations.

21
Evidence-based Practice: A Revolution in Library Project Management

Carol Perryman, TRLN fellow and PhD student, School of Information and Library Science, University of North Carolina–Chapel Hill; **Patricia L. Thibodeau, AHIP, FMLA,** associate dean, Library Services and Archives, Medical Center Library, Duke University, Durham, NC
Objective: Health sciences libraries face increasingly complex issues and projects, but planning templates derived from the business world have not always been successfully integrated in library settings. Evidence-based library practices enable libraries to take a fresh look at the planning process. Our objective was to devise a scaleable project planning template for Duke University Medical Center Library that encourages the use of evidence-based methods.

Methods: Existing project management tools were reviewed, followed by a survey of the library and general business project management literature. This process helped to identify a set of "common denominator" processes used in project planning, which became the baseline coding set for documentary analysis of two prior and one current library projects. Information needs expressed in task force minutes, emails, and other documentation created during the planning phase were identified, along with the sources consulted in finding answers. Findings were verified by means of retrospective, open-ended interviews with planning task force members and by participant observation in the current project. A particular focus was the use and evaluation of decision support resources and methods by task force participants. This research forms the basis for a new template for project management.
Results: Results of library project analysis revealed that while staff are actively engaged in creative and purposeful research, the current project planning structure led to the following problems: use of external information including published literature was equally limited, project documentation did not encourage follow-up evaluation or dissemination, and reconstruction of projects was difficult due to insufficient documentation and human memory instability. A staff planning retreat underscored the need for a formal planning structure including teamwork guidelines and a project template.
Conclusion: A new project template has been implemented that includes key elements of evidence-based practice along with core components of traditional planning. Elements include searching for evidence to answer important questions, evaluating existing documentation for relevance and usefulness using an included checklist; and disseminating and benchmarking planning built into the process. The template will be further tested with work groups in practice.

22
An Advocacy Service for Hospital Librarians

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Objective: The hospital library subcommittee wanted to determine ways it could advocate for libraries in our region and then to provide products that could be used by other libraries throughout the region.
Methods: The committee held lengthy discussions on the needs of hospital libraries in such areas as staffing, budget, support/advocacy, and marketing. From these discussions, it was determined that the committee would develop two toolkits: (1) a Hospital Librarian Orientation Toolkit that offers information from both regional and state-specific resources and (2) a Hospital Library Promotional Toolkit that provides a practical approach to promoting libraries in a hospital setting. A third function of the committee was to develop and execute a methodology for providing state and regional support to libraries in institutions that are planning to hire, downsize, or eliminate the librarian or library services. The methodology for providing support to endangered libraries has been developed, and testing has been ongoing.
Results: The Hospital Librarian Orientation Toolkit has been completed and delivered to several dozen institutions that have provided evaluations and suggestions for revisions. The Hospital Library Promotional Toolkit was completed in April 2007. A sample of both toolkits will be on display.

23
Disaster Planning: The Keystone of a Business Continuity Plan for Your Library

Daniel T. Wilson, assistant director, Collection Management and Access Services; **Susan S. Yowell,** project assistant; Claude Moore Health Sciences Library, University of Virginia–Charlottesville
Objective: The goal of this poster will be to show how specified elements of a library's comprehensive disaster plan can provide a workable strategy for a library to continue to provide services to its users in the event of a disaster, whether natural or human-caused.
Methods: In pursuit of our goal to create a document that would gather disaster preparedness and response information into one manual, we researched existing disaster plans for other institutions, our parent institution, our state emergency preparedness Web pages, and federal sites such as the Federal Emergency Management Agency and Homeland Security. We found that very few institutions had plans in place that provided information for both personal safety and collection recovery. After identifying potential disaster/emergency events and analyzing our library's risk for them, we developed a comprehensive disaster plan that provides information and procedures about service provision in the event of many types of disasters and/or emergencies. We created a disaster planning blog to share information about disaster planning for health sciences libraries.
Results: The comprehensive disaster plan provides

procedures for designated essential services for our library, so that we will be able to continue to provide basic patron services either from off-site or with minimal staffing. Through the use of technologies such as interactive Web pages, email, voice over Internet protocol, and other electronic resources, it is possible for libraries to make good contingency plans and to prepare to continue to provide for the information needs of their clientele in the event of many types of emergency.
Conclusion: The blog site for disaster planning has proved to be an excellent resource for people responsible for creating disaster plans, as it contains many helpful tips, as well as a link to the PDF of our entire plan.
We hope that these resources will help in supporting the larger missions of our libraries; providing the best possible health information to our patrons, regardless of the circumstances.

24
Assessing the Future: Developing Information Technology Skills for New Staff Roles in Academic Medical Libraries

Richard A. Peterson, AHIP, deputy director, Medical Center Library, Duke University, Durham, NC; **Carol Perryman,** IMLS/TRLN research fellow, University of North Carolina–Chapel Hill; **Robert James,** associate director, Access Services; **Charlie S. Lackey,** assistant director, Cataloging and Bibliographic Services; Medical Center Library, Duke University, Durham, NC
Objective: The primary objective of this study is to assess the information technology (IT) competencies of staff at the medical center library to plan for expanded roles in the future.
Setting/Subjects: The medical center library serves as the primary information resource for university's medical center and health system. With thirty-time full-time equivalents staff and a rapidly shifting demand for collaborative and educational spaces and services, the medical center library is poised for transition to a learning resource center.
Methods: First, a literature review was performed to determine whether other libraries had performed a similar inventory. Technology activities derived from a review of all job descriptions were conceptually grouped to build a core set of competencies and an expanded, comprehensive listing for use as a survey. After pilot testing with one department, the survey was then refined and administered to all staff. Finally, the results were assessed and used to support training programs intended to address deficits between present and future needs.
Results: The information technology (IT) assessment and survey instruments work well to quantify present-day IT skills and skill deficits. Results of the survey aid in planning for future training and enable more accurate position descriptions.
Discussion/Conclusion: An awareness of staff IT knowledge and practice is crucial to planning for the future of this and other medical libraries. In addition to addressing position description discrepancies, focused IT training supports the career development needs of all staff. Ultimately, we feel that having a more accurate idea of staff IT skills will serve to strengthen the ability of library staff to collaborate with medical center stakeholders in building and providing support for the new learning resource center.

25
Living the Brand, the Fish! Way

Alice Witkowski, AHIP, assistant director, Information and Outreach Services; **Nancy Stimson,** librarian, Outreach Services Coordinator; Biomedical Library, University of California–San Diego, La Jolla, CA
Objective: In 2005, the University of California-San Diego Biomedical Library began a branding project in connection with the library renovation and temporary relocation. Being away from our primary clientele, the library staff took a critical look at services and how our users viewed the library and services. This poster describes the articulation of the library's brand, tagline, and methods used to motivate staff to live the brand.
Methods: Using data from user focus groups, user surveys, information gathered from several staff meetings with a professional facilitator, and a library subcommittee, the brand statement was developed along with a tagline that captured the essence of our brand: *Connect, Reflect, Research, Discover.* Articulating a brand and tagline was the first step. We then looked for ways to live the brand and make it real to all library staff and our users.
Two elements of the library's brand are that our library staff is user focused and "goes the extra mile" for our patrons. To measure our progress in living up to our brand promises, we utilized the principles in Stephen Lundin's *Fish! Philosophy.* Each month we recognize and celebrate staff members who bring energy, passion, and a positive attitude to our library services and operations.
Results: Articulating a library's brand is an excellent way to take a critical look at library services and programs. Getting the staff on board with branding takes consistent leadership and ongoing effort. Using the principles of *Fish! Philosophy* is a simple and fun approach to motivate staff to incorporate the brand promises into library operations and services. Living the brand is an opportunity to measure the performance of library programs, services, and staff. Further research projects will evaluate if our users perceive the "brand" as we have articulated it.

26
A Tribal Librarians' Health Information Conference

Jeanette L. Ryan, AHIP, deputy director; **Patricia A. Auflick,** outreach services librarian; **Gary A. Freiburger, AHIP,** director; Arizona Health Sciences Library, University of Arizona–Tucson and Phoenix
Purpose: this poster reports on a health information conference held for tribal librarians and librarians serving tribal communities in 2005.

Setting/Subjects: Arizona is home to twenty-one federally recognized tribes. To make connections with as many tribes as possible, the Arizona Health Sciences Library (AHSL), in collaboration with the state library and the National Network of Libraries of Medicine, Pacific Southwest Region, developed a two-day conference on using the Internet effectively to find reliable health information. Sixteen participants attended.
Brief Description: The conference was developed to connect American Indian people with reliable health information by empowering librarians who serve tribal communities with the skills and resources they need to facilitate the exchange of useful health information.
Expected Outcomes: Improving skills in using National Library of Medicine online products such as MedlinePlus, PubMed, Loansome Doc, and Go Local; finding credible health information on the Web; improving the comfort level of librarians in dealing with health questions from tribal members; learning what AHSL can do to support their work; networking with each other; and connecting with other relevant resources in Arizona.
Evaluation Methodology: Pretests were given to the sixteen participants. Posttests were retrieved from nine. Eighteen months later, a phone survey was conducted with six participants.
Results: Before the conference, participants used Google to answer health reference questions and were not very confident in the resource used, answer given, or service they were providing. The post-test indicated a shift to MedlinePlus and PubMed as the resources to consult first and a higher level of confidence in their choice. The eighteen-month follow-up survey indicated that most topics covered had been "very useful" in their subsequent work. The low rate of participants available at the eighteen-month survey speaks to the high turn-over rate in this work.
Conclusions: These results and the high turn-over rate among the original participants will be used in planning for a follow-up conference later this year.

27
Let No Physician be Left Behind: Bringing Information to Rural Health Care

Deborah H. Ward, AHIP, director, J. Otto Lottes Health Sciences Library, University of Missouri–Columbia; **Susan Centner,** librarian, Ted Smith Resource Center, Mid-Missouri Area Health Education Center–Rolla

Objective: To determine the effectiveness of a state-wide information portal, complete with traditional library services, for health professionals in rural areas of the state.
Methods: We created a state-wide library service for rural health care providers through collaboration between a university-based resource library and an area health education center. The services range from access to electronic information resources to mediated searching, document delivery, and reference. Membership in the service is fee-based, and training in searching skills for finding evidence-based information is emphasized. Training includes an instructor who is a health care provider who can demonstrate how information found in the literature can be directly applied to health care practice. Evaluation of the service was done through surveys and data collection about the usefulness of the service in patient care. We also created an advisory council to provide feedback. This group is convened by teleconference twice per year. Data indicate that the service is making an impact, and health care providers report daily use of the service.

28
Power to the People: The Patient Information Hotline

Patricia May, director, Library Services; **Eleanor B. Silverman, AHIP,** medical librarian; **Madeleine M. Taylor,** medical librarian; **Charles L. Jankowski,** library assistant; Health Sciences Library, St. Joseph's Healthcare System, Paterson, NJ

Purpose: This poster presents the effectiveness of the informational packet of materials prepared by library staff and provided to patients and their families to satisfy their health information needs.
Setting/Participants/Resources: The Health Sciences Library of St. Joseph's Healthcare System in collaboration with the patient education and quality management departments, and the members of the multidisciplinary patient/family education committee of the healthcare system.
Brief Description: Many patients, their families, hospital employees, and members of the community request information about their diagnosis, treatment, and prognosis. The library staff culls this information from reputable sources and produces an informational packet. The program was initiated in 2002, and this poster summarizes the data collected over the last five years.
Evaluation Method: Completed Cardiff Teleform surveys from patients or their families. Surveys of the usefulness of the information provided are included in the packets, and information from the returned surveys is compiled by the health care system's quality management department.
Results/Outcome: The Patient Education Hotline is successful in providing reliable, accurate, current medical information to patients. Due to the enthusiastic response from the patients, information on the Hotline is now included in the systems' new employee orientation and flyers advertising the hotline have been posted in each patient and waiting room to alert more people to the availability of this service. In-service educational programs, including participation in learning fairs, continue annually.

29
Transforming Patients to Experts: Information Guides for Cancer Patients and Families

Ruti Volk, librarian, Patient Education Resource Center, Comprehensive Cancer Center, University of Michigan–Ann Arbor

Objective: Having to make important health care decisions at a time of extreme emotional distress is one of the greatest difficulties facing newly diagnosed cancer patients. These decisions often have long-term and even life and death consequences. Patients and caregivers must gain in-depth knowledge about the disease as quickly as possible to be able to make informed decisions in a timely manner. The Patient Education Resource Center (PERC) at the University of Michigan Comprehensive Cancer Center (UMCCC) publishes information guides that direct patients and families to authoritative and current information sources.
Methods: The PERC information guides cover twenty-six adult cancer types, thirteen childhood cancer types, and seventeen treatment, prevention, and quality-of-life topics. The guides include a variety of print and electronic format materials, are updated annually, and are approved by clinicians in the institution. An Access database helps to keep track of the annual revisions and the review process. The guides are published in print and electronic formats. The print handouts are displayed on a circular rack in the resource center, and PDF files of the guides are published on the UMCCC Website.
Results: In addition to helping patients and families locate authoritative information sources about cancer, the guides are also used by volunteers providing a reference service at the PERC. Working with the guides helps ensure that all patrons receive the same level of service regardless of the knowledge and experience of the volunteer. In addition, the annual update and review process helps to maintain the currency of the PERC collection, as this process triggers a search for new materials in a specific subject area.
Conclusion: The information guides were the basis for the book: Volk, Ruti M. *The Medical Library Association Guide to Cancer Information: Authoritative, Patient-Friendly, Print and Audiovisual Resources*. New York, NY: Neal-Schuman, 2007. The book is a compilation of the guides with an introduction to each topic and fully annotated resources.

30
Information Needs of Community Dental Professionals in North Carolina

Tina Crenshaw, clinical psychologist and graduate assistant, Health Sciences Library; **Rachel Wilfert,** research associate, Training and Education, NC Center for Public Health Preparedness, NC Institute for Public Health; **Diana McDuffee,** librarian and director, ILS Network; **MaryBeth Schell,** associate librarian and manager, AHEC Digital Library, Area Health Education Center Information and Library System Office, Health Sciences Library; University of North Carolina–Chapel Hill

Objective: The purpose of the study was to describe the information needs of dentists and dental support professionals, with the intention of using this information to develop a special collection of electronic resources that would interest community dental professionals.
Methods: The sample consisted of 264 dental professionals, including dentists, dental hygienists, and dental assistants. The sample was drawn from attendees at continuing education courses that were directed toward community-based rather than university-based providers. Data were collected by means of a one-page written survey asking dental practitioners what information resources they used most frequently and for what purposes. The survey used both open-ended and closed-ended questions. Participants were asked about information resources used for clinical decision making and practice management, as well as other uses.
Results: The majority of dentists and dental support professionals responding to the survey indicated that they frequently consult the dental literature to support clinical decision making. The survey also found a high level of interest among dentists in resources dealing with practice management and administration. "Continuing education" and "staying current" were other reasons given for consulting the dental literature. All of these purposes could be supported through the North Carolina Area Health Education Center (AHEC) program's AHEC Digital Library (ADL). It appears, though, that some of the most frequently used journals do not have electronic versions and some are provided only through individual memberships in professional organizations or through personal subscriptions. Additional research on availability, cost, and usefulness of adding these titles to the ADL's collection will have to be explored.

31
Evaluating an Alumni Outreach Program

Steven Hunt, Web librarian; **Michelle Frisque,** head, Information Systems; **Kurt Munson,** head, User Services; **Linda O'Dwyer,** education librarian; **James Shedlock, AHIP, FMLA,** director; Galter Health Sciences Library, Northwestern University, Chicago, IL

Objective: At the request of the medical school alumni board and the office of alumni relations, the library was asked to provide library services and resources to the school's alumni. Our objective is to evaluate alumni usage of these recently available services and resources, gauge their interests and needs, and guide our future efforts.
Setting: We are a medium-sized academic health sciences library with approximately 14,000 living Medical School alumni.
Methods: In September, 2006 we unveiled the Alumni Gateway to Health Information and Library Services. This dedicated Web portal provides quick and efficient access to many of the library's services and electronic resources. These include photocopy services, literature searches, book-borrowing, library classes on MEDLINE, as well as remote access to StatRef!, AccessMedicine and *JAMA*. An "alumni profile" was also created that customizes the home page to give quick links to popular resources. Letters were sent, informing alumni of the new service. Since the first alumni have signed up, we have kept data on the following: how many people have signed up, how often and how many times they log on, what resources

they most often use, and what their interlibrary loan activity is.
Results: Eighty-four alumni registered after September 1, 2006, representing 0.006% of eligible alumni. Between September 1, 2006, and March 1, 2007:
• 15% logged in 1–2 times (13 users)
• 32% logged in 3–5 times (27 users)
• 13% logged in 6–10 times (11 users)
• 25% logged in 11–50 times (21 users)
• 14% logged in 51+ times (12 users)
During this time, there were 250 instances of alumni accessing electronic resources remotely. Top resources were:
• AccessMedicine (16)
• MEDLINE (Ovid) (15)
• PubMed (MEDLINE) (13)
• Emergency Medicine: A Comprehensive Study Guide (8)
• FreeBooks4Doctors (8)
• MDConsult (8)
• STAT! Ref (8)
• Free Medical Journals.com (7)
• Harrison's Principles of Internal Medicine (7)
• JAMA (6)
• Cecil Textbook of Medicine (5)
• Merck Manuals (5)
Just four interlibrary loan and seven photocopy requests were made. We conclude that the response was underwhelming and that most alumni probably have access to medical literature through other means or are thoroughly retired.

32
Peer Power PLUS 2006 Online Symposium: Peer Tutoring, Online Health Resources, and Community Outreach

Javier Jiménez, technology coordinator; **Sara Reibman,** librarian; **Lucy Hansen,** lead librarian; **Ann Vickman,** librarian; Biblioteca Las Américas, South Texas Indepedent School District, Mercedes, TX; **Frederick B. Wood,** computer scientist, Office of Health Information Programs Development, National Library of Medicine, Bethesda, MD; **Cindy Olney,** evaluation consultant, C.O. Evaluation Consulting, Greensboro, NC
Objective: To produce an online symposium from the Lower Rio Grande Valley of Texas to increase awareness of National Library of Medicine (NLM) health resources, to share peer tutoring experiences, to promote the peer tutor model in schools, and to encourage mentoring by medical librarians. Guests included peer tutors, students, health care professionals, high school teachers, and librarians from high schools, universities, hospitals, and Regional Medical Libraries (RMLs). Results are maintained in an archive available online through the ¡VIVA! Peer Tutor Website at bla.stisd.net.
Methods: A Web hosting service produced the moderated symposium with two simultaneous strands. Live, PowerPoint, and audiofile presentations by panelists—including librarians, NLM personnel, and peer tutors—were followed by two question-and-answer sessions. Results were compiled for the NLM.
Results: The efficacy, efficiency, and pros and cons of the online symposium, including trade-offs with face to face and practical limitations on the number of online participants will be presented.

33
¡VIVA! Peer Tutor Summer Institutes

Sara Reibman, librarian; **Lucy Hansen,** lead librarian; **Ann Vickman,** librarian; **Javier Jiménez,** technology coordinator; Biblioteca Las Américas, South Texas Indepedent School District, Mercedes, TX; **Frederick B. Wood,** computer scientist, Office of Health Information Programs Development, National Library of Medicine, Bethesda, MD; **Cindy Olney,** Evaluation Consultant, C.O. Evaluation Consulting, Greensboro, NC
Objective: To provide the peer tutors with enough time to create learning objects, attend workshops, perform outreach activities, develop lesson plans, and plan activities for coming year. Summer activities included guest speakers on a variety of health and wellness topics; field trips to community centers, local hospitals, and *promotora* meetings; collaborating with teachers to develop lesson plans using National Library of Medicine (NLM) resources and that follow the Texas Essential Knowledge and Skills (TEKS); hosting an online symposium; and participating in videoconferencing activities. The ¡VIVA! Peer Tutor Website is available at bla.stisd.net.
Methods: Ten peer tutors and two graduate peer tutors (former peer tutors who were no longer South Texas Independent School District students) were hired for five weeks. The graduate peer tutors supervised the peer tutors under the direction of the project director. Results were compiled for the NLM.
Results: Two summer institutes have been completed and a third is in the planning stages. What have we learned from the two previous institutes as to what strategies and activities best achieve the goal of increasing health literacy in our school and community? What number of participants is optimum? What type of participants work best together to contribute to health literacy?

34
New Partnerships for a New Generation

Mary E. Piorun, associate director, Library Systems; **Barbara Ingrassia, AHIP,** associate director, Technical Services; **Sally Gore,** information literacy librarian; **Judith Nordberg,** reference associate; Lamar Soutter Library, UMass Medical School, Worcester, MA
Objective: This poster will demonstrate how partnering with civic and community organizations to host a traveling exhibit helps the library reach beyond its primary clientele to: (1) heighten awareness of the historical roles of women physicians, (2) encourage young women to enter the medical fields, (3) promote

medical librarians and library services, and (4) increase visibility of the medical school.
Methods: In the summer of 2004, a core group of library staff gathered to prepare the application to host the American Library Association/National Library of Medicine traveling exhibit, "Changing the Face of Medicine: Celebrating America's Women Physicians." Once selected as a host site, the group reached out to a diverse mix of academic and administrative staff from across the medical school, as well as members of the local community. This group became the formal steering committee to plan programming to accompany the exhibit, helping meet the educational and promotional goals set forth in the initial application. Some outreach events included movie nights at the public library, an essay contest for grade school students, a career day with Girl Scouts, a review of research in women's health (Women's Health Initiative), etc. Promotional methods/vehicles included "save the date" postcards, flyers, posters, and coverage through area radio, television, and newspapers.
Results: Seventeen events were held in conjunction with the library's hosting of the exhibit. During the 6-week period, approximately 60,000 individuals visited the library, more than 750 specifically devoted to viewing the display. Two hundred people from the medical school community and the public at large attended the opening ceremony, 100 area Girl Scout members participated in multiple educational events, local middle and high school students took part in an essay contest, and more than 100 people attended book signings, film screenings, and a dramatic performance about Elizabeth Blackwell. Six groups provided financial support of the exhibit, totaling more than $7,000.
Conclusion: The exhibit encouraged new experiences for library staff including collaboration, marketing and outreach to a wider audience. It introduced many first-time library visitors to a valued local resource, helped develop relationships between medical school students and the public, and introduced a different and important historical perspective on medicine to all.

35
Regional Partners Strengthen Outreach

Alexa A. Mayo, AHIP, associate director, Services; **Patricia Hinegardner, AHIP,** Web services librarian; **M.J. Tooey, AHIP,** director; Health Sciences and Human Services Library, University of Maryland–Baltimore

Objective: The purpose of this project was to create and sustain statewide partnerships to influence the development and assist in the promotion of an outreach project, Maryland Health > Go Local.
Methods: This poster will describe how regional partners strengthened an outreach project. In early 2005, the library hosted statewide regional summits to gather data on the health information needs of citizens throughout the state. The four summits were held in both rural and urban settings and included a professionally diverse group of participants. A goal of the summit was to obtain feedback for the Maryland Health > Go Local project, then in development. In September and October 2006, the library rolled out Maryland Health > Go Local using the same regional model. This poster will highlight the benefits of regional partnerships and describe how these partners assisted with Maryland Health >Go Local. The poster will include practical advice on organizing regional meetings and sustaining collaborative relationships.
Results: Using a regional model to rollout and celebrate Maryland Health > Go Local was successful. The Library experienced both long- and short-term benefits in this model, including new opportunities for collaboration.

36
Changing the Search Behavior of a Public Health Workforce. Descriptive Quantitative Analysis of an Arkansas Public Health Virtual Library Project

Susan C. Steelman, outreach coordinator; **Mary L. Ryan, AHIP, FMLA,** library director; **Abby E. Holt,** campus outreach librarian; UAMS Library, University of Arkansas for Medical Sciences–Little Rock

Objective: Quantitative analysis of survey results was used to design public health workforce training classes and a public health information Website for the employees.
Methods: A four-page survey was distributed to all 2,815 employees of the Arkansas Department of Health (AHOD) to identify their information needs. Responses were received from 951 (34%) of the ADOH employees. Fifty-four percent of respondents were nurses. Quantitative analysis of the survey results was used to design public health workforce training classes and a public health information Website for the employees.
Results: The most requested resources were state agency resources, immunization guidelines, lab data, practice guidelines, and health information for the public. Top training needs were search engines, patient education information, and literature searching. The type of Website organization selected as most useful was "organized by subject areas of public health."
Conclusions: The Arkansas Public Health Virtual (PHVL) Library site is being used regularly, but no significant trend is evident at this point. However, resources provided by the University of Arkansas for Medical Sciences (UAMS) Library are being used more frequently than the other professional resources. This usage could be attributed to the prominent placement of the UAMS Library link on the PHVL home page, and the placement of various links to UAMS Library resources in the site. Results of training reveal improved information seeking skills of the ADOH workforce. Future plans include quality analysis of the site's usability and additional training classes for public health officials.

37
Make A Difference! A Collaborative Effort Among Libraries and Hospitals

David C. Stewart, AHIP, associate director, Public Services; **Rochelle Kramer, AHIP,** reference librarian; Coy C. Carpenter Library, Wake Forest University School of Medicine, Winston-Salem, NC

Objective: Create a collaborative partnership between three institutions: a medical library, public library, and a children's hospital.

Methods: The Carpenter Library at Wake Forest University School of Medicine hosted a National Network of Libraries of Medicine (NN/LM) class on consumer health resources that brought together staff from public, medical, and academic libraries; the medical center, and public health departments. Forsyth County Public Library, Medical Library, and Brenner Children's Hospital representatives identified a project that would further develop the Family Resource Center (FRC) in the children's hospital as a community resource for pediatric health information. Funding was awarded from NN/LM to train nurse educators and volunteers on how to identify credible online health information, to hire a nurse educator to manage the FRC, and to purchase a stand-alone computer system that offers video and audio pediatric information written for parents. Librarians from the medical library and the public library taught twenty-seven nurses and volunteers how to evaluate health Websites, search PubMed and CINAHL, locate full-text articles, and retrieve patient-oriented information from MedlinePlus.

Results: An underutilized room saw a dramatic increase in the number of visitors. Family surveys indicated that 100% of those surveyed found the FRC staff to be "very helpful." Although 55% of hospital staff members had not visited the FRC, 66% answered that they had advised or recommended that a parent or family member utilize its resources.

Conclusion: Find areas where the library can make a difference and create collaborative projects.

38
Using a Logic Model to Plan and Implement a Liaison Outreach Program of Mobile Reference Services

Donghua Tao, health sciences reference librarian; **Patrick McCarthy,** director; **Mary Krieger,** assistant director, Information Services; **Annie Webb,** reference assistant; Medical Center Library, Saint Louis University, St. Louis, MO

Objective: This poster will report on using a logic model to plan and implement a new liaison outreach program of mobile reference services to the School of Public Health at Saint Louis University.

Setting/Participants/Resources: In 2005, the medical center library launched a library liaison program, matching reference librarian subject specialists with users in schools of medicine, public health, and allied health. The school of public health is located at a greater distance from the Library than programs on the main medical center campus. To provide easy access to information services for public health users, we developed an outreach program of mobile reference services to deliver on site information assistance.

Brief Description: The logic model provides a framework for planning, implementing, and evaluating programs, which includes four components—goals, activities, outputs, and outcomes. Based on a logic model, we set the goals for the program, evaluated needed resources, identified actions to be carried out, and proposed expected outcomes in terms of public health user perceptions on the ease of access and use of library resources and services.

Results/Outcome: During the planning stage, we identified the needed resources, which included an independent office room, a desktop or laptop computer with an Internet connection, and the necessary office supplies. The activities included identifying the time and location of the Services, setting up the services office, and publicizing the services to all public health users. Based on the plan, an announcement letter, promotion flyers and brochures, a directional sign, a sign-up sheet, an information request form, and a service evaluation form were drafted and designed. A triple wall mount system for holding the forms was purchased. The expected outcome measure is the number and the content of reference transactions during the service hours.

Evaluation Method: Through the sign-up sheet, the number and the content of reference transactions have been recorded. Through a hard copy and online evaluation form, we are collecting user's feedback about the services.

39
Connecting Congregations: Access to Online Health Information for Parish Nurses

Kelly K. Near, outreach librarian, Information Services; **Bart Ragon,** assistant director, Library Technology Services and Development; Claude Moore Health Sciences Library; **Lisa M. Zerull,** PhD student; **Sarah Farrell,** associate dean, Academic Programs, School of Nursing; University of Virginia–Charlottesville

Objective: To provide communication technology and health resource information education to parish nurses and evaluate its effectiveness on parish nurse practice.

Methods: This was a descriptive pilot study in which participants were chosen from a survey of fifty practicing parish nurses. Subjects were five parish nurses working in their respective congregational settings representing various denominations in rural and nonrural areas who were selected to participate in the nine-month National Network of Libraries of Medicine-funded project. Nurses selected for the main project received laptop computers, printers, projectors, and a Webcam. All had or were provided with high-speed Internet access. Subjects attended two six-hour sessions at the library that incorporated communication technologies training (use of PowerPoint, email lists, chat software, and video cameras) and training in accessing and using quality

health information resources such as MedlinePlus. Data were collected through semi-structured interviews and a twelve-question, pre/post project survey that assessed nurses' information technology practices using a four-point Likert-style scale. Quantitative data were analyzed using SPSS software.

40
Qualitative Evidence Guiding Modification of a Local Health Department Library Program

Barbara L. Folb, public health librarian; **Ahlam Saleh,** reference librarian; Health Sciences Library System, University of Pittsburgh, Pittsburgh, PA

Objective: An established partnership providing library services to a local health department from an academic health sciences library was experiencing an unexpected drop in utilization three years into the program. Our objective was to identify factors leading to the decline in use and determine which features of the program were and were not functioning as intended.

Methods: A qualitative approach using focus groups was chosen. Ten questions designed to promote discussion of information seeking preferences, need for information at work, barriers to information access due to workplace and library program characteristics, knowledge of the library program, and suggestions for improvement were created and approved by the university's institutional review board and the health department. Participants were recruited through the directors of each program area in the department. Five focus groups with twenty-seven participants, including supervisors and staff from environmental and human health programs were formed. The focus groups were facilitated by a librarian unaffiliated with the library/health department program. Recorded sessions were transcribed, coded thematically, and analyzed. Based on the focus group results, five high priority actions were recommended and adopted.

Results: Focus groups produced a detailed picture of health department employee thoughts about, use of, and nonuse of the library program. Results showed a need for further tailoring of training and Website content for each health department program area and provided helpful information on how to address information needs by public health specialty areas. Strengths and weaknesses of the Website design and function were identified and suggestions for improvement of content and navigation were provided. Visibility of the library program could be improved by increasing frequency of email program news and searching tips that were already valued. Additional refresher classes and new employee orientations were also added to increase program visibility and knowledgeable use. Finally, results indicated a need to revisit options for meeting time sensitive information needs.

41
Information Revolution: Mustering the Militia: Collaborating with Public Libraries to Provide Consumer Health Information Services to Seventeen Rural Tennessee Counties

Nakia Carter, clinical reference librarian; **Rick Wallace, AHIP,** assistant director, Outreach and Public Services; Quillen College of Medicine Library, East Tennessee State University–Johnson City

Objective: To enable primarily public libraries and secondarily public health workers and rural hospital staff to be consumer health information providers with the goal of creating a program that could be copied nationally, enabling public library workers to become an important resource in reversing our national health information illiteracy.

Methods:

Setting: Three regions of the state regional public library system covering seventeen counties and two regions of the state public health department system.

Participants: Public library staff, public health department staff, and rural hospital staff.

Program: East Tennessee State University (ETSU) College of Medicine Library partnered with public libraries to improve the delivery of health information. Four free classes were taught multiple times: "Prescription for Success," "An Apple a Day," "PubMed for Public Librarians," and "From Snake Oil to Penicillin." Regional public library directors were used to convince their staff of its value and obtain the concurrence of their boards for release time for class attendance. Classes were also developed for the public health workforce and rural hospital staff. Existing classes (with all teaching materials on the National Network of Libraries of Medicine [NN/LM] Website) were used with the existing public library system.

Results: Five-hundred thirty-three students attended the classes. Fifty-two public library workers received MLA's Consumer Health Information Specialist certification. Thirty-one public libraries have joined NN/LM. All ordered MedlinePlus marketing materials for their libraries from InformationRx.org.

Conclusion: This project helped address the public health problem of health information illiteracy by filling the gap the average person has in finding quality health information. A strength of this project is its easy replication. The project used materials that were readily available and put them to use. Any library could replicate this project in its own service area saving time and cost to the library.

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Information Revolution:
Change Is in the Air

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Medical Library Association
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MLA '07 Abstracts

A Supplement to the *Official Program*

MLA is a nonprofit, educational organization with more than 4,500 health sciences information professional members worldwide. Founded in 1898, MLA provides lifelong educational opportunities, supports a knowledgebase of health information research, and works with a global network of partners to promote the importance of quality information for improved health to the health care community and the public.

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