Medical Library Association 2014 Annual Meeting Poster and Paper Abstracts

All unsolicited abstracts for the annual meeting undergo a process of blind peer review. Abstracts of papers intended for section programs are reviewed by members of a panel of reviewers from the sections sponsoring the programs. The final decision on program speakers rests with the section program planners. Abstracts for the poster sessions are reviewed by members of the Medical Library Association National Program Committee (NPC), and designated NPC members make the final selection of posters to be presented at the annual meeting.

Sunday, May 18

Dental Section

2014 Stat!Ref Lecture: Gathering the Evidence to Build Our Future Spaces

Changing Roles: Changing Facilities

Jean P. Shipman, AHIP, FMLA
Director, University of Utah, Salt Lake City, UT

Sunday, May 18
4:35 PM - 5:00 PM

Room: Regency B, Gold Level, West Tower

Description: As roles for librarians and libraries change, so have the physical facilities. This presentation will cover some of the new approaches librarians are implementing to have their physical buildings remain relevant to their constituents.

Where the Evidence Leads: Future Space Needs and Institutional Priorities

Gerald (Jerry) Perry, AHIP
Director, University of Colorado Anschutz Medical Campus, Aurora, CO

Sunday, May 18
5:00 PM - 5:25 PM

Room: Regency B, Gold Level, West Tower

Purpose: This portion of the panel presentation will address the master planning process utilized by most sizable institutions to manage future space uses and allocations, and the ways in which library leaders can engage in and influence those considerations.
Setting: Space is an extremely valuable asset that must be well managed. Most institutions--be they academic, government, for-profit or non-profit--will have space and facility use needs and priorities, and will have a planning process for

strategically managing the short- and long-term space needs of the institution leveraging available evidence and expertise. Master planning activities usually address high-level issues such as access and regional transportation, volume of visitors/customers, mission-linked resource capacity needs, growth projections, demographic considerations and economic forecasting, among many other strategic issues.

Brief Description: Library leadership engagement in the master planning process requires familiarity with the mission and priorities, key performance indicators, constituencies, and financial drivers of the parent institution. Engagement in master planning activities provides an almost unparalleled "deep dive" into the strategic priorities, "mind set," and future-forward thinking of parent institution leadership. The library's role in serving all aspects of an institution's mission affords a uniquely broad and balanced platform from which to assist and support the planning effort with access to expertise and evidence.

Experienced Team: Collaborative Process

Peter J. Bolek
Principal, HBM Architects, Cleveland , Ohio

Sunday, May 18
5:25 PM - 5:50 PM

Room: Regency B, Gold Level, West Tower

Thinking about your library--is it time to update, rejuvenate, renovate, expand, or start over? A key first step is to seek advice and guidance from a qualified design professional to help put together the right team to work through a collaborative process. This portion of "Evidenced Based Design" will provide insight on how to select an architect and provide questions and options to consider. Your objective should be to identify an architect based on qualifications that relate specifically to your project needs and requirements. The presentation will also focus on a collaborative approach that engages the stakeholders in a charrette process that provides creative and innovative ideas to make your project a success. You will also gain insight in to working with an architect and help prepare you for your upcoming project.

Relevant Issues Section
Accessibility and Appropriateness in Our Information Future

Collaboration to Expand Accessibility: The Role of Consumers in Web Content Development

Cathryn W. Chiesa
Resource Librarian, Duke University, Durham, NC

David Knox
Consulting Group, Duke University, Fuquay Varina, North Carolina

Nathalie Reid
Manager, Information and Resources, and Manager, Continuing Education Program, University of California, Los Angeles, CA

Sunday, May 18

4:35 PM - 4:54 PM

Room: Columbus EF, Gold Level, East Tower

Objectives: Using the case example of a web project on the National Child Traumatic Stress Network's website, this paper examines the importance of including the perspectives of parents, caregivers, and young adults throughout a project from conception to completion. We believe that parents and caregivers play an important role in helping children recover from traumatic stress, therefore it is vital to include their voices to help inform decisions.
Methods: The National Child Traumatic Stress Network's website is an information hub for professionals who provide care to families and children who have experienced traumatic stress. Recently an twelve-month effort to enhance accessibility of trauma-informed information for school personnel, Spanish-speaking individuals, and parents was launched. This paper will describe the benefits and challenges of working with various stakeholders, among them the network's Consumer Consulting Group, consisting of parents, caregivers, and young adults. We will show how, with input from the Consumer Consulting Group, we were able to update our information with new content at appropriate reading levels, engaging visual designs, messages of hope and resilience, and more detailed information about treatment options. The findings from our

experience will encourage others to utilize consumers in the development of web projects.

Providing Resources Supporting the Enhanced National Standards for Culturally and Linguistically Appropriate Services in Health Care

Faye D. Williams
Knowledge Center Manager, Department of Health and Human Services, Washington, District of Columbia

Sunday, May 18
4:54 PM - 5:13 PM

Room: Columbus EF, Gold Level, East Tower

Objectives: This presentation will discuss the overall goals for the National Standards for Culturally and Linguistically Appropriate Services in Health Care (CLAS Standards), as well as describe key resources available to health care personnel, advocacy organizations, and libraries that serve these organizations.
Methods: The mission of the Department of Health and Human Services (HHS) Office of Minority Health (OMH) is to improve and protect the health of racial and ethnic minority populations through the development of health policies and programs that will eliminate health disparities. The office advises HHS on public health programs affecting minority populations. As part of OMH, the OMH Resource Center offers research, training, and community outreach services. In 2001, this office released the first CLAS Standards. Enhanced standards were released in 2013 to encourage disparities reduction programs in a broader array of health care organizations. Overall goals for the standards, along with explanations of related content from the OMH Knowledge Center online catalog, will show how libraries, researchers, and consumers can obtain culturally appropriate materials.
Results: The resource center continues to support the CLAS Standards outreach programs sponsored by the federal OMH. The online library catalog includes over 2,500 citations specifically related to cultural competency topics and over 700 consumer-level health information brochures in languages other than English. The digitization program is making additional materials available to the public via its Internet archive online collection. This collection has had over 5,000 downloads by the general public since 2011.
Conclusions: Federal programs that support cultural competency efforts can assist health providers, health care institutions, libraries, and community groups in improving the health outcomes of their patients and clientele.

If You Build a Patient Portal, Will They Come?

Prudence W. Dalrymple, AHIP, FMLA
Teaching and Research Professor, Director, Institute for Health Informatics, Drexel University, Philadelphia, Pennsylvania

Anthony Luberti
Medical Director, Informatics Education, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania

Michelle Rogers
Assistant Professor, Drexel University, Philadelphia, Pennsylvania

Lisl Zach
Associate Teaching Professor, Drexel University, Philadelphia, Pennsylvania

Sunday, May 18
5:13 PM - 5:32 PM

Room: Columbus EF, Gold Level, East Tower

Objectives: In consultation with the physician heading portal implementation at a pediatric hospital, we sought to identify patterns of Internet access, health information seeking, and potential portal use by parents and caregivers at five affiliated practices serving children and families of diverse backgrounds in a large metropolitan area that includes health disparities populations.
Methods: Prior to full portal implementation, we administered a survey to assess patient readiness to adopt a portal containing clinical and educational information. After field testing and approval by the institutional review board, the 26-item instrument was to 270 participants from August 2012 to January 2013. Survey items included demographics (age, race, and education), Internet use and experience, mobile device access, health information seeking, health literacy, and potential portal use. Data were entered into an electronic database for analysis.
Results: Survey respondents were predominantly female (80%), high school graduates (92%), younger than 40 (60%), whose income exceeds $25,000. The sample included white (40%), African American (38%), and Hispanic or Latino (14%) participants. Most (70%) reported accessing the Internet several times weekly, primarily using a handheld device such as a smartphone, but only 36% reported conducting information searches. When asked about using a portal for administrative tasks (appointments, prescription refills, email), 60% of the participants said they would access it "usually," and a similar number (59%) would view personal information such as test results. Only 10.5% expressed no interest in portal use. Most respondents prefer to direct their health questions to a person, either a clinician (63%) or family member (35.7%). Although 69% indicated they had no problems learning about health issues, only 60% felt very

comfortable filling out medical forms on their own, and only 56% felt that they never needed help with reading health-related materials.

Conclusions: Our study indicated that participants' health information seeking was done primarily for themselves (59%) or other family members (44%). When looking for answers to health questions, participants prefer to consult clinicians, trusted community members, and loved ones. Of importance to health sciences librarians is our finding that nearly 70% of survey respondents reported using a mobile device to access the Internet and that most people meet their health information needs through clinicians or family members. Librarians who collaborate with the designers of health portals that include health information and educational materials may find this observation useful in ensuring that the information they provide is optimized for mobile access.

Do You Want Me? What Attracts Users and Can Repel Them from a Consumer Health Website

Cynthia L. Henderson, AHIP
Executive Director, Howard University, Howard University, Washington, District of Columbia

Sunday, May 18
5:32 PM - 5:51 PM

Room: Columbus EF, Gold Level, East Tower

Medical Informatics Section

Information Building Blocks: Open Data Initiatives and Trends

A Tale of Two Data Catalogs

Kevin Read
National Library of Medicine Associate Fellow, New York University Langone Medical Center, New York, New York

Sunday, May 18
4:35 PM - 4:54 PM

Room: Columbus AB, Gold Level, East Tower

Description: This presentation will describe two studies undertaken to build two separate data catalogs: the first for National Institutes of Health (NIH)-funded datasets and the second for institutional datasets created within an academic medical center. To inform the creation of an NIH data catalog, the purpose of the first study was to (a) develop a set of minimal metadata elements used to describe datasets and (b) carry out an analysis to identify datasets in NIH-funded research articles that do not provide an indication that their data have been shared in a data repository. This study served as the foundation for developing an index of all NIH-funded datasets and provided information about in what repositories researchers share their data most often. The second study was spurred on by the first and involved interviewing institutional faculty members and researchers to learn more about how they collect data, what challenges they face when collecting data, whether they have thought about sharing data, and what they would find most useful from an institutional data catalog. The results of this study informed the workflows, metadata creation, and requirements for building a data catalog within the medical center. Additionally, interview responses were used to further inform the data services provided by the health sciences library, including education, research consultations, and clinical quality improvement initiatives. Both studies provide various examples of how a librarian working in the health sciences can contribute to and participate in data-related services within their institution.

Building Blocks: Contributing to Open Data Initiatives by Teaching Data Reuse Workshops

Megan Laurance
Research Informationist, University of California, San Francisco, California

Sunday, May 18
4:54 PM - 5:13 PM

Room: Columbus AB, Gold Level, East Tower

Objectives: This paper examines the results of a pilot workshop, entitled "Introduction to Genomic Data Repositories and Data Mining," offered to students, postdocs, staff, and faculty in the basic and translational sciences as a way to promote open data initiatives and increase awareness of the value that open data brings to science and individual scientists.
Methods: There is a wealth of publicly available genomic and genetic data available to researchers through microarray, next generation sequencing, and genetic variant data repositories. However, many researchers are not aware of these research data repositories or how to take advantage of the data to generate hypotheses, validate novel findings, or use as tools for teaching the next generation of researchers about big data. To promote the value of open data initiatives, we created a workshop that helps researchers navigate the genomic data repository space, query for datasets of interest, and identify tools and services available for data analysis and interpretation in a biological context. This paper describes the value of this workshop, as measured by attendance and feedback, and by subsequent opportunities for curriculum-based workshops that have arisen due to the initial pilot workshop.
Results: In November 2013, we launched a new workshop series, entitled "Bioinformatics Resources for Biologists," and used it to pilot a new workshop, "Introduction to Genomic Data Repositories and Data Mining." The workshop consisted of a forty-five-minute lecture on data repositories, data sharing policies, and the ecosystem of tools surrounding data repositories, followed by a hands-on exercise in which the attendees learned how to search the National Center for Biotechnology Information's Gene Expression Omnibus (GEO) (www.ncbi.nlm.nih.gov/geo/) for a genomic dataset of interest and analyze it with GEO2R (www.ncbi.nlm.nih.gov/geo/geo2r/). The workshop was well attended, and well received. Attendees included students, faculty, and staff, with postdocs composing the largest group. Feedback, solicited through a survey handed out in class, was overwhelmingly positive, with the most consistent request for improvement being "more time for hands-on exercises" and "additional workshops on genetic variant data repositories." This workshop was subsequently included in the winter-quarter curriculum for PhD students in the Biomedical Sciences Program, and will be offered to the research community at the University of California-San Francisco as needed.

Conclusions: This workshop provides a valuable forum for us to educate our researchers about the policy, practices, and value of data sharing and reuse; is helping meet a significant need for training in bioinformatics and data management resources for biologists; and has resulted in ongoing requests for additional workshops.

Data Management, Open Data, and the Library: The 1K Challenge

Robin Champieux
Scholarly Communication Librarian/Assistant Professor, Oregon Health & Science University, Portland, OR

Melissa Haendel
Lead Ontologist/Assistant Professor, Oregon Health & Science University, Portland, Oregon

Nicole Vasilevsky
Biocurator and Project Manager, Oregon Health & Science University, Portland, Oregon

Jackie Wirz
Biomedical Research Specialist/Assistant Professor, Oregon Health & Science University, Portland, OR

Sunday, May 18
5:13 PM - 5:32 PM

Room: Columbus AB, Gold Level, East Tower

Objectives: The goal of this paper is to relate our grant-funded activities to identify information and data management, open data, and scholarly communications expertise within the library and to run customized workshops offering these skill sets to our research community.
Methods: In order to work closely and effectively with the research community on data needs, it is important to (1) identify what skills we have to offer, and (2) learn how to best leverage our skills to help patrons in their data needs. We began by performing an internal assessment of skill sets within a targeted team of data interested library staff, then developed an in-house presentation on "Data 101." Following the staff training event, library staff volunteered to participate in a larger workshop with our research community. A data open house was offered in October, during which four library faculty presented on the topics of data management, open data, repositories, scholarly communications, and alt metrics.

This event will be followed by small group consultations with researchers and additional library staff training sessions.

Results and Conclusions: Our results are still developing, but a clear need for data literacy education has been observed. As we continue our interviews with researchers, we will use this information to develop a new plan for library outreach and education efforts in the area of research data management.

Beyond the Data Flood: Opportunities for Data Engagement

Deborah H. Charbonneau
Assistant Professor, Wayne State University, Detroit , Michigan

Sunday, May 18
5:32 PM - 5:51 PM

Room: Columbus AB, Gold Level, East Tower

Description: What is data engagement? This presentation explores roles and opportunities for health sciences librarians to strategically engage in data initiatives at their institutions or organizations. Promising areas for data engagement relevant to data-intensive research environments will be highlighted.

Medical Library Education Section

New Voices

Preparing Medical Students for Residency: Efficacy of Evidence-Based Medicine Instruction

Alexander J. Carroll
Agriculture and Natural Resources Librarian, University of Maryland, College Park, Maryland

Sunday, May 18
4:35 PM - 5:00 PM

Room: Columbus CD, Gold Level, East Tower

Objectives: Are residents retaining the evidence-based medicine (EBM) skills learned during medical school and applying those EBM skills to improve patient outcomes? Can online resources be developed to effectively supplement face-to-face EBM instruction? Does embedding EBM instruction into all four years of medical school increase skill retention and improve learning outcomes?
Methods: This study was constructed by reviewing published literature on librarians providing EBM instruction to medical students. The literature review consulted three databases that index articles related to evidence-based medicine: ProQuest' Library and Information Science Abstracts (LISA), MEDLINE, and EBSCOHost' Library Literature & Information Science Full Text (LLIS). The search strings used are provided below:
LISA search strings: 1. su(evidence based medicine) AND instruction 2. medical students AND evidence based medicine 3. (SU.exact("EVIDENCE BASED MEDICINE") AND SU.exact("MEDICAL LIBRARIES")) 4. (SU.exact("TEACHING") AND SU.exact("MEDICINE"))
MEDLINE search strings: 1. evidence based medicine AND (medical students OR medical student education OR teaching medical students)
LLIS search strings: 1. su (evidence-based medicine) AND (su (medical students) OR su(Medicine -- Study & teaching))
Results: The literature on EBM instruction is divided over how well medical students retain EBM knowledge and skills into their residency programs. EBM instruction during medical school creates a foundational knowledge, but residents need to receive additional training and practice in order to retain a high level of

skill. However, several case studies suggest two pedagogical methods that could possibly improve the efficacy of EBM instruction within medical schools: creating online instruction tools that supplement traditional instruction methods and increasing the pervasiveness of EBM by integrating instruction into all four years of the medical school curriculum.

Conclusions: While EBM instruction in medical schools enables students to cultivate some of the needed skills in their residency programs, the mixed learning retention rates of residents suggests that there are opportunities to improve the EBM training currently being offered to medical students. Librarians must form strong working relationships with course directors, curriculum specialists, and deans. Through these relationships, librarians can gain influence in shaping medical school curricula to include innovative new pedagogical methods that can increase learning retention and ensure that medical students matriculating from their institutions are well prepared for the rigors of a residency program.

A Healthy Dose of Language: A Literature Review of Health Literacy and English as a Second Language Instruction

Myriam Martinez-Banuelos
MLIS Candidate, 2014, University of North Texas, Fort Worth, Texas

Sunday, May 18
5:00 PM - 5:25 PM

Room: Columbus CD, Gold Level, East Tower

Objective: To determine the programs, tools, and techniques that have been used to integrate health literacy into the instruction of English as a second language (ESL). Teaching individuals how to access and utilize health information is an important part of health sciences librarianship. There are many different populations that cannot be reached due to cultural, socioeconomic, or language barriers.

Methods: This literature review focused on non-native English speakers and the integration of health literacy concepts into ESL instruction. The literature reviewed from 2003 to 2013, sought to identify what programs, tools, and techniques have been created to support both health literacy and the acquisition of a new language.

Results: Various techniques were used in programs that integrated health literacy and ESL instruction such as integration of technology to locate online health information, development of support materials aimed for specific populations, incorporation of guided discussions, and the use of interactive

activities such as videos, vocabulary cards, games, and information gap exercises. The most common health topics covered in the programs were nutrition, hepatitis B, health and safety, and physical activity. The populations reached with these programs were mainly Hispanics, Asians, teenagers, and seniors. There were no tools identified in the literature that supported both disciplines.

Conclusion: Not many programs have been developed to support ESL instruction and health literacy. Nevertheless, the few programs and studies that were found in the literature review demonstrated the importance of integrating both disciplines. The development of these programs was based on the needs of specific population, and the curriculum was adapted according to cultural, socioeconomic, and language barriers. The literature also revealed that collaboration must exist between ESL instructors and health literacy specialists in order to design effective programs. Health sciences librarians play an important role in health literacy, and they can contribute significantly in the development of new programs that aim to benefit non-native English speakers.

Chasing the Cure in Well Country: The Valmora Industrial Sanatorium

Laura J. Hall
Manager, Special Collections and Interim Coordinator, Resource Access and Delivery, University of New Mexico Health Sciences, Albuquerque, NM

Gale Hannigan, AHIP
Research Professor, University of New Mexico Health Sciences, Albuquerque, NM

Jacob L. Nash
Resource Management Librarian, University of New Mexico Health Sciences, University of New Mexico Health Sciences Library and Informatics Center, Albuquerque, New Mexico

Sunday, May 18

5:25 PM - 5:50 PM

Room: Columbus CD, Gold Level, East Tower

Objective: This paper examines the processes and outcomes of a project to digitize a robust collection of local historical materials, with emphasis on promoting the use of the collection in the local curriculum, broadening access to the collection, as well as the long-term digital preservation of the collection.

Brief Description: Our institution received a Digital Preservation and Access (DiPA) Award to digitize items from the Carl H. Gellenthien collection housed in the library's archives. This collection encompasses eighty years of materials from a tuberculosis sanatorium in northern New Mexico that has been used for research and education in the past.

Methods: The collection was examined, and items were selected that "told the story" of life at Valmora Sanatorium. Documents and photographs were digitized using a high-resolution scanner and uploaded to the New Mexico Digital Collections server, employing the ContentDM software platform, where they are freely available for research and education. Individual items were tagged with metadata to ensure findability and long-term preservation. The collection is findable from the New Mexico Digital Collection, the library's website, and the Rocky Mountain Online Archives catalog.

Building the Bioinformationist Pipeline

Karen E. Gutzman
Associate Fellow, Washington University in St. Louis, St. Louis, MO

Kristi L. Holmes
Director, Galter Health Sciences Library, Northwestern University Clinical and Translational Sciences Institute (NUCATS), Chicago, Illinois

Sunday, May 18
5:32 PM - 5:51 PM

Room: Columbus CD, Gold Level, East Tower

Description: Now more than ever, libraries are positioned to offer a wide variety of support services to basic science and clinical researchers at academic medical centers. This presentation will discuss skills and competencies for librarians who wish to offer this type of support and will provide several options available to librarians to obtain the training necessary for this type of role, including workshops, training courses, academic coursework, online learning modules, and more. Several options for possible library-based service models and how they align with current job prospects will also be discussed. Finally, we will address the requirements of rolling bioinformatics support services out at the local level, including specific ideas for librarians to better understand the research environment, client needs, and institutional priorities. The session will wrap up with a fun role-play that touches on some of the topics covered in the session.

2014 National Program Committee

Open Spaces: Collaborations to Build our Information Future

Building the Global Future, One Relationship at a Time: Challenges and Rewards in a Cooperative International Project

Bette Anton
Head (retired), University of California, Berkeley, California

Pamela C. Sieving
Biomedical Librarian/Informationist, National Institutes of Health, Bethesda, Maryland

Sunday, May 18
4:35 PM - 4:54 PM

Room: Columbus KL, Gold Level, East Tower

Objectives: The objective is to discuss the planned and unexpected challenges and rewards in dealing with partners in international cooperative library programs. The partners are the Association of Vision Science Librarians (AVSL), librarians developing country resource centers, the Seva Foundation, and the Elsevier Foundation.
Methods: Vision is life-giving, particularly in developing countries. A team of US-based vision librarians collaborated with staff of a US-based nonprofit with expertise in global access to vision care. The team received a three-year grant from the Elsevier Foundation to improve access to information needed to advance and improve vision care at centers providing free and low-cost eye care in India, Nepal, Egypt, Guatemala, and Tanzania. This paper describes successful achievements in the first two years of the grant, opportunities still remaining for the final year, and the unexpected challenges along the way. We believe the lessons learned are important for the successful completion of the project and informative for others interested in similar work.
Results: Results include creation of a mentorship program, development of a means of group communications, and workshops bringing representatives of all

institutions together. We are currently working with individual partner institutions to develop plans for small grants that will ultimately improve access to the ophthalmic literature.

Conclusions: We have had many successes and some challenges. An important goal for the final year of the grant is to address those challenges.

Collaboratively Creating an Evidence Base for Our Publicly Accessible Information Future

Lauren Maggio
Director, Research and Instruction, Stanford University School of Medicine, Stanford, California

Laura Moorhead
Research Assistant, Stanford University Graduate School of Education, San Francisco, California

John Willinsky
Professor, Stanford University Graduate School of Education, Stanford, California

Sunday, May 18

4:54 PM - 5:13 PM

Room: Columbus KL, Gold Level, East Tower

Objectives: In 2013, federal agencies were directed to expand public access to federally funded research. Libraries must prepare for this expansion, which has implications for information literacy and collection development. This study, a collaboration between an education and medical school, aims to build an evidence base describing physician behavior when provided with relatively complete access to biomedical literature.

Methods: Using Twitter, LinkedIn, Facebook, and professional association email discussion lists, we recruited 352 licensed physicians from 42 states practicing in over 20 specialties to participate in a year-long randomized controlled trial to observe their use of research literature. All participants received 11 months of access to the research collection of a major academic medical center. Participants were either randomized to an early start group, which granted access to the literature immediately, or a late-start group, which had delayed access for 1 month. Access was provided via a specialized web portal that included links to PubMed and UpToDate. The portal, accessible via mobile device or computer, tracked participant clicks to PubMed and UpToDate, use of search terms and Boolean operators, views of abstracts, and the meta-data of all

articles accessed, including publication type, date and source, Medical Subject Headings terms and PMC status.

Tripartite Collaboration for National Institutes of Health Public Access Policy Compliance: The Library, the Clinical and Translational Science Institute , and the Office of Research

Wajeeh Bajwa
Director, Regulatory Knowledge and Research Support Program, University of Florida, Gainesville, FL

Olivia Davey
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Jennifer A. Lyon, AHIP
Clinical Research Librarian, University of Florida, Gainesville, FL

Christina Moore
Program Assistant, University of Florida, Gainesville, FL

Alicia Turner
Assistant Director, Quality Improvement, University of Florida, Gainesville, FL

Sunday, May 18
5:13 PM - 5:32 PM

Room: Columbus KL, Gold Level, East Tower

Objectives: The University of Florida (UF) received $160M grant support from the National Institutes of Health (NIH) in 2012. The NIH's announcement of delayed award processing pending full public access policy compliance led to a coordinated planning effort between the Clinical and Translational Science Institute (CTSI), the Office of Research (OR), and the Health Science Center Libraries (HSCL) to increase compliance levels.

Methods: The program assistant in the OR Division of Research Compliance (DRC), an information technology expert in the OR, and the lead health sciences librarian were assigned access to the NIH's Public Access Compliance Monitor (PACM) and developed an email notification that was sent to 1,094 faculty and first authors on February 12, 2013. The program assistant extensively checked the PACM list, re-notified 751 faculty on July 31, and regularly repeats UF-wide

notification thrice annually. The librarian developed a LibGuide, trained other librarians, created video and slide presentations, and facilitated library-based training sessions. The CTSI director of regulatory affairs collaborated with the librarian to train a compliance coordinator to coordinate support for CTSI-associated researchers. Compliance was taught in CTSI courses, support obtained from Academic Health Center leadership, and hundreds of group and individualized consultations held over the past year.

Results: Support from UF leadership through the OR was vital to launching an institution-wide compliance effort. Cooperation and shared problem solving between all 3 units streamlined support for UF faculty and research staff. Comparison of PACM reports run monthly by the librarian to CTSI-based lists of grant-supported projects and publications by the CTSI compliance coordinator allowed targeting of non-compliant principal investigators (PIs) at high risk of losing funding and supplemented the broader OR notifications. Training of multiple liaison librarians to offer assistance to their assigned departments and colleges lessened the load on the lead librarian. The compliance effort has increased UF's compliance percentage from 77% in February 2013 to 88% in April 2014. The total number of non-compliant articles was reduced from >1,200 to 552, and the number of non-compliant PIs was reduced from 1,093 to 150.

Conclusions: At the beginning of the UF-wide institutional effort to comply with the NIH public access policy in early 2013, the task appeared daunting. More than 1,000 PIs were out of compliance for >1,200 articles going back to 2008. Multiple silos within the university had a stake in the process, necessitating extensive collaboration. Beginning with an initial meeting, cooperative efforts developed, involving the HSCL, the OR-Research Compliance, and the CTSI. Relying on open information and problem-resolution sharing between these 3 infrastructure units enhanced compliance efforts and led to a demanding, but successful and continuing compliance process.

Facilitating Collaboration across International Boundaries: A Medical Librarian Job Exchange Program

Martha Knuth
Assistant Professor, Sungkyunkwan University, Portage, Michigan

Fred Pond
Library Associate Professor, University of Vermont, Burlington, Vermont

Elizabeth (Beth) Whipple, AHIP
Research Informationist/Associate Librarian, Indiana University School of Medicine, Indianapolis, Indiana

Sunday, May 18
5:32 PM - 5:51 PM

Room: Columbus KL, Gold Level, East Tower

Objectives: Collaboration between medical librarians internationally encourages new approaches to problems and different solutions, contributing to the overall improvement of global health. This paper explores the creation and design of an international job exchange program, providing specifics on pursuing exchanges such as identifying host libraries and librarians, and hosting options overseas. Challenges encountered throughout the process will be presented.
Methods: Medical librarians are eager to gain first-hand knowledge from international colleagues, enabling them to provide the best information and service possible to their users. A task force of the International Cooperation Section spearheaded the creation of a job exchange program with the Korean Medical Library Association, intending to provide a how-to process for librarians interested in professional exchanges. Broadening the mission to include other countries, the task force developed guidelines to guide prospective librarians and institutions; addressing selection process, obligations--detailing both the individual and institution perspectives; including an online application designed to move the process forward across the oceans. Guidelines include the use of surveys to discover shared goals for an exchange as well as post-surveys to evaluate completed international exchanges. This program will serve as a model for international exchanges among medical libraries and librarians.

Federal Libraries Section
Patient-Centered Care

Personalizing Health Communication: Using Health Literacy and Learning Style Preferences to Improve Patients' Diabetes Knowledge

Hannah Epelbaum
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Marcia Epelbaum
Assistant Director and Training Coordinator, Vanderbilt University Medical Center, Nashville, Tennessee

Nunzia B. Giuse, AHIP, FMLA
Assistant Vice Chancellor, Knowledge Management; and Director, Eskind Biomedical Library; and Professor, Department of Biomedical Informatics and Department of Medicine, Vanderbilt University Medical Center, Nashville, Tennessee

Suzanne Hurley
Director, University Community Health Services, Nashville, Tennessee

Taneya Y. Koonce
Deputy Director, Vanderbilt University Medical Center, Nashville, Tennessee

Kenneth A. Wallston
Professor, Vanderbilt University Medical Center

Sunday, May 18
4:35 PM - 4:50 PM

Room: Columbus IJ, Gold Level, East Tower

Objectives: In previous research, we demonstrated that educational information tailored to individual health literacy and learning style preferences significantly increased hypertensive patients' knowledge of their condition. In the work outlined below, we tested the effectiveness of our successful approach within a local community health clinic's diabetic patient population.

Methods: In community health centers, diabetes presents a significant public health challenge, as patients seen in these settings are at increased risk for adverse health outcomes. In this study, we enrolled 160 type II diabetic patients from a local community health center. Patients' diabetes knowledge was assessed using the Michigan Diabetes Test and numeracy and health literacy levels were measured using 2 3-item subjective questionnaires. Patients self-assessed their preferred learning styles, information that was then used in combination with their literacy level. All participants were subsequently randomly allocated to control and intervention groups. Intervention group participants received our personalized education materials; individuals in the control group did not receive the material. Two and 6 weeks after the clinic visit, we re-administered the diabetes knowledge test to evaluate diabetes knowledge changes.

Results/Conclusions: Results from this research demonstrated that our unique approach for personalizing health information to individual health literacy and learning style preferences increased diabetic patients' ability to understand the intricacies of their health condition. Learning improvements were observed at multiple time points after the initial clinic interaction, thus illustrating the sustained effectiveness of the personalized intervention. These results also provide strong evidence for the generalizability of our model across multiple health care conditions. Our model can help inform optimal methods for health communication practices and encourage greater patient participation in their care regimens.

Patient Interests in Medical Research and the Potential to Help Redefine the Library Space in a Hospital's Family Resource and Information Center

Lauren Maggio
Director, Research and Instruction, Stanford University School of Medicine, Stanford, California

Laura Moorhead
Research Assistant, Stanford University Graduate School of Education, San Francisco, California

Sunday, May 18
4:50 PM - 5:05 PM

Room: Columbus IJ, Gold Level, East Tower

Objectives: This study assesses patients' interest and behaviors around health information use and highlights an opportunity to make information more transparent, openly available, and useable for patients. The study considers how librarians might connect patients with best evidence in a patient-centered way that is practical for their institution and supportive of the 2013 federal mandate to make federally funded research publicly available.

Methods: This exploratory study was conducted at a family resource and information center in an independent teaching hospital in Northern California, where three-quarters of visitors were at or below the federal poverty level. In the first phase (56 self-reported patient surveys and a librarian interview), participants were asked about their use and value of health information over the previous 12 months. In the second phase (24.5 hours of observations of 141 patients and another librarian interview), researchers observed patient behaviors for obtaining information and interviewed center librarians to triangulate preliminary findings. All research mapped to the questions: "What health information do patients say they use and value?" "What are the behaviors patients rely on when trying to attain health information? "What are patients' expectations around physician awareness and sharing of research?" "How might librarians help patients attain best evidence?"

Facilitating Patient-Physician Communication and Patient Engagement for Enhance Patient-Centered Care

Linda C. Butson, AHIP
Consumer Health and Community Outreach Librarian, University of Florida, Gainesville, Florida

Ryan Nall
Assistant Professor, Medicine, University of Florida, Gainesville, Florida

Hannah Norton, AHIP
Liaison Librarian, University of Florida, Gainesville, Florida

Sunday, May 18

5:05 PM - 5:20 PM

Room: Columbus IJ, Gold Level, East Tower

Objectives: To test the hypothesis that patients who are assisted by librarians in preparing questions before their physicians' visits and provided with high-quality consumer health information at an appropriate literacy level before and after clinic visits will have better interactions with health care providers and take a

more active role in their health care.

Methods: Continuing previous work, librarians were embedded in an outpatient internal medicine clinic four hours per week, where they interacted with patients in the clinic waiting room. Interested patients completed a questionnaire addressing their health information seeking habits, technology access, preferred learning styles, and health literacy. Using this feedback, the librarians helped patients find consumer health information suited to their preferred learning styles and health literacy level and helped patients develop questions for their doctors. Incorporating information prescriptions in the project increased the scope of physicians' participation by enabling all clinic physicians, regardless of their clinic schedule, to refer patients to additional health information. Information prescription pads from the National Library of Medicine were customized to direct patients either to look at MedlinePlus themselves or to consult with a librarian in person, by email, or by phone.

Results: Twenty-eight resident and attending physicians were enrolled in the study; they were administered pre-intervention and post-intervention surveys addressing their standard communication with patients and whether they believed that the librarians' presence and/or information prescriptions improved their communication with patients or patients' understanding of their health. Patients continue to be enrolled during the course of weekly visits to the internal medicine clinic. In general, contact with patients must be initiated by the librarian. The internal medicine clinic has become quite efficient at taking patients back to exam rooms quickly, leaving less time in the waiting room for a potential interaction with the librarian. This service may be better suited to services with longer wait times or the librarian's presence in a different location within the clinic.

Conclusion: Librarians can help patients and physicians communicate by providing access to shared information resources for discussion. Additional work is needed to determine impact of the librarian intervention, including identifying potential clinical outcome measures.

Hey, I Do That All the Time! Is That What It's Called?: Shared Decision Making and the Librarian's Role

Melissa Helwig
Information Services Librarian, Dalhousie University, Halifax, Nova Scotia, Canada

Lindsey Sikora
Health Sciences Research Liaison Librarian, University of Ottawa, Ottawa, Ontario, Canada

Sunday, May 18
5:20 PM - 5:35 PM

Room: Columbus IJ, Gold Level, East Tower

Objectives: As physicians and patients engage in shared decision making (SDM), where does the librarian fit in? While librarians are engaged in SDM, it may not be labelled as such. We conducted a scoping review in order to clarify these roles and explore opportunities. Our objective includes disseminating our findings, while gathering feedback from librarians regarding their perceived roles in SDM.

Methods: Our project is divided into 3 phases: Phase 1 included a scoping review that identified librarian engagement in SDM. The emerging themes in clinical and research activities included: education and programming, quality of information, space, and technology. Phase 2 involves knowledge translation from the scoping review and a questionnaire administered to health librarians in order to gain further insight into the potential roles of librarians in SDM, "labelling" of these roles, and their levels of engagement and awareness. The final phase will involve taking the results of the questionnaire and finding ways of implementing SDM in librarianship in a cohesive fashion. Phase 3 will not be completed until after MLA '14.

Results: Our scoping review demonstrated that while librarians are engaged in SDM, terminology and approach varied greatly. Based on these results, two recommendations are supported:
1. Librarians are participating in SDM, identified through emerging themes in the literature, however, a greater awareness and cohesiveness is required to further identify these roles;
2. Implementation of SDM is challenging; greater research is needed to assess the best practices of SDM application for librarians. Key findings support that librarians are engaged with both patients and health care professionals in SDM, but in varying degrees and different ways, which will be further discussed in our presentation. In order to further improve our understanding of SDM practices in health librarianship, a questionnaire will be administered to librarians in order to gain insight into their involvement in SDM.

Conclusions: While SDM has been described and monitored among health professionals, librarians have not yet ascertained their SDM roles and skills. Following the dissemination of the results from our scoping review and questionnaire, we hope to formulate a more comprehensive view of the roles of information professionals within SDM. SDM is an important emerging culture in health care and librarians need to proactively identify opportunities to embed our skills and engage with patients and health professionals.

Outreach Superstructure: Partnering to Design and Build a Framework for Health Information Interventions to Support Family Caregivers' Medical Decision Making

Terri Ottosen, AHIP
Consumer Health Coordinator, University of Maryland, Baltimore, Maryland

Jamie E. Peacock
Outreach Librarian, National Library of Medicine, Bethesda, MD

Wilma Templin-Branner
Health Education Specialist, Oak Ridge Associated Universities (ORAU), Oak Ridge, Tennessee

Sunday, May 18
5:35 PM - 5:50 PM

Room: Columbus IJ, Gold Level, East Tower

Objectives: To combine the experience and expertise of three individuals from three different organizations to produce tutorials and training for family caregivers.
Methods: Family caregivers need a variety of quality health information resources to address the health care needs of themselves and their loved ones. It is estimated that family caregivers make up 29% of the population, or roughly 65 million people, who provide care to someone who is ill, disabled, or aged. Unpaid family caregivers will likely continue to be the largest source of long-term care services in the United States as the population of those 65 and over more than doubles by 2030. In order to more effectively address caregivers' multiple health information needs and disparate learning styles, 3 professionals collaborated to create a set of tutorials and materials to assist family caregivers with negotiating the wide array of essential health information.
Results: Using the technological experience of one professional, the family caregiver expertise of another, and the training and outreach background of the third, the team created scripts, scenarios, and videos to form an outreach intervention specifically designed for family caregivers. These products will be promoted through Facebook, Twitter, LinkedIn, and YouTube, as well as through onsite and virtual training classes, to ensure their availability and to promote their use by a wide audience.
Conclusions: Our two organizations, working with the third, have not previously collaborated to produce audience-specific trainings. Given the experience and knowledge each participant brought to this project and the rich discussion and conviviality of the working relationships, it is hoped that more collaboration will

result across the many organizations affiliated with the parent library. With the challenges present and future family caregivers face, it is imperative that more be done to provide outreach and information resources to those facing the often heavy burden of caring for a loved one.

Educational Media and Technologies Section

Structural Adjustments: Changes in Education

Building a Foundation for Lifelong Research: Emphasizing Open Access and Open Educational Resources in Allied Health Higher Education

Virginia Pannabecker
Health Sciences Librarian, Arizona State University, Phoenix, AZ

Sunday, May 18
4:35 PM - 4:50 PM

Room: Regency A, Gold Level, West Tower

Objectives: Highlight top open access and open educational resources in health sciences and provide examples of their use in supporting higher education curriculum needs to respond to online, distance, flipped classroom, and hybrid learning structures, and to ensure familiarity with lifelong continuing education and research resources for evidence-based practice in allied health fields.
Methods: "a student's education is only as valuable as the information that a student has access to" Matt Cooper (president of the National Association of Graduate and Professional Students, 2012). Evidence-based practice is no longer a new concept in health professions or education, but its integration into allied health higher education curricula and its inclusion by health professionals in everyday, lifelong practice still presents challenges. One challenge is affordable access to research study findings and data, and to resources that index such information. A librarian from a public, research-1 university will draw from experiences and practices at her institution, and from a review of such at similar institutions. She will present methods to promote: use of open access and open educational resources, greater participation in these movements, and curriculum-related applications.
Results: This flipped presentation will include an overview of top overall and health sciences-related open access and open educational resources: how to find them and suggestions for evaluation criteria. It will also include options to promote and use Creative Commons search and licensing for discovering and

sharing materials licensed for others to use, reuse, and adapt. Methods for promoting open access and open educational resources in higher educational and other settings will follow, with a final overview of newly expanding options for do-it-yourself and open science initiatives including opportunities for involvement in health research and innovation.

Conclusions: Join us, and bring your laptop, tablet, or mobile device! This presentation will be a "flipped presentation," with a brief (ten-to-fifteen minutes) voice-over PowerPoint presentation sent out ahead of time. The in-person session will offer a hands-on approach with opportunities to delve into using one or more major sources of open access or open educational resources to discover resources to recommend for supporting curricula, professional development, or training. You will also have a chance to collaborate with colleagues and explore ideas for promotional events and materials to build awareness of open access and open education initiatives. Leave with first-hand knowledge of new resources and an action plan for an event to promote these important initiatives within your community.

Theory-Based Techniques for Active Learning in the Evidence-Based Medicine Classroom

Nancy Adams
Associate Director, Coordinator, Education, and Instruction, Penn State, Hershey, Pennsylvania

Alan Adelman
Professor, Penn State Hershey College of Medicine, Hershey, Pennsylvania

Jay Zimmermann
Assistant Professor, Penn State Hershey College of Medicine, Hershey, Pennsylvania

Sunday, May 18
4:50 PM - 5:05 PM

Room: Regency A, Gold Level, West Tower

Objectives: Inspired by the "flipped classroom" concept, our objective was to transform our teaching in two required evidence-based medicine courses in the undergraduate medical curriculum. Rather than focusing on a transmission mode in which we "delivered" course content, we desired to use a constructivist mode, based on adult learning theory, that attended to the social aspect of learning.

Methods: We employed methods inspired by the "flipped classroom" approach and supported by constructivist learning theory. Two lecture topics were

selected: introduction to evidence-based medicine information resources and diagnostic test characteristics. One week prior to the scheduled class, learners were assigned readings, short instructor-produced videos, and exploratory searches in information sources. They submitted written answers to questions on the topic in the course management system prior to the lecture. This revealed learners' common misconceptions about the topics and allowed us to tailor the lecture to address these during the first portion of the class period. We then used a "think-pair-share" peer-teaching protocol with a series of conceptual questions. Using an audience response system, learners committed to answers individually, discussed with a partner, then voted again.

Results: Learners engaged in significant task-focused discussions with peers. Evidence of peer teaching was shown when learners changed their "votes" on the conceptual questions following these discussions. Increased engagement during large-group discussion of the topics was also noted by instructors. Writing conceptual questions that called for significant understanding of the underlying concepts of test characteristics and information sources--not just using formulas or doing a quick search--was time consuming for instructors. This method allowed learners to assume greater control over their learning since their prior understanding was used to tailor lecture content.

Conclusions: This approach can be implemented by instruction librarians who have sessions integrated into health sciences curricula. Advance collaboration with the course instructor is required so that learners can be assigned the advance readings and answer pre-lecture questions. This method is more labor intensive and risky than a traditional lecture, as there is significant preparation and the instructor must "think on her feet" and cede more control to learners. Use of this method increases interaction between students and engagement with course content, which should lead to deeper understanding.

Using Team-Based Learning to Engage Medical Students in Evidence-Based Practice, Epidemiology, and Biostatistics

Courtney D. Lynch
Assistant Professor, Epidemiology, Obstetrics and Gynecology, and Pediatrics, Ohio State University, Columbus , Ohio

Stephanie J. Schulte
Assistant Professor/Education and Reference Services Coordinator, Ohio State University, Columbus, OH

Sunday, May 18
5:05 PM - 5:20 PM

Room: Regency A, Gold Level, West Tower

Objectives: To introduce librarians to the concept and benefits of team-based learning (TBL) to teach essentials of evidence-based practice, epidemiology, and biostatistics. The session will include fundamentals and logistics of conducting TBL as well as information about personal experience applying the method to evidence-based practice education.
Methods: A complete redesign of the college of medicine medical school curriculum allowed the thoughtful inclusion of evidence-based practice concepts, including articulating questions, searching the literature, and critically appraising studies. The redesign also included integrating several TBL sessions, a flipped teaching method requiring accountability for pre-class preparation and more focus on application of knowledge during class. As a result of this redesign, several online modules produced with Articulate software were presented within the curriculum management system utilized by the college of medicine. After one year of trying more traditional approaches to assessment of evidence-based practice essentials and decreasing time for live lectures on epidemiology and biostatistics, one librarian and one epidemiology faculty member teamed up to design and co-teach a TBL session for first year medical students.
Results: This guided learning activity provides an interactive flipped learning experience for even large classes. Teaching about 100 students each day for 3 hours, the instructors successfully held students accountable for the online content, while also utilizing a case-based approach to dive into deeper discussions about questions, resources, searching, and study design. A full technology team was engaged behind the scenes to prepare test materials, presentations with clickers integrated within, and record-keeping. Lessons learned will be shared.
Conclusions: TBL requires a thoughtful approach and can be time consuming during the preparation phase. However, the interactive format provides a conduit for rich discussions that may be lacking during online educational modules.

Faculty Development Series: Teaching Enhancement for Instruction Librarians

Rebecca Abromitis
Reference Librarian, University of Pittsburgh, Pittsburgh, PA

Linda M. Hartman, AHIP
Reference Librarian, University of Pittsburgh, Pittsburgh, Pennsylvania

Ester Saghafi
Reference Librarian, University of Pittsburgh, Pittsburgh, Pennsylvania

Patricia M. Weiss
Reference and Information Technology Librarian, University of Pittsburgh, Pittsburgh, PA

Sunday, May 18
5:20 PM - 5:35 PM

Room: Regency A, Gold Level, West Tower

Objectives: Most library instruction occurs in single-session format, with little time to build rapport with students. In addition, professional training for librarians does not generally include didactics or teaching skills. This paper discusses a faculty development series created for the purpose of expanding the teaching repertoire of instructors, including techniques for building student participation and evidence-based methods for improving learning for knowledge retention.
Methods: In an academic health sciences library, a team of instruction librarians with a shared interest in the enhancement of teaching collectively identified topics that could be readily adapted to enrich student learning during any typical one-hour library instruction session. Through self-directed learning, each team member investigated specific teaching enhancement topics. They presented their findings to fellow librarians, modeling the technique being discussed, in a series of eight monthly faculty development presentations. Topics included: adult learning styles and needs, use of in-class assessment, games, technology in instruction, and evidence-based design and visual presentation techniques. Faculty librarians attending the series were expected to "change at least one thing" during their subsequent instruction sessions and then to report, in a final sharing session, successes, failures, and anecdotes from their experiments with teaching enhancement techniques.
Results: A series of eight workshops was produced by a team of five librarians and presented as a faculty development series during 2013. The proposed outcome to "change one thing" was met by ten faculty librarians, who provided examples during a sharing session of the ways workshop attendance impacted their subsequent library instruction. Changes included use of: in-class assessments (pop quizzes; pre/post-tests); games; learner-selected choices; storytelling; short answer exercises; slide composition and design; and consideration of learning styles.
Conclusions: The faculty development series presented by the Teaching Enhancement Group succeeded in encouraging ten faculty librarians to experiment with teaching enhancement techniques. The series raised awareness of adult learners' needs, and provided concrete examples which could be incorporated into one-hour instruction sessions. Faculty librarians were generally positive about the series, and one said, "The techniques were fun because they engaged the group."

Flip-Flop: Reflections on Reversing Flipped Information Literacy Instruction for Pre-College Health Profession Students

Kim Mears, AHIP
Nursing Information Librarian, Georgia Regents University, Augusta, Georgia

Peter Shipman
Dental Medicine and Cancer Librarian, Research and Education Services, Georgia Regents University, Augusta, Georgia

Sunday, May 18
5:35 PM - 5:50 PM

Room: Regency A, Gold Level, West Tower

Objective: To modify a face-to-face six-session information literacy course to a five-session flipped information literacy course for a pre-college health professions students using an online learning management system to improve information literacy skills.

Methods: The academic health sciences library participates annually in a 7-week summer enrichment program sponsored by the medical school's diversity office to familiarize pre-college students with health sciences educational opportunities. The program aims to help students identify career paths and prepare for the health sciences admissions process through a series of coursework, including a Library Research Seminar (LRS). The 2013 cohort of 10 students attend a face-to-face orientation and 5 1.5 hour sessions, representing 5% of the pre-college curriculum.

The LRS consists of a pretest, posttest, and four quizzes on information literacy and evidence-based practice topics. Two librarians co-teach the class in traditional lecture/hands-on format with handouts. The 2013 seminar was anticipated to move lecture and testing to the institution's learning management system, Desire2Learn, and reserve face-to-face time for active problem solving and testing of the online lecture content within a flipped learning environment.

Results: The technical complications with enrollment management systems for processing temporary students led to one group of students properly engaging with Desire2Learn and the enterprise email system, and a second group excluded from these systems. The first group could view lectures and take tests online and use enterprise email, while the second group had to be emailed links to lecture content and tested with paper. The first quiz results were low across both groups compared to previous groups, which led the library instructors to reevaluate the ability of the students to absorb online content unguided. The instructors decided to revert to the traditional lecture and paper-based model to risk further experimentation with assessment outcomes. However, the online lectures were continued as a low-risk method of introducing students to learning

management systems they will encounter in their undergraduate experience.
Conclusion: More time and preparation is required to conceptualize and execute a flipped instructional environment than could be summoned during a time of rapid institutional change and the approaching fall term teaching loads. Reliable enrollment systems and growing familiarity with the learning management system along with advance course planning will provide a better environment for flipped instruction.

Collection Development Section
Vendor Negotiation Strategies

TBD

Sunday, May 18
4:35 PM - 5:00 PM

Room: Columbus GH, Gold Level, East Tower

N. Bernard (Buzzy) Basch

N. Bernard (Buzzy) Basch
President, Basch Subscriptions and Prenax, Concord, New Hampshire

Sunday, May 18
5:00 PM - 5:25 PM

Room: Columbus GH, Gold Level, East Tower

Elizabeth Lorbeer

Elizabeth Lorbeer, AHIP
Library Director, Western Michigan University, Kalamazoo, Michigan

Sunday, May 18
5:25 PM - 5:50 PM

Room: Columbus GH, Gold Level, East Tower

Monday, May 19

Nursing and Allied Health Resources Section

Architects of the Future: Managing 21st Century Resources

Combining Resources, Combining Forces: Regionalizing Hospital Library Services in a Large Statewide Health System

Basia Delawska-Elliott
Health Sciences Librarian, Providence St. Vincent Medical Center, Portland, Oregon

Heather J. Martin, AHIP
Director, Regional Library Services, Providence Health & Services, Portland, Oregon

Monday, May 19

10:35 AM - 10:54 AM

Room: Columbus KL, Gold Level, East Tower

Objectives: Amidst declining full-time equivalents (FTEs) and budgets, four hospital libraries were forced to adapt in order to survive or possibly even thrive. This paper describes the experience, including process, challenges, and lessons learned of an organizational shift to a regionalization of services, collections, and staffing. Insights from this process are shared and may help similar organizations going through restructuring, centralization, or mergers.
Methods: After an FTE reduction, 2 libraries situated in large teaching hospitals and 2 in small community hospitals in a western US statewide health system saw opportunity for expansion through a regional reorganization. Strategic planning and stakeholder interviews identified strengths, growth areas, and threats to successful implementation of a regional structure and established a plan for moving forward. Service areas were expanded to include the entire statewide health system. While FTE stayed static, the staffing model was reorganized, with a team approach reporting to a regional director. Eliminating duplicate subscriptions and cutting 80% of print titles, allowed for an addition of 100+ electronic titles, despite significant cost increases to license e-resources to the

entire health system, and expanding linking options dramatically improved findability. A regional intranet site was created to provide a single entry point, and a remote access solution developed.

Results: Despite a loss of 2/3 of the professional staff and a budgetary decrease of 27% over the previous 3 years, the health sciences libraries were able to grow business, usage, awareness, and collections through organizational innovation and improved efficiency following regionalization. The regionalization of the health sciences libraries was considered a success by library staff and administration. Initial usage statistics from the first year of regionalization show an average monthly increase of 25% in literature search requests and 6% in document delivery requests, demonstrating successful outreach, and an increase in internal efficiency as FTE was not adjusted to match increased business.

Conclusions: The regional library system in this state is seen as a model for regionalizing services and responsiveness to organizational change. It has been considered for replication in an additional statewide region of the parent health care system, as well as for a broader centralization of the five-state health care system.

Partnering with Postdocs: A Library-Hosted "How To" Training Series Taught by Postdocs

Ansuman Chattopadhyay
Head, Molecular Biology Information Service, University of PIttsburgh, Pittsburgh, Pennsylvania

Carrie L. Iwema, AHIP
Molecular Biology Information Specialist, University of Pittsburgh, Pittsburgh, Pennsylvania

Monday, May 19

10:54 AM - 11:13 AM

Room: Columbus KL, Gold Level, East Tower

Objectives: Postdoctoral associates rarely formally teach, as they typically spend their time conducting research. This can be problematic when searching for faculty positions requiring classroom teaching experience. To build new relationships with the postdoc community and provide them with a unique teaching opportunity, we created a "how to" training series hosted in the library and taught by postdocs.

Methods: Our health sciences library supports a large biomedical teaching, research, and clinical community. To explore novel user support possibilities requiring minimal expense but providing maximal impact, we contacted our

university's postdoctoral career development office for help creating a new teaching opportunity for biomedical postdocs. The topic is up to the instructor but must be a one-to-two hour "how to" style talk (not a seminar). The library works with the postdocs to create a workshop that is a positive teaching experience and instructive to attendees. All instructors are given feedback, letter of acknowledgement, and the option of being videotaped. The first series of six postdocs was successfully completed, covering such topics as CV creation, histology image processing, and cell culture tips. A second series is in production, building on lessons learned from the initial run.

How a Health Sciences Librarian Creates a Different Approach to Library Instruction

Gwen Wilson
Health Sciences Librarian, Washburn University, Topeka, KS

Monday, May 19
11:13 AM - 11:32 AM

Room: Columbus KL, Gold Level, East Tower

Objectives: To demonstrate how a single health sciences librarian in a university library goes beyond the one-shot library instruction by being embedded in the course learning management system.
Methods: Traditionally, the library is introduced during one class period, sometimes in less time than an entire class period. The concept of being an embedded librarian goes beyond the one-shot library instruction. There are multiple ways to be an embedded librarian. One way is to be physically embedded in the face-to-face class. The second way is to combine the face-to-face library instruction and an online presence in the learning management system. A third way provides online library instruction and an online presence in the learning management system. This paper will discuss in more detail the process a health sciences librarian took to provide these services and the challenges and benefits of providing these services to nursing and allied health courses.
Results: By going beyond the one-shot library instruction, the health sciences librarian has seen an increase in student success in relation to research-based assignments. The health sciences librarian experienced more students seeking help through face-to-face meetings, phone calls, email, and a discussion forum within the course in the learning management system.
Conclusions: The additional contact with students after the library one-shot reminds students how the health sciences librarian can assist them, and students responded by asking for assistance through a variation of formats.

Future Technological Practices: Medical Librarians' Skills and Information Structures for Continued Effectiveness in a Changing Environment

Patricia F. Anderson
Emerging Technologies Librarian, University of Michigan, Ann Arbor, MI

Skye Bickett, AHIP
Reference and Education Librarian, Philadelphia College of Osteopathic Medicine, Suwanee, GA

Joanne Doucette
Associate Director, Knowledge Management, and Assistant Professor, Massachusetts College of Pharmacy and Health Sciences University, Boston, MA

Pamela R. Herring, AHIP
Electronic Resources Librarian, University of Central Florida College of Medicine, Orlando, FL

Judith Kammerer, AHIP
Medical Librarian, University of California-San Francisco, Fresno, CA

Andrea Kepsel, AHIP
Health Sciences Educational Technology Librarian, Michigan State University, East Lansing, MI

Tierney Lyons
Reference Librarian, Penn State University-Worthington Scranton, Dunmore, PA

Scott McLachlan
Information Officer, Library, Oxford, United Kingdom

Ingrid Tonnison
Electronic Services Librarian, Central Coast Local Health District, Gosford, NSW, Australia

Lin Wu, AHIP
Reference Service Librarian, University of Tennessee, Memphis, TN

Monday, May 19

11:32 AM - 11:51 AM

Room: Columbus KL, Gold Level, East Tower

Objectives: In May 2013, MLA initiated a multi-team project to assess available evidence supporting medical librarianship practice related to key topics. The emerging technology team's assignment was to explore health care's information and technology explosion, thus identifying skill sets or information structure that medical libraries will need to continue as strong partners and contributors in the health sciences environment.

Methods: The team identified relevant emerging technologies through a survey and focus groups with medical librarians and healthcare leaders conducted in summer 2013. The authors then explored emerging technologies that impact the following settings: traditional librarianship, education and society, health care and public health, and the human body. In developing recommended search strategies to identify forthcoming tools, the authors defined and prioritized technologies as most important for consideration, described how each is applied in specific environments and identified the level of knowledge and competencies needed. They established a timeline for adoption for each setting, included librarians' roles for those technologies being currently adopted, where librarians provide education, versus those on the horizon in one to two years, where skills building and planning are needed, or those in the "hype" stage, where librarians should have awareness and the ability to track trends.

Results: For each of the four settings, the team identified a total of six to nine emerging technologies. These were further categorized by horizon: current, one to two years, and hype--with two to three technologies per stage and the librarians' role in each horizon stage.

Conclusions: This analysis will help librarians recognize which emerging technologies are currently being used and which will be seen in the years to come. It will show how the technologies can be applied in their setting and the role of librarians in implementation. Further or updated research will always be needed in this area because technology is constantly changing and libraries moving forward.

Leadership and Management Section

Building Capacity for Sustainable Innovation

Building Bridges: Sustaining Innovative Services to Support Internal Efficiencies in a Collaborative Partnership

Noreen Mulcahy
Health Sciences Librarian, Technical Services, Mount Carmel Health System, Columbus, Ohio

Tony Nguyen
Health Sciences Librarian, Mount Carmel Health System, Columbus, Ohio

Donald Pearson
Knowledge Management Library Technology Specialist, Mount Carmel Health System, Columbus, Ohio

Stevo Roksandic
Library Director, Mount Carmel Health System, Columbus, Ohio

Monday, May 19

10:35 AM - 10:54 AM

Room: Columbus IJ, Gold Level, East Tower

Objectives: A health system library integrated resources, services, and staffing to act as a virtual embedded library and informational service support of a health system in another state. This paper establishes an innovative partnership within an academic, hospital, and corporate setting.
Methods: A thorough evaluation of resources, staffing, and physical space in two separate health system libraries was conducted to determine if virtual services would be economical and beneficial to both health systems. Interviews and focus groups with hospital personnel of the potential health care partner were conducted to determine if virtual support would be economical and beneficial to

both health systems. Development of unified e-collections, redesigning of physical space, and an allocation of financial resources were evaluated, and ways to establish future partnership determined. After a beta test of library support, workflows were established, challenges assessed, organizational changes, and impact potential evaluated.

Welcome to the Family! Enjoying Massive Organizational Change

Mark Berendsen
Research Librarian, Northwestern University Feinberg School of Medicine, Chicago, Illinois

Heidi M. Nickisch Duggan
Interim Director, Northwestern University Feinberg School of Medicine, Chicago, Illinois

Linda O'Dwyer
Communications Coordinator and Education Librarian, Northwestern University Feinberg School of Medicine, Chicago, Illinois

Jeremy Prevost
Web Applications/Software Developer, Northwestern University Feinberg School of Medicine, Chicago, Illinois

Pamela L. Shaw
Biosciences and Bioinformatics Librarian, Northwestern University Feinberg School of Medicine, Chicago, Illinois

Mary Anne Zmaczynski
Public Services Librarian, Northwestern University Feinberg School of Medicine, Chicago, Illinois

Monday, May 19

10:54 AM - 11:13 AM

Room: Columbus IJ, Gold Level, East Tower

Objectives: Sometimes massive organizational restructuring can result from high-level administrative changes. New directors and deans mean new visions for academic institutions. Our library recently underwent full integration into our clinical and translational sciences institutes (CTSI). Rather than feeling like the ugly stepchild, we have been welcomed as a full-fledged member of the family,

valued for our ideas, creativity, and skills.

Methods: While many libraries are searching for ways to develop partnerships with their CTSIs, ours was recently aligned under the administration of the CTSI. This integration changed the administrative and budget reporting structures for the library. Prior to the integration, the library was struggling to realign its priorities and services with the vision of the medical school. Despite the inherent uncertainty of a new alignment, the library has been adopted into the CTSI family and has already established successful research and education partnerships. Now the library is recognized as a valuable asset and core resource within the larger structure of the medical enterprise and is pursuing new space plans and staffing and service initiatives. We will outline key barriers that have been lifted and opportunities created by this blending of "families."

Building the Future: Rejecting, Rethinking, Redoing, and Rejuvenating Medical Librarianship

Jane Fama, AHIP
Associate Director, University of Massachusetts Medical School, Worcester, Massachusetts

Elaine Russo Martin
Director, University of Massachusetts Medical School, Worcester, Massachusetts

Martha E. Meacham
Library Fellow, University of Massachusetts Medical School, Worcester, New Hampshire

Monday, May 19

11:13 AM - 11:32 AM

Room: Columbus IJ, Gold Level, East Tower

Objectives: Traditional library work is spiraling downward. Health sciences librarians are taking on new roles such as embedded librarians or research data informationists. Simultaneously, institutionally mandated budget cuts force the question, "How do we maintain mission-critical work within our budget?" Survival means rejecting old service models, rethinking our roles, redoing our professional identity, and rejuvenating ourselves and our libraries.

Methods: The Library Fellows Program at the University of Massachusetts (UMass) Medical School is one response to the challenges we are facing. The fellows program, designed to foster the next generation of medical librarians, provides a two-year experience for newly graduated library science students, emphasizing hands-on learning and research into topics of information

management and medical librarianship. This innovative curriculum incorporates training, professional development, mentorship, and research with the library as the learning laboratory. Curriculum components focus on medical librarianship foundations as well as rotations within core library functional areas. This paper serves as a project description and evaluation. It discusses organizational changes that necessitated and facilitated the structural changes surrounding this program and the resulting effect on staff and operations. The midpoint success of the program is determined and reported, with recommendations and future considerations.

Results/Conclusions: In early 2013, management at Lamar Soutter Library (LSL) planned organizational changes necessary to meet strategic initiatives and continue supporting the medical school's mission in the face of severe budget constraints. The final plan resulted in discontinuation of many traditional library activities, elimination of staff that supported those activities, and, ultimately, the development of the FELLOWS PROGRAM. In September 2013, three task forces were created to develop an implementation plan. A search committee was formed to begin the process of hiring three fellows. The Curriculum Task Force was charged with structuring the two-year fellowship program. The curriculum developed includes rotations through library departments, in-depth reference experience, expert searching training, structured projects, and performing research. The Reference Services Task Force was charged with developing a new reference model to replace the current triage and pager model. The Research Task Force was charged with laying the groundwork for creating a research environment in the library. With outside consultation, LSL developed a detailed evaluation plan. The program is in its eighth month. Modifications and refinements are being made as the first cohort experiences the program. The program has led to a redefinition of librarianship and a new professional identity based on a culture of achievement, research, and reflection.

Balanced Scorecard in Libraries: Libraries Can't Effectively Change What They Can't Measure

Dean Hendrix
Assistant Director, University Libraries, State University of New York, Buffalo, New York

Monday, May 19

11:32 AM - 11:51 AM

Room: Columbus IJ, Gold Level, East Tower

Objectives: Balanced Scorecard is an outcome-based, strategic planning and management tool that focuses on metrics derived from four perspectives: (1)

users, (2) internal processes, (3) staff learning and growth, and (4) financial health. This paper describes one library's use of Balanced Scorecard and the resulting organizational and cultural shifts.

Methods: To realize the library's mission and vision, strategic metrics were identified and prioritized that addressed the perception of the library to users and the administration of our parent institution, workflows and areas where the library must be excellent, and the process of improvement and innovation. Charged with the task of improving specific metrics, owners (individuals or committees) managed and created initiatives that spoke directly to the metrics. Periodic evaluations show the trajectory on specific measures and offer a real-time impetus to alter or not alter approaches to library work.

Results: My results are still in progress and will carry more weight with each quarterly report. This paper will share specific examples how Balanced Scorecard encourages innovative and creative thinking. For example, one strategic communications metric, external media mentions, increased from twenty to sixty-six (including a national story on National Public Radio's *Morning Edition*) in the course of one year.

Conclusions: Outcomes-based planning creates a culture of focused creativity. Aligning library activities and hiring plans to goals and objectives of the parent institution and reporting progress to our stakeholders has been made easier with the adoption of Balanced Scorecard. Staff buy-in has been challenging due to previously abandoned strategic planning processes, a new approach primarily focused on outcomes rather than initiatives, Balanced Scorecard's business world pedigree, and angst over the potential for ending ineffective but beloved practices.

Health Association Libraries Section

Evolution of the Librarian: New and Changing Roles

You Do WHAT with Your Data?! Opportunities for Librarians to Teach Data Management Best Practices

Carrie L. Iwema, AHIP
Molecular Biology Information Specialist, University of Pittsburgh, Pittsburgh, Pennsylvania

Andrea M. Ketchum, AHIP
Reference Librarian, University of Pittsburgh, Pittsburgh, Pennsylvania

Melissa A. Ratajeski, AHIP
Reference Librarian, University of Pittsburgh, Pittsburgh, Pennsylvania

Bedda L. Rosario
Visiting Assistant Professor, University of Pittsburgh, Pittsburgh, Pennsylvania

Monday, May 19
10:35 AM - 10:50 AM

Room: Regency B, Gold Level, West Tower

Objectives: Concerns about data access, privacy, and storage are becoming increasingly prevalent. To help guide library decisions regarding data management services, resources, and training sessions, we surveyed health sciences researchers at a large health sciences academic institution regarding their current data management practices.
Methods: Researchers at a large health sciences academic institution were recruited to complete a 25-question, institutional review board-approved survey. Recruitment was through departmental email discussion lists and links on the library's home page and molecular biology blog. The survey remained open for 3 weeks and gathered data on researchers' demographics and data management

practices, including if file naming conventions are used, if metadata is assigned to data files, where working and back-up data are stored, how data are made accessible to the research community, and if they have written a data management plan. Data was interpreted using descriptive statistics such as frequency and percentages. Fisher's exact test was used to determine the association between categorical variables. The significance level was set to 0.05.

Building the Future of Research Together: Collaborating with a Clinical and Translational Science Award (CTSA)-Funded Translational Science Institute to Provide Data Management Training

Heather Coates
Digital Scholarship and Data Management Librarian, Indiana University-Purdue University, Indianapolis, IN

Monday, May 19
10:50 AM - 11:05 AM

Room: Regency B, Gold Level, West Tower

Objectives: To explore potential collaborations between academic libraries and Clinical Translational Science Award (CTSA)-funded institutes with respect to data management training and support.
Methods: The National Institutes of Health CTSAs have established a well-funded, crucial infrastructure supporting large-scale collaborative biomedical research. This infrastructure is also valuable for smaller, more localized research projects. While infrastructure and corresponding support is often available for large, well-funded projects, these services have generally not been extended to smaller projects. This is a missed opportunity on both accounts. Academic libraries providing data services can leverage CTSA-based resources, while CTSA-funded institutes can extend their reach beyond large biomedical projects to serve the long tail of research data.
Results: A year-long series of conversations with the Indiana CTSI Data Management Team resulted in resource sharing, consensus building about key issues in data management, provision of expert feedback on a data management training curriculum, and several avenues for future collaborations.
Conclusions: Data management training for graduate students and early career researchers is a vital area of need that would benefit from the combined infrastructure and expertise of translational science institutes and academic libraries. Such partnerships can leverage the instructional, preservation, and

access expertise in academic libraries, along with the storage, security, and analytical expertise in translational science institutes to improve the management, protection, and access of valuable research data.

Part of the Team: Librarian Support in Developing Standardized Pathways of Care

Jamie M. Gray, AHIP
Medical Librarian, Seattle Children's Hospital, Seattle, Washington

Susan L. Groshong
Medical Librarian, Seattle Children's Hospital, Seattle, Washington

Monday, May 19

11:05 AM - 11:20 AM

Room: Regency B, Gold Level, West Tower

Objectives: Since 2008, a multidisciplinary hospital team has worked to facilitate the development of standardized pathways of patient care. These pathways focus on managing the most frequent inpatient diagnoses. In 2011, this work became a hospital-wide goal and remains an administrative priority. The expectation is that by 2016, 50% of all diagnoses will have a pathway.
Methods: The goal of "Clinical Standard Work" (CSW) is to develop pathways based on the most recent evidence. These standards are then reviewed and revised every three years. Given that pathways are evidence based and the need to update what was done, establishing documentation procedures was essential. Additionally, standardized search strategies were developed to try and balance the need for thoroughness with the real-world time constraints of each project. Because maintaining and tracking citations is also vital to each project, the librarians developed protocols for using RefWorks, as well as training to assist project members with this step. Once the pathways were established, keeping teams updated on important/emerging literature became critical. The librarians implemented an alerting service for teams as projects moved into the improvement phase.
Results: As the CSW process has grown and changed over the past six years, so has the library's involvement. Initially, the literature search component was optional and the searches performed varied in scope depending on the project. To establish a more standardized process, searches began taking place in two stages. Additionally, the librarians instituted Medical Subject Headings meetings to have clinicians assist in selecting appropriate terminology. To improve communication between the library and CSW staff, the librarians began attending the team's weekly meetings. This has led to the library assisting the CSW team in

reimagining the improvement phase for projects.

Conclusions: Currently, approximately 87% of CSW projects have library involvement. As the number of projects expands to include the emergency, ambulatory, and outpatient settings, the library anticipates increased involvement as well. There is great potential for growing the librarian's role as the process, especially around pathway improvement, becomes more defined.

Bridging Gaps in Transitional Care with Knowledge Management and Interprofessional Teamwork

Heather Collins
Assistant Director, Research and Learning, University of Kansas Medical Center, Kansas City, Kansas

Kristy Johnston
Program Director, University of Kansas Medical Center, Kansas City, Kansas

LaVerne Manos
Program Director, Master of Science in Health Informatics, University of Kansas Medical Center, Kansas City, Kansas

Monday, May 19

11:20 AM - 11:35 AM

Room: Regency B, Gold Level, West Tower

Objectives: This paper explores the contribution of a health sciences librarian acting as a knowledge manager in an interprofessional collaborative practice for the development of a transitional care model. The impact and possibilities relating to knowledge management and interprofessional leadership in a clinical research area are explored.

Methods: An interprofessional team comprising an academic health sciences librarian, nursing, medical and health professions faculty, university hospital clinicians, and others came together under a Health Resources and Services Administration grant to help at-risk children and their families transition smoothly from hospital to home to follow-up care. Using knowledge management and coordinated leadership, several strategies are currently underway to eliminate knowledge gaps in transitional care planning. These strategies include: the use of academic electronic health record technology, in-situ simulation, mobile technology, health literacy universal design and training, information literacy training, and the coordination of scholarly communication and knowledge development.

Evolution of the Librarian as Superhero

Pamela L. Shaw
Biosciences and Bioinformatics Librarian, Northwestern University Feinberg School of Medicine, Chicago, Illinois

Monday, May 19

11:35 AM - 11:50 AM

Room: Regency B, Gold Level, West Tower

Objectives: Able to leap tall buildings in a single bound? Maybe not, but from Gotham to Empire State University (and all real locations in between), the librarian is partnering with research teams in traditional and nontraditional ways. We promise an entertaining presentation of the results of our investigation into the rise of the librarian as superhero on the research team. What is your superpower?

Methods: Librarians and library-based experts have skills in information seeking, publication evaluation and bibliometrics, copyright, metadata, bioinformatics analysis and instruction, and knowledge of federal policies and mandates relating to publications and data. Perhaps more interesting are the nontraditional ways in which librarians are contributing to team science and research, sometimes from nonlibrary positions: project administrators, evaluators, data curators, instructional designers, and more. A structured review of the literature of team science was performed, and areas in which librarians or library-based experts could benefit team dynamics or process were noted and recorded. Additionally, published literature and online content in the fields of library science and team science were searched to discover examples highlighting the successful integration of the librarian into the research team.

Hospital Libraries Section

Leading the Way in Assessing Our Value

Evaluating the Impact of Literature Searching Services on Patient Care through the Use of a Quick Assessment Tool

Ashley Farrell
Client Services Librarian, Regina Qu'Appelle Health Region, Regina, Saskatchewan, Canada

Jeff Mason, AHIP
Academic Information Co-ordinator, Regina Qu'Appelle Health Region, Regina, Saskatchewan, Canada

Monday, May 19

10:35 AM - 10:54 AM

Room: Regency A, Gold Level, West Tower

Objectives: (1) To evaluate the impact of literature searching services on patient care through the use of a validated quick-assessment tool. (2) To create a quick-assessment tool to be used by other libraries to assess their own literature searching services.
Methods: Setting: The Health Sciences Library of the Regina Qu'Appelle Health Region is medium-sized library within a health care delivery system providing hospital, rehabilitation, community and public health, long-term care, and home care services to 260,000 residents in cities, towns, villages, rural municipalities, and indigenous communities. Population: All clients who requested a literature search for the purposes of patient care from the library during a 3-month period. Methodology: A link to a short survey was included with literature search results and emailed to participants using LibAnswers. A reminder was sent one week after the initial invitation. Participants who did not provide an email address were contacted by phone, mail, or fax. Responses were collected using FluidSurveys. Survey validation: Face and content validation of the quick assessment tool was conducted with prospective respondents, librarians, and research support staff followed by a short pilot phase to assess reliability.

Results: Preliminary results will be discussed.
Conclusions: Preliminary conclusions will be discussed.

The Value Study as a Tool for Library Advocacy

Joanne Gard Marshall, AHIP, FMLA
Professor, University of North Carolina, University of North Carolina, Chapel Hill, North Carolina

Julia F. Sollenberger, AHIP, FMLA
Associate Vice President and Director, University of Rochester Medical Center, Rochester, New York

Monday, May 19

10:54 AM - 11:13 AM

Room: Regency A, Gold Level, West Tower

Objectives: How can the results of the value of library and information services in patient care study be used to advocate for the role of library and the librarian?
Methods: A critical incident survey of physicians, residents, and nurses was used to assess the value of the library and information resources at 56 library sites serving 118 hospitals in the United States and Canada. Responses from over 16,000 health professionals demonstrated the impact of library and information resources on changes made to patient care, avoidance of adverse events, and time saved. Additional investigations were conducted to determine how the results have been used by participating and non-participating librarians to advocate for their value. In addition, multivariate analyses conducted by the researchers revealed the added value of consulting the librarian and using the physical library. Librarians used the results to advocate for the importance of the library through posters, presentations, newsletters, and personal contacts with administrators. Time saved by health professionals was also converted into dollars saved.
Results: Librarians used the results to advocate for the importance of the library through posters, presentations, newsletters, and personal contacts with administrators. Time saved by health professionals was also converted into dollars saved. The results were used by both participating libraries as well as those who had not participated in the study. The study website at www.nnlm.gov/mar/about/value.html has a variety of resources, including a PowerPoint presentation overview of the study results suitable for presentation by both participating and non-participating libraries. Specialized PowerPoint summary reports are also available based on geographic region as well as Association of Academic Health Sciences Libraries (AAHSL) and non-AAHSL sites and profession of respondents. The site provides access to the study data

and all supporting materials, including the survey. These features encourage data use, benchmarking, and replication.

Conclusions: A large scale, multi-site study on the value of library and information services in patient care is possible given sufficient dedication, planning time, and funding support. The scope of such studies provides a resource that all hospital and health sciences libraries can use for advocacy purposes. It is important for librarians to share their experiences in using the study results and data so that we can optimize our advocacy efforts.

The Value to and Impact of Health Sciences Libraries and Information Services on Academic and Clinical Practices: A Systematic Review

Lindsay Alcock Glynn
Public Services Librarian, Memorial University of Newfoundland, St. John's, New Foundland, Canada

Ruth Berry
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Lee Clemans-Taylor
Director/Medical Librarian, University of Alabama, Huntsville, Alabama

A'Llyn Ettien
Head, Technical Services, Boston University, Boston, Massachusetts

Kathleen Gadd
Librarian, Dalhousie University, St. John's, New Foundland, Canada

Pamela R. Geldenhuys
E-Resources Librarian, Royal Devon and Exeter National Health Service Foundation Trust, Exeter, United Kingdom

Christina Kim
Market Intelligence Information Specialist, University of Toronto | MaRS Discovery District, Toronto, Ontario, Canada

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Aoife Lawton
Systems Librarian, Health Service Executive Ireland, Dublin, Ireland

Caitlin McClurg
Health Sciences Librarian, University of Calgary, Calgary, Alberta, Canada

Kristen Sakmar
Reference Librarian, University of South Florida, Tampa, Florida

Jean L. Siebert, AHIP
Collection Manager/Reference Librarian, West Virginia University, Morgantown, WV

Monday, May 19
11:13 AM - 11:32 AM

Room: Regency A, Gold Level, West Tower

Objectives: To determine, using the best research evidence, the qualitative and quantitative value and impact of health library services on clinical and academic practices.
Methods: A systematic review of the relevant bibliographic databases and citation indexes was performed, including published research and gray literature. Articles deemed relevant for inclusion were identified based on strict eligibility criteria and review of the methods section of relevant articles. Outcomes (i.e., length of stay, choice of diagnostic tests, patient care, admission rates, teaching, publication rate, program evaluation, etc.) were identified from existing studies and validated data collection instruments. Included articles were critically appraised and synthesized to determine best evidence. A list of databases searched and a sample search strategy will be included in the presentation. Both perceived and quantifiable value were investigated.

Leading the Way with Lean

Kencee Graves
Chief Medical Resident, University of Utah, Salt Lake City, Utah

Claire Hamasu
Associate Director, University of Utah, Salt Lake City, Utah

Robert Millsap
Financial Analyst, University of Utah, Salt Lake City, Utah

Debra L. Simmons

Director, Clinical Affairs, Utah Diabetes and Endocrinology Center, University of Utah, Salt Lake City, Utah

Monday, May 19

11:32 AM - 11:51 AM

Room: Regency A, Gold Level, West Tower

Objectives: Hospital chief executive officers frequently come from the business sector. It is, therefore, useful for librarians to show their value to the institution in financial terms. The authors used the "Lean" process to develop a pilot to determine the financial impact of a librarian responding to patient care questions generated on clinical rounds. The hypothesis is that net costs would be lower with a librarian's involvement.

Methods:

- A librarian was added to four internal medicine round teams at an academic medical center. The librarian searched for answers to questions generated on the rounds.
- A survey was distributed to all health care provider team members. The survey collected data on the average time team members spent on searching for information and the use and usefulness of the librarian's search results.
- Estimated salary and benefits were used to calculate net avoidance costs for physician search time.
- The authors developed two scenarios (using two questions that were asked) and the possible impact the information provided by the librarian would have. The physician authors determined that tests were potentially avoided and patient care based on the information affected length of stay. Using this information the MBA author derived procedure costs and altered outcome costs using Department of Health and Human Services Healthcare Research and Quality Data.

Results:

- One full-time equivalent (FTE) rounding librarian may save 5 hours of physician search time/day=$94,000 (approx.) net annual savings.
- One FTE rounding librarian will save a combination of 5 hours physician and postgrad search time/day=$29,000 (approx.) net annual savings.
- In each patient scenario, preliminary data indicate that savings of several thousand dollars might be realized due to the information provided by the librarian.

Conclusions:

- When looking at time avoidance the hypothesis is correct that nets costs are lower. Search time avoided by having a librarian provide literature searches for physicians converts to a significant dollar savings.
- New Lean institutions may not have the data needed to compute the dollar value for impact of a librarian on patient care.
- A multidisciplinary team is required to carry out this type of study: librarian, financial person, physician.

Cancer Librarians Section

Libraries and Our Brand: How Do We Look?

Re-Imagining Communications: Approaches from Academic and Hospital Libraries

Grace DiVirgilio
Coordinator, Western New York Library Resources Council, Buffalo, New York

Dean Hendrix
Assistant Director, University Libraries, State University of New York, Buffalo, New York

Monday, May 19

10:35 AM - 10:54 AM

Room: Columbus AB, Gold Level, East Tower

Objectives: Despite their best efforts, librarians have not used best communications practices to advocate and inform users of new services and expertise. The objective of this paper is to describe and evaluate communications experiments at a large academic library system and a hospital library services program. Additionally, the paper will broach applied solutions to improve health sciences libraries communications efforts.
Methods: The two libraries used different approaches in revamping their approaches to external communications. The academic library used the strategic planning tool, Balanced Scorecard, in order to focus on outcomes not initiatives. The library established several strategic metrics related to communications and tracked their progress. These metrics included media mentions, analytics related to use of promoted initiatives, user attitudes, cost savings, and donor relationships. Due to the multidimensional nature of communications, the library used data from Google Alerts, Google Analytics, vendor logs, user surveys, budget lines, and development reports to gauge whether or not they positively influence the desired outcomes. The hospital library program's approach centered on hiring marketing consultants to rethink their communications to hospital administrators in light of recent hospital library closures.
Results: In the academic library setting, the Balanced Scorecard framework created an environment of focused experimentation and, as a consequence, resulted in over twenty new communications ideas that were adopted. In

comparing 2012 to 2013, (1) external media mentions rose from twenty to sixty-six, including a story on National Public Radio's *Morning Edition* program; (2) development monies, bequests, and donor pool increased significantly; (3) the library's website surpassed the university's main website for the most page views; and (4) promoted services exhausted their budgets within weeks of being unveiled.

Conclusions: In the hospital setting, a custom branding and communications strategy focused on a confident tone, concise talking points, indirect effects of the program (i.e., research leading to millions of dollars of grant funding), mitigating risk, and the competitive market advantages that hospital libraries provide. Despite very different approaches, both organizations concluded that their messaging must be more concise, consistent, emotionally intelligent, targeted to specific user groups, and supplemented with visualizations for maximum effectiveness. Challenges to changing communications culture in libraries include adopting advertising principles, uncoordinated campaigns and ad hoc messaging, an overreliance on print media, and weak external relationships.

Branding: No Irons Required

Karen L. Hanson
Knowledge Systems Librarian, New York University Langone Medical Center, New York, NY

Catherine Larson
Web Services Librarian, New York University Langone Medical Center, New York, NY

Karen Yacobucci
Content Management Librarian, New York University School of Medicine, New York, New York

Monday, May 19

10:54 AM - 11:13 AM

Room: Columbus AB, Gold Level, East Tower

Objectives: In order to successfully brand and market new resources and services, libraries need to develop successful marketing strategies for implementation. With the intention of laying the groundwork for developing a brand management and marketing plan, the library used its first homegrown clinical search tool as an opportunity to create, implement, and monitor current and future branding and marketing opportunities.

Methods: In order for the library's homegrown clinical search tool to be easily recognized and generate interest amongst its target audience, it would need a

unique brand identity. This brand would include a name, icon, and overall improved visual appearance. The library's Marketing and Community Outreach Team devised a development strategy for the creation of a brand identity. Beginning with an analysis of the "need" and ending with the application of the brand identity to several pieces of marketing communication, the team was able to map out a coherent six-stage process for creation of its clinical search tool's new brand identity.

Results: After selecting a few different viable options for a new brand name and icon, we surveyed users from our target audience in order to identify how each option was perceived by the user and which brand identity would be most appealing to them. In addition to our survey results, we collected usage statistics from the tool before and after the brand identity change in order to gauge its success or failure. We documented increased usage in the clinical search tool after implementing the new brand identity. The initial data and user responses for the clinical search tool's new brand identity point to a success.

Conclusions: After the initial success of the newly branded clinical search tool, the Marketing and Community Outreach Team feels it can implement similar strategies for brand identity creation and management, which can have a positive impact on our users. Although most brand management projects are unique, the foundation laid from this particular project will play a role in research methodology and brand identity strategy for similar projects going forward.

Building a Library Brand One Person at a Time

Ana D. Cleveland, AHIP, FMLA
Regents Professor and Director, Health Informatics Program, University of North Texas, Denton, Texas

Jodi L. Philbrick
Lecturer, University of North Texas, University of North Texas, Denton, Texas

Monday, May 19

11:13 AM - 11:13 AM

Room: Columbus AB, Gold Level, East Tower

Objectives: This paper provides an overview of personal branding, including a definition of the term and how to use it effectively for professional success. Implications of personal branding on building a library's brand will be presented.

Methods: An exploration of the concept of personal branding will be presented by examining the literature of business and library and information sciences. The authors will discuss strategies to build your personal brand. Activities that you can use to enhance your personal brand will be illustrated along with how they can impact a library's brand.

Results: Information professionals in the audience will have gained an understanding of personal branding and how it can be used in the workforce to communicate their value.

Conclusions: Personal branding is an important point to consider when developing the library's brand, especially in the digital age.

Selling the Libraries: Constructing a Marketing Plan

Autumn Johnson
Information Literacy Coordinator, Savannah State University, Savannah, Georgia

Virginia Loveless
Project Manager, Georgia Regents University, Augusta, Georgia

Kim Mears, AHIP
Nursing Information Librarian, Georgia Regents University, Augusta, Georgia

Renee Sharrock
Curator, Historical Collections and Archives, Georgia Regents University, Augusta, Georgia

Matthew Whittington
Library Assistant, Georgia Regents University, Augusta, Georgia

Monday, May 19

11:32 AM - 11:51 AM

Room: Columbus AB, Gold Level, East Tower

Objectives: To create awareness of the libraries among students, faculty, and clinical users and to gain greater recognition for library events, resources, and services, the University Libraries Marketing Committee was formed in March 2013. The committee was charged with developing and implementing a formal marketing plan, fostering an internal marketing culture, and ensuring a brand identity for the university libraries.

Methods: After a review of the literature, the committee drafted a marketing plan outlined in *Blueprint for Your Library Marketing Plan* by Patricia H. Fisher and Marseille M. Pride. Five priorities were identified: statement of purpose, marketing goals and objectives, current market description, opportunities and issues analysis, and summary. Appendixes including the following working documents: marketing calendar, action plan, and promotional schedules. The marketing plan was reviewed by the libraries director's leadership team, and

feedback was incorporated. The plan was approved in September 2013. Three brown bag sessions were held to create library staff awareness of marketing resources, social media platforms, logo use, and university brand guidelines. A LibGuide was created to facilitate staff access to a marketing toolkit, including templates, formatting quick-tips, and an archive of marketing materials.

Results: The marketing plan defined concrete goals and initiatives for the Libraries Marketing Committee. Committee members have attended training sessions to increase marketing knowledge. The brown bag sessions aided in staff awareness of university and libraries branding guidelines and adherence to standards. Flyers and additional marketing materials produced by the staff present a consistent identity, resulting in increased brand recognition.

Conclusions: In an environment where users have increased options for information resources and services, it is vital that the university libraries articulate their value as a place of intellectual inquiry and a center of activity on campus. The libraries have expanded their use of social media applications and increased followers by 15% through active engagement. The committee has facilitated marketing efforts for 7 events, 2 lecture series, and 2 exhibits.

2014 National Program Committee

Expert Systems and Artificial Intelligence

Julia Stephens
Chief, Library Section, VA Medical Center, Jackson, Mississippi

Monday, May 19
10:35 AM - 10:40 AM

Room: Columbus EF, Gold Level, East Tower

Description: Medical evidenced-based information offers current studies and research to clinical medical staff. However, clinicians have very little time to search the Internet for peer-reviewed journals or current knowledge reviews and tools. When a need arises, such searching for a diagnostic decision tree or calculator, during a patient visit; the clinical medical staff often fails to communicate with the patient because they simply do not have current evidence-based knowledge to send or print for their patients. As artificial intelligence (AI) matures and becomes more accessible to library professionals in medicine, case-based knowledge reviews change and become more accessible to the clinician.

Building Marketing Momentum: 25 Tips in 5 Minutes

Valerie S. Gordon, AHIP
Associate Professor, University of Alabama, Birmingham, Alabama

Patricia C. Higginbottom, AHIP
Associate Director, Public Services, University of Alabama, Birmingham, Alabama

Monday, May 19
10:40 AM - 10:45 AM

Room: Columbus EF, Gold Level, East Tower

Description: Marketing is essential but can be overwhelming when you have lots of other things to do. Get twenty-five tips to get you started and keep you on track with promoting your library and building your brand.

Keeping up to Date with Information Retrieval Research: Summarized Research in Information Retrieval for Health Technology Assessment

Patrice Chalon
Knowledge Manager, KCE, Brussels, Belgium

Jaana Isojarvi
Librarian, National Institute of Health and Welfare, Helsinki, Finland

Carol Lefebvre
Independent Information Consultant, Lefebvre Associates, Oxford, United Kingdom

Sari Ormstad
Research Librarian, Norwegian Knowledge Centre for the Health Services, Norway, Norway

Julie Glanville
Associate Director, University of York, York, United Kingdom

Monday, May 19

10:45 AM - 10:50 AM

Room: Columbus EF, Gold Level, East Tower

Description: Increasing numbers of research papers about information retrieval for health technology assessments (HTA), systematic review, and other evidence syntheses are being published. It is time consuming and demanding for information specialists to keep up-to-date with the latest research evidence in information retrieval. To help to meet these challenges, the Interest Sub-Group on Information Resources (IRG) of Health Technology Assessment International (HTAi) has launched a web resource, Summarized Research in Information Retrieval for HTA (SuRe Info). Sure Info identifies, summarises and critiques information retrieval research of relevance to the conduct of evidence syntheses.

Big Bang Health Information Literacy: Outreach to Diverse Populations

Gregory Chauncey
Consumer Health Program Manager, Pacific College of Oriental Medicine, Pacific College of Oriental Medicine, La Jolla, California

Robert Damone
Academic Dean, Pacific College of Oriental Medicine, San Diego, California

Stacy Gomes
Vice Pres, Academic Affairs, Administration, San Diego, California

Jack Miller
President, Pacific College of Oriental Medicine, San Diego, California

Naomi C. Broering, AHIP, FMLA
Dean, Libraries, Pacific College of Oriental Medicine, La Jolla, California

Monday, May 19
10:50 AM - 10:55 AM

Room: Columbus EF, Gold Level, East Tower

Description: The Pacific College of Oriental College (PCOM) received a 2013 award from the National Network of Libraries of Medicine, Pacific Southwest Region, program to conduct a 1-year collaborative health information training program with 6 major San Diego institutions including public libraries, churches, community centers, and clinics based in ethnically and culturally diverse communities. This paper describes the project goals, objectives, and significant outcomes. The project partners included branches of San Diego Public Library, San Diego County Library, Chula Vista Library, African Methodist Episcopal churches, La Jolla Community Center, and the PCOM clinic with its affiliated clinics. The target population was San Diego's multicultural and minority residents, including Hispanics, Latinos, African Americans, Asians, and Middle Easterners, as well as community health care providers. The project goals were to improve information access through outreach training workshops on numerous high demand (big bang) health topics using the National Library of Medicine's online resources and to introduce these resources directly to San Diego's large and diverse population. There were 20 workshops and 815 attendees.

LEAPing Print Journals

Louise McLaughlin
Information Specialist, Woman's Hospital, Baton Rouge, Louisiana

Monday, May 19

10:55 AM - 11:00 AM

Room: Columbus EF, Gold Level, East Tower

Description: As a solo librarian in a 225-bed specialty hospital with a beautiful new library in a beautiful new hospital, I noticed a critical decrease in staff who came to the library to browse the new journals. I designed a Library Easy Access Project (LEAP) that places online-also print journals in the staff lounges or units for two months at a time. I have increased print journal use and, by personally bringing the journals to units, increased the library's value and visibility.

The Palm Beach County Library System's Consumer Health Information Service (CHIS) Develops Community Partnerships to Provide Educational and Enrollment Assistance with the Affordable Care Act (ACA) Marketplace

Rachel Mick
Consumer Health Information Service (CHIS) Coordinator, Palm Beach County Library System, West Palm Beach, Florida

Monday, May 19

11:00 AM - 11:05 AM

Room: Columbus EF, Gold Level, East Tower

Description: As of January, 158,030 Florida residents signed up for a plan under the Affordable Care Act--more than any other state using the federal government enrollment site--and another nearly 58,400 gained access to Medicaid in Florida. The Palm Beach County Library System's Consumer Health Information Service (CHIS) has been reaching out to Palm Beach County residents who want to apply for new health coverage options through the Affordable Care Act health insurance marketplace by hosting enrollment sessions at branch locations with local agencies. Efforts have also included organizing an Affordable Care Act Community Partnership group comprising librarians, agencies and organizations, and local political representations to maximize library efforts for the community. A timeline of activities also include League of Women Voters educational presentations for the public at library locations and training public service staff.

A Clerkship Model for Training Future Health Sciences Informationists

Michelle Bass
University Library Associate, University of Michigan, Ann Arbor, Michigan

Monday, May 19
11:05 AM - 11:10 AM

Room: Columbus EF, Gold Level, East Tower

Description: This presentation will provide an overview of the Taubman Health Sciences Library University Library Associate (ULA) Clerkship model. The main learning goals of the clerkship model are to expose the ULA to all organization units at the library and skills-based experience and project creation. Clerkship objectives include providing the ULA with meaningful skills-focused experience in the unit's field through involvement with instructional activities and projects and initiatives, observation of and involvement with advanced information searchers, and the completion of at least one dedicated project with appropriate deliverables. The presentation will highlight clerkship projects completed to date.

The Librarian's Role in the Development of Electronic Health Record Order Sets

Emily Brennan
Research Informationist, Medical University of South Carolina, Charleston, South Carolina

Monday, May 19
11:15 AM - 11:20 AM

Room: Columbus EF, Gold Level, East Tower

Description: The Medical University of South Carolina's (MUSC's) Center for Evidence-Based Practice (EBP) uses interprofessional content expert teams to develop evidence-based order sets for the electronic health record (EHR). The librarian is a member of this team and is responsible for helping develop the clinical questions of interest for a given disease process or topic and performing literature searches. The director of EBP critically appraises, evaluates, and summarizes the evidence. The content expert teams then reviews the evidence and develops recommendations that drive the development of order sets and identification of quality metrics to evaluate the effectiveness of the order sets.

Once the clinical content has been finalized, the Center for EBP facilitates the translation of the order sets into MUSC's EHR.

Assimilated into the Collective: From Reference Desk Services to Office Hours and Beyond

Penny Coppernoll-Blach, AHIP
Biomedical Reference Librarian, University of California, San Diego, California

Monday, May 19
11:20 AM - 11:25 AM

Room: Columbus EF, Gold Level, East Tower

Description: The University of California-San Diego UCSD Biomedical Library was merged administratively into the UCSD Library in July 2013 during a major reorganization, and all librarians were reassigned to new function-based programs rather than to subject-based branch libraries. The reference desk staff available at the newly named Biomedical Library Building (BLB) was cut from six librarians to two, so services had to be reworked. The new BLB reference services now include office hours each weekday, consultations that can be scheduled in advance, 24/7 Ask a Librarian chat, and referrals to the Research Assistance Desk (RAD) in the Geisel Library (main library building). This presentation will report on how the new services are being utilized and perceived by our patrons.

Library Diaspora: How We Lost Our Walls and Nobody Noticed

Jane Blumenthal, AHIP
Associate University Librarian and Director, University of Michigan, Ann Arbor, Michigan

Nadia J. Lalla
Assistant Director, Collections and Information Services, University of Michigan, Ann Arbor, MI

Nandita S. Mani, AHIP
Assistant Director, Enabling Technologies, University of Michigan, Ann Arbor, Michigan

Jean Song
Assistant Director, Research and Informatics, University of Michigan, Ann Arbor, MI

Monday, May 19

11:25 AM - 11:30 AM

Room: Columbus EF, Gold Level, East Tower

Description: Health sciences libraries continue to be more about librarians, expertise, and professional work and less about collections and space as they evolve into their future. We completely vacated our library building during its renovation, moving into a temporary location with collaborative and meeting space as well as offices, but no physical collection, service desk, or walk-in study space. We found relocating made little difference in how we worked, as those changes took place before the move and led to the exodus and not vice versa. The relocation gave us greater visibility and brought attention to our work, giving us an opportunity to further refine new models for collaboration and partnership in education, research, and clinical care.

Building Interdisciplinary Collaborations among Researchers in Sex and Gender Differences and Women's Health

Hannah Norton, AHIP
Liaison Librarian, University of Florida, Gainesville, Florida

Nancy Schaefer, AHIP
Reference and Instruction Librarian, University of Florida, Gainesville, Florida

Michele R. Tennant, AHIP
Assistant Director and Biomedical Informatics Librarian, University of Florida, Gainesville, Florida

Mary Edwards, AHIP
Distance Learning and Liaison Librarian, University of Florida, Gainesville, Florida

Monday, May 19

11:30 AM - 11:35 AM

Room: Columbus EF, Gold Level, East Tower

Description: This project, funded by the National Library of Medicine and the National Institutes of Health's Office of Research in Women's Health, has enabled the Health Science Center Library to help promote awareness of the need for research in the areas of sex and gender differences and women's health and to create and expand research collaborations among faculty. Our project involved a new role for us as librarians: facilitating collaboration while educating students and faculty about information resources. To support and promote collaboration and create cross-disciplinary connections, in 2013 the library partnered with faculty in from several departments in the Colleges of Liberal Arts and Sciences and Medicine to present on the Women's Health Resources Portal during various undergraduate, graduate, and professional courses. We also hosted two "Collaborating with Strangers" workshops, during which researchers participated in speed meetings with interdisciplinary colleagues, sharing their common interests in sex and gender differences in health. In 2014, the library will extend collaborations to several new groups, including high school science students and teachers, additional departments in the Colleges of Medicine and Public Health and Health Professions, and professional students in the "Interdisciplinary Family Health" course.

Ditch the Binder! Leveraging Technology in Professional Organization Planning and Collaboration

Keith Engwall, AHIP
Assistant Professor, Web and Emerging Technologies Librarian, Oakland University William Beaumont School of Medicine, Rochester, Michigan

Monday, May 19
11:35 AM - 11:40 AM

Room: Columbus EF, Gold Level, East Tower

Description: Building our information future relies on collaboration and professional engagement. However, at the local level, professional organizations have been slow to move from traditional tools of planning and record-keeping to the technologies available to facilitate collaboration and planning. This lightning round session provides an overview of online tools that can be used to help librarians break free from our binders and work together more effectively.

Getting Off Obesity Island: How Informationists Can Enhance Clinical Decision Support

Rick Ralston
Assistant Director, Library Operations, Indiana University-Purdue University, Indiana University-Purdue University Indianapolis, Indianapolis, Indiana

Elizabeth (Beth) Whipple, AHIP
Research Informationist/Associate Librarian, Indiana University School of Medicine, Indianapolis, Indiana

Jere Odell
Scholarly Communications Librarian, Indiana University-Purdue University, Indianapolis, Indiana

Monday, May 19

11:40 AM - 11:45 AM

Room: Columbus EF, Gold Level, East Tower

Description: Clinical decision support (CDS) will play a key role in improving the health of patients; informationists can support the development of CDS systems by indexing rule libraries and mapping the system logic. This work can help rule developers make more informed choices and understand how rules are related conceptually and operationally. With a map, rules can be written to bridge isolated concepts (islands) and rules that are no longer needed can be weeded. This talk will explore the added value that informationists bring to projects by reporting on the role of informationists working on a pediatric CDS.

International Cooperation Section

M-Health and Information Innovations: Making an Impact in Global Health

Unfettered and Untethered: Internet Access in the Hands of Under-Connected Community-Based Organizations

Dana Abbey
Health Information Literacy Coordinator, National Network of Libraries of Medicine, MidContinental Region, University of Colorado Anschutz Medical Campus, Aurora, CO

John Bramble
Technology Coordinator, University of Utah, Salt Lake City, UT

Barbara Jones
Missouri Outreach and Advocacy Coordinator, University of Missouri, Columbia, MO

Monica Rogers
Health Information Literacy Coordinator, Creighton University, Omaha, NE

Rachel Vukas
Kansas/Technology Coordinator, University of Kansas Medical Center, Kansas City, KS

Monday, May 19
10:35 AM - 10:54 AM

Room: Columbus CD, Gold Level, East Tower

Objectives: This paper describes what happens to the quality and impact on outreach efforts conducted by health-focused community-based organizations

(CBOs) serving at-risk populations when their outreach staff are provided with Apple iPad2s with unlimited cellular data plans along with intensive training by health sciences librarians on quality online health information resources and on the use of the Apple iPad2.

Methods: The project worked with six CBOs covering a wide geographic area. CBOs participating in this project needed to meet certain criteria. They need to: have a health education focus, have underserved/at-risk populations as primary clientele, conduct outreach or in-home services, have a single point of contact who was also the person conducting the fieldwork, do not have the resources to access the Internet while in the field, be willing to participate in intensive training on quality health information/use of the Apple iPad2, and be willing to regularly report on their activities using an online form (SurveyMonkey). The questions in the online report form were created to elicit responses from the CBOs on how their outreach efforts were impacted by participating in the project. Patterns from the report submissions were identified and coded, and the data from the coding were analyzed.

Capacity Building and Sustainability: The Role of Mobile Apps

Elizabeth F. Norton
Librarian, National Library of Medicine, National Institutes of Health, Bethesda, Maryland

Monday, May 19

10:54 AM - 11:13 AM

Room: Columbus CD, Gold Level, East Tower

Description: Lack of access to technology and digital information resources in limited or austere conditions hampers the ability of disaster health professionals to prepare for, respond to, and recover from events affecting their communities or those requiring outside assistance. Internet-independent information tools that can be carried into the field are an important part of the well-equipped "digital go-bag." The availability of these resources can serve to level the playing field and help communities build the capacity to help themselves.

The number and type of mobile tools and apps is overwhelming. Many apps are not relevant, not supported by authoritative sources, and not usable when the Internet is unavailable. How do you get just what you need just in time? The National Library of Medicine (NLM) Disaster Information Management Research Center has developed a suite of disaster apps and has sorted through the myriad of other disaster-related apps to identify the most credible and useful. It is important for communities to know how to get reliable information not only when,

but also where they need it.

The NLM also supports capacity building and sustainability in local communities through collaborating, providing funding, and sharing expertise and technology. Recognizing the high vulnerability in Latin America to natural disasters, the library has been assisting in the development of disaster information centers across that region. M-health tools, including mobile apps, are now an important part of these disaster information centers. Part of these efforts have included support for the Latin America disaster information centers to create their own apps that help them meet their unique information needs.

From One Small Satellite to Gadgets Galore: What's Health Got to Do with It?

Julia Royall
Consultant, National Institutes of Health, Washington, District of Columbia

Monday, May 19

11:13 AM - 11:32 AM

Room: Columbus CD, Gold Level, East Tower

"It is true that technological progress in modern times has linked men together like a complex nervous system. The means of travel are numerous and communication is instantaneous--we are joined together like the cells of a single body, but this body as yet has no soul. This organism is not yet aware of its unity as a whole." --Antoine de Saint-Exupéry, Wartime Writings 1939-1944

Description: mHealth is all the rage! Especially on the African continent. Gizmos that measure and communicate. Information. Fast. Does the community health worker want another piece of technology or a bicycle? Are they even at the table in this critical discussion? And what difference in morbidity and mortality do these inventions enable their users to make?

But let us back up a bit. Twenty-three years ago, our aim in this very session was to create a library partnership program bringing together librarians in North and South in a kind of ad hoc delivery system for full-text medical journal articles. Delivery was by any means possible--sometimes by fax or diplomatic pouch, more often by postal service. Unless it was converted to ASCII text, one full-text article could barely fit on HealthNet, the small satellite in a low orbit around the earth. But it was a beginning. Librarians in sub-Saharan Africa were the heroes as they downloaded HealthNet News (which would fit) and distributed it by hand. Librarians, especially our courageous colleagues in Africa, have been and continue to be the foundation and immutable force in the finding, organizing, and using health information and in leveling the playing field.

What is mHealth? What does it comprise? Is it "agnostic" or should it inform an

endpoint?

In this session, we will look at two particular examples: A case study of Ugandan medical students work in and with a village in gathering data on actual use of insecticide-treated bed nets using a digital pen. How plain-vanilla connectivity brings African malaria researchers into the international scientific community; they invent the rest.

Monday, May 19
11:32 AM - 11:51 AM

Room: Columbus CD, Gold Level, East Tower

Description: A discussion with presenter panel and participants: This will provide a time for the presenter panel members and participants to share further experiences on the use of mHealth and technology in improving health outcomes and empowerment in low-resource communities. This will also provide an opportunity for participants to discuss mHealth, ask questions, share personal experiences, and consider opportunities for future involvement.

Veterinary Medical Libraries Section

Mobile Devices in Health Sciences Education and Clinical Practice

Mobile Device and App Use in Pharmacy: A Multi-University Study

Trish Chatterley
Public Services Librarian, University of Alberta, University of Alberta, Edmonton, Alberta, Canada

Vicky Duncan, AHIP
Liaison Librarian, University of Saskatchewan, Saskatoon, Saskatchewan, Canada

Patrice Dupont
Bibliothécaire de référence, Université de Montréal, Montreal, Quebec, Canada

Shannon Gordon
Liaison Librarian, Pharmacy, University of Waterloo, Waterloo, Ontario, Canada

Kelly Hatch
Public Services Librarian, Memorial University of Newfoundland, St. John's, New Foundland, Canada

Melissa Helwig
Information Services Librarian, Dalhousie University, Halifax, Nova Scotia, Canada

Sherri Vokey
Pharmacy Librarian, University of Manitoba, Winnipeg, Manitoba, Canada

Monday, May 19
10:35 AM - 10:50 AM

Room: Columbus GH, Gold Level, East Tower

Objectives: To investigate how students and faculty members in Canadian pharmacy faculties use mobile devices such as smartphones and tablet computers in their studies and professional environments, and to explore patron perceptions of resource value and awareness, so academic health librarians can improve support for these users via enhanced resource offerings and better marketing of licensed products.

Methods: This mixed method research study involved an online survey and follow-up interviews conducted at seven of the ten universities in Canada with pharmacy faculties. The survey was distributed to pharmacy students and faculty members at each participating institution via departmental email distribution lists and links on library subject guides. Questions were posed regarding: types of drug information sought via mobile devices (e.g., dosages, side effects, etc.), frequency of use, likes and dislikes of product features, issues of professionalism associated with mobile use in front of patients, technical barriers to use, awareness of institutionally licensed resources, and personal app purchasing history. Interviews explored some issues further, such as ease of use of applications, criteria used to evaluate apps, and professionalism. Interviews were audio-recorded and transcribed, and a qualitative thematic analysis conducted.

Results: Four hundred eight-seven responses to the online survey were received for an estimated response rate of approximately 15%; 95% of respondents own a mobile device, with Apple products being the most common; 81% of those who own a device use it to locate health information, usually information about drug side effects, dosages, and interactions. Respondents enjoy the convenience and ease of use of mobile products but find costs and connectivity issues to be some of their biggest barriers. They are concerned that device use in a pharmacy might be seen as unprofessional, even when being used to inform patient care. Only 51% of respondents knew their library provided access to mobile resources, but of those, 90% had used the library's resources. Responses from the 8 interviews conducted confirmed the survey results and permitted the opportunity to further explore issues of barriers to use and professionalism.

Conclusions: Pharmacy students and faculty are frequent users of mobile devices to help answer health-related questions, but their needs in terms of collections and services are not necessarily being met. Means for more effectively supporting mobile technology and collections in academic health libraries will be discussed.

Mobile Device Usage at an Academic Health Sciences Library: What Do They Really Want?

Amy Chatfield
Information Services Librarian, University of Southern California, Los Angeles, California

Annie M. Hughes
Information Services Librarian, University of Southern California, Los Angeles, California

Lynn Kysh
Information Services Librarian, University of Southern California, Los Angeles, California

Megan Rosenbloom
Head, Metadata and Content Management, University of Southern California, Los Angeles, CA

Jin Wu
Emerging Technologies Librarian, University of Southern California, Los Angeles, CA

Monday, May 19

10:50 AM - 11:05 AM

Room: Columbus GH, Gold Level, East Tower

Objectives: Many libraries are providing services related to mobile devices, but there are few data about whether a majority of health sciences students have adopted mobile devices and if they wish to use library resources on their mobile devices. This study aims to measure patrons' mobile device usage habits to help the library tailor its services.

Methods: We developed and administered a longitudinal sixteen-item survey to all first-year health sciences students at our institution; six other Association of Academic Health Sciences Libraries (AAHSL) members also administered the survey to incoming students. The survey covered several aspects of technology, with a focus on three areas of mobile devices usage: ownership of devices/interest in future purchases, current usage of information resources and social media via mobile devices, and interest in future uses of mobile devices (e.g., downloading the library's app, attending instruction sessions on using mobile apps, or specific types of information students wished to obtain). The survey results from 2012 have been reported in the *Journal of the Medical Library Association* (expected April 2014) and this presentation will present results from 2013.

Results: One thousand thirty-one students from 6 AAHSL libraries participated for a response rate of 37% (1 institution dropped out). For all respondents, 83% own a smartphone and 45% own a tablet. At our institution, 79% own a smartphone, and 34% own a tablet; in 2012, 75% had a smartphone and 25% had a tablet. In terms of using devices, 41% at our institution are extremely likely to use medical apps and 46% are extremely likely to check the library' operating hours. Among all respondents, 58% use Facebook all the time, but over 47% have never used QR codes, Twitter, Google+, LinkedIn, FourSquare, Tumblr,

Vine, or Pinterest.

Conclusions: Results from the survey can be used in four ways. Our institution's data alone can be used to alter our services. Data from each institution can be compared to reveal differences among student cohorts. Data for all institutions together can create continually updated snapshot of health sciences students' mobile device preferences. If data continue to be collected, longitudinal data will let us track changes in student preferences. These four frames of analysis provide abundant information to support changes in instruction, reference, collection development, technology acquisitions, and staffing.

Targeted Evolution of Embedded Librarian Services: Providing Mobile Reference and Instruction Services Using iPads

Deborah Chiarella
Coordinator, Education Services, and Senior Assistant Librarian, University at Buffalo, Buffalo, New York

Elizabeth Stellrecht
Clinical Librarian and Liaison, School of Dental Medicine, University at Buffalo, Buffalo, New York

Monday, May 19

11:05 AM - 11:20 AM

Room: Columbus GH, Gold Level, East Tower

Objectives: To create a program to aid in the development of embedded library services and subsequent provision of mobile reference and instruction to support the research, curricular, and clinical programs of five health sciences school and a center of excellence across three campuses.

Methods: Seven iPads and productivity apps, two portable projectors, and two Apple TVs were purchased for the use of library liaisons to the health sciences schools and one center of excellence. Library liaisons provide point-of-care information in the clinical setting, embedded reference hours in academic and clinical departments, and off-campus instruction. By leveraging the portability and power of iPads in combination with the evidence-based practice expertise of library liaisons, more students and faculty can be reached at the point of need with instruction in quality information resources. This paper will discuss the execution of this experiment with embedded librarianship and mobile technology as well as statistical data gathered during this project over an academic year and in addition chronicle the trials and successes in the implementation of this program.

Results: At time of submission, the most frequent use of the iPad was reference, comprising 36% of the total transactions. Instruction followed at 23%. Demonstrating searches in PubMed and troubleshooting EndNote composed a total of 46% of transactions. On a scale of 1-5 representing iPad function, 61% of interactions were reported as a 5 or "iPad functioned extremely well for this purpose." The majority of interactions (33%) occurred in hallways and cafes across campus, with the most frequently reached user group being graduate and professional students at 43% and faculty following at 33%. Limitations to the project included promotion of this new service and identifying solid library advocates to aid in promoting this service to students and faculty. In a few cases, the iPad was not a robust enough tool to successfully execute the full reference transaction.

Conclusions: Developing a program to use iPads and other portable technology to bring library services outside of the library was well received by liaisons and users. A more efficient initial set up of iPads needs to be conducted if project is continued to avoid future problems with authentication. Further study is needed to develop new embedded services and make full use of the iPad's potential as a mobile tool as the university prepares to open a new downtown location for its medical campus in 2016.

Smartphone Use to Answer Clinical Questions: A Descriptive Study of Advanced Practice Nurses

Adelia B. Grabowsky
Health Sciences Librarian, Reference, Auburn University, Auburn, Alabama

Monday, May 19

11:20 AM - 11:35 AM

Room: Columbus GH, Gold Level, East Tower

Objectives: To assess if and how advanced practice nurses (APNs) are using smartphones to seek clinical information as well as barriers they face and training/resource needs they have related to information seeking via smartphones.

Methods: A questionnaire about smartphone use to seek clinical information was developed, approved by the institutional review board (IRB) and distributed to APNs in the state via 2 methods: the posting of an announcement to a state APN email discussion list and the mailing of individual postcards to 1,947 APNs. The questionnaire asked about smartphone use to answer clinical questions, barriers to information seeking via smartphone, types of questions answered using smartphones, most helpful apps and online resources, and training/resource needs. Data were analyzed to determine if smartphone use for clinical

information seeking is related to gender, age, practice location (type and rural/non-rural), library access, level of education, and/or years of practice.

Results: Fifty-nine usable responses were received, 92% of respondents reported using smartphones at work. The only variable significantly related to smartphone use was years approved to practice as an APN. Those approved to practice more than 10 years were slightly less likely to use smartphones at work. Almost half (45%) reported lack of time as the most significant barrier to information access; a far second was cost (14%). Information overload, Internet access/connectivity, lack of resources, and lack of skill/education were each listed as the most significant barrier by only 10% of respondents. Type of information sought via smartphone by the largest percentage of respondents was drug therapy (79%), followed by other therapy (31%), diagnosis/etiology (25%), patient education (16%), and prognosis (14%). When asked to list essential apps, drug apps were most often mentioned; the specific app listed most often was Epocrates. Guidelines through professional organizations were considered the most useful online resource followed closely by MedlinePlus. Ninety percent of respondents felt their searching skills were adequate or exceptional, but 68% are still interested in training in online searching. The most desired type of training was an online video tutorial that can be replayed.

Conclusions: This study suggests that APNs are using smartphones to seek out clinical information and that a majority are interested in improving their online searching skills; however, the low response rate increases the possibility that response was biased toward smartphone users. Further research is needed to determine if smartphone use among APNs is as widespread as this study indicates.

Evaluation of an iPad Loan Program in an Academic Medical Library

T. Derek Halling, AHIP
Onsite Services Librarian, Texas A&M University, College Station, TX

Rebecca McKay, AHIP
Associate Professor/Outreach Librarian, Texas A&M University, College Station, Texas

Catherine Pepper
Assistant Professor/Coordinator, Library Field Services, Texas A&M University, Round Rock, TX

Robin Sewell, AHIP
Associate Professor/Technology Coordinator, Texas A&M University, College Station, Texas

Suzanne Shurtz, AHIP
Assistant Professor/Instructional Services Librarian, Texas A&M University, College Station, Texas

Monday, May 19

11:35 AM - 11:50 AM

Room: Columbus GH, Gold Level, East Tower

Objectives: To assess the effectiveness of an iPad circulation service, at multiple campus locations, by gathering and analyzing quantitative and qualitative data.

Methods: An academic medical library distributed iPads to five campus locations. Circulation statistics were tracked, including number of check-outs, peak times and days of loans, number of turn-aways, campus locations, disciplines, and processing time of staff to restore the original iPad settings before each loan. Users who checked out iPads were invited to complete a brief online survey to gather patron demographics and feedback about how the iPad was used, what applications were used, what applications the patron wanted to be added to the default iPad setup, and the loan experience. To encourage participation, a monthly prize drawing for a gift card was held for those who completed the survey. Preliminary data were gathered and analyzed, with plans to continue data collection for up to a year.

Results: In one month, there were 18 total check-outs with the following distribution of loans per campus: n=0, n=2, n=3, n=5, and n=8. There were 13 turn-aways. A third of loans occurred between 11:00 a.m. and 4:00 p.m. Peak days were Wednesdays (n=4) and Saturdays (n=4). Master's/PhD students were most frequent user (n=8), followed by undergraduates (n=4), and the remainder faculty and staff. Half of the loans were to those in medicine. Users also included those in veterinary medicine, nursing, pharmacy, public health, and business. Processing time for staff to reset the iPad settings ranged between 33 and 12 minutes (average of 22 minutes). Five users completed an online survey; all enjoyed the loan experience. They used the iPad to access library resources, listen to music, search the Internet, read e-books/PDFs, social network, and work on class assignments and research. Two individuals requested check-out be changed from one week to two. One user requested YouTube, Groupme, and a note-taking app be added permanently to the devices.

Conclusions: Preliminary data demonstrated the iPad service to be more popular at campuses where users may not have their own device as part of the curriculum. The iPads at campuses with little usage may need to be moved to those with higher demands. A waiting list was helpful at managing demand. Length of check-out period will be monitored before changing it. Promotion of the iPad service, via posters and emails, boosted circulation. Allowing users to add their own content was well received.

Nursing and Allied Health Resources Section

Building Allies: Supporting the Allied Health Professionals

A Two-Year College Library's Support of Allied Health Programs

Steven Self, AHIP
Librarian, Austin Community College, Austin, Texas

Monday, May 19
2:05 PM - 2:30 PM

Room: Columbus CD, Gold Level, East Tower

Objective: This presentation seeks to provide an overview of the characteristics of allied health science programs at Austin Community College and describe some of the obstacles and opportunities libraries face in supporting them.
Methods: Using the programs at my college as an example, I will outline the various ways community college libraries and librarians support allied health science programs, including collection development, information literacy instruction, serving on search committees, working toward departmental accreditation, serving on advisory committees, and working with community agencies and partners.
Results: My personal experience as a librarian in a large urban community college system that supports over a dozen allied health sciences programs across multiple campuses has proved to be quite challenging and rewarding.
Conclusions: Although Austin Community College might not be typical of two-year colleges that educate allied health professionals, it does provide an example of how libraries can support associate degree and certificate-level allied health education programs.

A Unique Collaboration to Facilitate Evidence-Based Practice among Statewide Rehabilitation Professionals

Frances A. Delwiche
Library Associate Professor, University of Vermont, Burlington, Vermont

Monday, May 19
2:30 PM - 2:55 PM

Room: Columbus CD, Gold Level, East Tower

Objectives: Community-based pediatric rehabilitation professionals--including occupational therapists, physical therapists, and speech therapists--employed in rural educational and community settings often lack knowledge of and access to information resources required for evidence-based practice. This paper describes a novel collaboration to provide information literacy instruction to this group of underserved health care professionals through the use of a preexisting, statewide videoconferencing system.
Methods: The Training and Resources for Interdisciplinary Professionals Serving Children and Youth (TRIPSCY) project was launched by the university's Center for Excellence in Developmental Disabilities to bring continuing education opportunities to pediatric occupational, physical, and speech therapists across the state. One of the primary activities of this project was the creation of an interdisciplinary journal club. However, many of the therapists experienced difficulty in their attempts to access the literature due to their rural locations and inadequate literature searching skills. In response to the therapists' requests for information literacy instruction, two health sciences librarians were recruited by the TRIPSCY project leaders to provide an information literacy workshop for the TRIPSCY participants. The collaborators took advantage of the TRIPSCY infrastructure to conduct a needs assessment, followed by development and delivery of the workshop by the librarians via a statewide hardware-based videoconferencing system.
Results: The team members, including two faculty members from the Physical Therapy and Communication Sciences and Disorders Departments and the two liaison librarians to their respective departments collaborated to plan the content of the workshop. Their goal was to focus on resources and strategies that unaffiliated patrons can use to search the pediatric rehabilitation literature and to obtain full-text documents. The culmination was a two-hour workshop presented by the librarians in May 2013 via the Vermont Interactive Technologies (VIT) communications network. The presentation was attended by twenty-one solo practitioners, including occupational therapists, physical therapists, speech therapists, and special educators. Half the participants attended the presentation in person at VIT's main studio in Williston, VT, and the remainder attended at five VIT studios located across the state. An online research guide containing

information, links, and tutorials augmented the workshop. Results of the post-workshop evaluation indicated a high degree of satisfaction with the quality and usefulness of the workshop, and several participants requested a follow-up presentation.

Conclusions: This project provided an excellent example of how university allied health teaching faculty and health sciences librarians can collaborate to create an educational opportunity to address the information literacy instruction needs of unaffiliated pediatric rehabilitation professionals practicing statewide.

Mobile Technology and Community College Allied Health Students: New Paths to Information Literacy

Gregg A. Stevens
Assistant Professor and Health Sciences Librarian, Tallahassee Community College, Tallahassee, Florida

Monday, May 19

2:55 PM - 3:20 PM

Room: Columbus CD, Gold Level, East Tower

Objectives: This paper describes how iPads are being used as information literacy tools with allied health students at a community college. In addition to providing electronic access to accurate health information and teaching information literacy skills, the iPads are replicating how students will find needed information in a work setting.

Methods: Working with faculty in the college's emergency medical services (EMS) and pharmacy technician programs, the librarian introduced students in those programs to mobile websites and apps that deliver information previously sought by the students in print resources. The EMS students used the National Library of Medicine's (NLM's) WISER app as an integral part of a classroom activity on first responder awareness and hazardous materials, which required students to find information needed to react to a mock chemical spill. Assessment was a comparison of hazmat test scores versus the previous year. The pharmacy technician students looked up drug information on three NLM mobile sites and a commercial pharmacology app in lieu of print drug guides. This information was used during class quizzes and lab practicals. Assessment was made using iPad usage data and assignment grades.

Results: The first cohort of EMS students who participated in the WISER classroom activity scored 20% higher on the hazmat/special ops module of the course than students in the previous year. Analysis of usage data and grades from the pharmacy technician students showed that the students using the iPads

the most often also had the highest grades in the course.

Conclusions: Due to the small numbers of students in these programs during the first year, we will need to conduct these activities with several more cohorts to show greater reliability. Additionally, In April 2014 we are introducing a rubric to better assess the information literacy outcomes for the EMS activity. However, the results so far indicate that student performance and information fluency were increased by the use of mobile technology. We believe this will result in health professionals who are better prepared to work with information technology on the job. The librarian continues working with these two programs and is expanding the use of mobile technology to other allied health programs.

Public Health/Health Administration Section

Built Environment in Public Health: How Community Infrastructure Impacts Health Outcomes

The Impact of Street Advertising on Physical Activity, Sedentary Behavior, and Weight Among Youth

Sandy Slater
Assistant Professor, University of Illinois, Chicago, Illinois

Monday, May 19
2:05 PM - 2:30 PM

Room: Columbus EF, Gold Level, East Tower

Purpose: Social marketing combines ideas from commercial marketing and the social sciences to present information in a way so as to influence behavior. Social marketing is increasingly being advocated as a core public health strategy for influencing voluntary lifestyle behaviors such as physical activity. Using a social marketing framework, this study aims to examine the impact street advertising of sedentary entertainment, as well as physical activity products/brands, services and facilities on youth physical activity-related (PA) and sedentary behavior, and weight.

Methods: Data collected in 2011 and 2012 on body mass index (BMI), PA, sports participation, and sedentary behavior were taken from annual cross-sectional nationally representative samples of 8th, 10th, and 12th grade public school students in the United States (n=44,844 students and 313 school enrollment zones) . Ads promoting a PA product, brand, service, facility, or participatory event, and all screen entertainment (e.g., video games, TV shows) and cell phone ads were observed. Two sets of advertising measures were constructed: (1) 1/4-mile density surrounding the school and (2) the proportion of streets within the school enrollment zone. Multivariate analyses were conducted, controlling for youth and community demographic and socioeconomic characteristics and clustering at the school/community level.

Results: Preliminary results showed increased density of positive PA advertising in the one-quarter mile surrounding schools and having a greater proportion of ads throughout the community were significantly positively associated with PA and sports participation and negatively associated with sedentary behavior and prevalence of obesity.

Conclusions: Results suggest that increasing the amount of positive PA advertising near schools and throughout communities may be an effective social marketing strategy to promote healthy living by influencing increased PA and reduced sedentary behavior.

A Better Place: Understanding the Information Worlds of Parents of Children with Down Syndrome

Amelia N. Gibson
Graduate, Florida State University, Tallahassee, Florida

Monday, May 19

2:30 PM - 2:55 PM

Room: Columbus EF, Gold Level, East Tower

Description: This study examines the effect of place and community on health-related information behaviors and access. It explores the information worlds of two communities of parents of children with Down syndrome in Florida using interview, social network mapping, and mapping of the physical community. It also highlights the influences of geography, the built environment, and migration on community structure and information networks, and discusses implications of those influences for health information seeking, sharing, and communication.

Searching within Existing Infrastructure to Support Research on the Differently Abled

Nancy Schaefer, AHIP
Reference and Instruction Librarian, University of Florida, Gainesville, Florida

Monday, May 19
2:55 PM - 3:20 PM

Room: Columbus EF, Gold Level, East Tower

Objectives: Nearly half of Healthy People 2020's Disability topic area and objectives in other topic areas focus on accessibility of health care, housing, workplaces, and centers of leisure and social activity for the differently abled. This paper will address challenges of locating quality resources and reliable statistics in authoritative and unbiased sources to support researchers, disabled persons, and their caregivers.

Methods: Information gleaned from interviews with rehabilitation researchers in various specialties will be combined with lessons learned from reference transactions, instructional sessions, and experimenting with optimal literature search strategies for the Healthy People 2020 objectives to provide suggestions on where and how to search for literature in the field of physical and mental challenges. Issues in identification of the target population, available search terminology, reliable sources of information, patient privacy, and architectural and engineering design will be addressed.

Results: Definition and scope for important terms like disability, universal design, and reasonable accommodation vary across sources, authors, users, and even across time for the same user. Students often begin searching without clear inclusion/exclusion criteria in terms of types and extent of disability to target. In the absence of appropriate, useful controlled vocabulary in most bibliographic databases, researchers on disability issues rely on keyword searching, despite higher than normal proportions of irrelevant results. Privacy protections, funding, jurisdictional, and sponsorship issues make locating objective, reliable, comprehensive, authoritative data challenging if not impossible. National-level surveillance is currently the most accessible, reliable and comprehensive, yet build-environment issues often require or rely on data at a more local level. Nonprofit organizations often provide the most focused information but lack the objectivity of peer-reviewed sources.

Conclusions: Clarifying scope and expectations before searching is crucial in disability research. Triangulating national and nonprofit sources may be the only method currently available to project the type of local-level information needed by researchers, equipment purchasers, architects, landscapers, and other decision makers. Improved indexing based on input from experts in disability may assure that the most useful concepts and clear scope notes are available for further research and truly universal design.

History of the Health Sciences Section

Celebrating Our Information Future Using the Treasures of the Past

Branching out of the Rare Book Room: Expanding the Role and Reach of the Health Sciences Special Collections Librarian

Megan Rosenbloom
Head, Metadata and Content Management, University of Southern California, Los Angeles, CA

Monday, May 19
2:05 PM - 2:20 PM

Room: Regency B, Gold Level, West Tower

Objectives: Health sciences institutions often have fascinating special collections that are inaccessible to their patrons and the public. This paper shows how special collections librarians can step outside of their comfort zones to engage with people on their turf. Be it through campus events, public lectures, exhibitions, or general interest publications, expanding the librarian's traditional role can lead to unexpected benefits.
Methods: Through holding author talks with accompanying rare book exhibits to draw attention to collection items, getting outside grants for campus events to expand audience reach, and doing off-campus public lectures and publications, librarians can show off their libraries' treasures and teach about the history of medicine and the history of their institutions. This paper will discuss strategies for seeking outside funding and partnerships toward widening the audience for a health sciences libraries' special collections. Librarian involvement in multidisciplinary groups and conferences will also be explored.
Results: This paper uses the author's personal successes and failures at her institution to extrapolate practical ideas for other librarians to expand the reach and visibility of their special collections.
Conclusions: Librarians' abilities to promote their collections are limited mostly by their time. A little legwork and creativity can go a long way toward reaching new audiences, which can benefit the library in unexpected ways.

Preserving the Past for the Future: University of California-San Francisco Library Recipe for Success

Karen Butter, FMLA
University Librarian and Assistant Vice Chancellor, University of California, San Francisco, California

Polina E. Ilieva
Head, Archives and Special Collections, University of California, San Francisco, California

Monday, May 19
2:20 PM - 2:35 PM

Room: Regency B, Gold Level, West Tower

Objectives: This paper will demonstrate the importance of building and maintaining a robust archives and special collections (A&SC) program to collect, preserve, and provide access to institutional memory. Describe how archival collections are used to support research and teaching in the history of health sciences and history of the University of California-San Francisco (UCSF). Explain how A&SC contributed to successful organization of the 150th anniversary of UCSF.
Methods: Analyze reference requests sent by university departments and schools in preparation for the 150th anniversary and how A&SC fulfilled them. Investigate what and how materials were used to create physical and virtual exhibits and event website and showcased through social media. Evaluate how archivists' expert knowledge of institutional history contributed to the work of the campus-wide organizational committee. Research how A&SC enhances the value of the library not only through serving the current needs of the research and educational community, but also by connecting the past to present and contributing to building a common future. Investigate how day-to-day activities of A&SC facilitate successful and on-time organization of fundraising and gift campaigns, institutional and individual faculty anniversaries, and local and state physical or virtual exhibits, and contribute to successful fulfillment of overall institutional mission.
Results: A well-established and funded A&SC program ensures continuing preservation of the institutional history and traditions. It provides easy access to audiovisual materials, artifacts, documents, and publications and helps reconstruct events of the past. The archives staff provides advice on how to position the history of an individual school or department within a broader cultural and historical context. The A&SC plays diverse roles in the anniversary organization process from providing factual information for the event website and creating a historical timeline to managing the work of exhibit designers as well as

selecting materials and artifacts to represent institutional development and achievements.

Conclusions: UCSF A&SC dates back to 1864, when the Toland Medical College was created in San Francisco. Even if the archival program did not officially exist at that time, librarians have been collecting materials documenting the establishment of the college that later became affiliated with the University of California. A yearlong 150th anniversary celebration is used to showcase and analyze how A&SC contributes to organization of events and their promotion. To fulfill this role, A&SC actively solicits collections, organizes educational events, establishes relations with departments to facilitate the transfer of materials, and educates all stakeholders about the value of well-preserved and easily accessible institutional history.

The New England Prescription Images Database: Building a Strong Foundation for Future Research

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Greg Martin
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Sarah McCord
Associate Director, Information Literacy Services, and Associate Professor, Massachusetts College of Pharmacy and Health Sciences University, Boston, Massachusetts

Monday, May 19

2:35 PM - 2:50 PM

Room: Regency B, Gold Level, West Tower

Objectives: This paper discusses the challenges and successes, both human and technological, of creating a digitized searchable database of historic prescription records.

Methods: Our university is a private institution that supports a wide range of allied health sciences disciplines. The library collection includes many old prescription books with entries spanning the years 1876-1915, and we are now in the process of making them available digitally. This session will cover the design challenges of creating database architecture that reflects the unique information contained in the original sources, the creation of metadata to describe the images for effective searching, the transcription of the information into the database, and the process the university is using to evaluate the Health Insurance Portability and Accountability Act implications of making this information publicly available on the Internet. In addition to a searchable database, we are also planning the eventual creation of a data set that can be used for historical epidemiology, pharmacy practice, and drug regulatory affairs research.

Results: Because these records document both the prescriptions that were actually dispensed by each pharmacy, as well as the formulae used to compound them, they are valuable to students and researchers interested in the history of medicine, pharmacy, and public health, as well as those interested in the use of natural products as materia medica before the development of modern synthetic medicines.

Conclusions: The project has generated significant interest from many teaching and research faculty at our institution, beyond our initial collaboration between libraries and pharmacy faculty members, and has had the added benefit of engaging university alumni in an ongoing research project.

Collaborative Connection to the Past and Future: Introducing an Archival Program and Creating a History and Image Web Exhibit

Martha E. Meacham
Library Fellow, University of Massachusetts Medical School, Worcester, New Hampshire

Monday, May 19
2:50 PM - 3:05 PM

Room: Regency B, Gold Level, West Tower

Objectives: Establishing an archival program and creating a digital exhibit highlighting the history of an institution provides invaluable outreach and support.

There are opportunities for significant collaboration between affiliated organizations by building relationships and sharing expertise. This paper provides a project description and product evaluation of the collaboration between a large academic medical library and archives and an affiliated vaccine manufacturer. The planning, implementation, and outcomes are discussed, with generally applicable components of this project detailed. Finally, recommendations for similar project implementations are given.

Methods and Results: In collaboration with a medical library and archives, an affiliated, historic vaccine manufacturer developed a project to preserve and publicize its long, rich history. While initially there were many goals for the project, an archivist was hired for only 900 hours. Priorities, a timeline, and deliverables had to be negotiated. The result was the development of an institutional archival program and an online history and image exhibit, both serving as powerful outreach and marketing tools. The project had 2 notable components: the establishment of traditional archival procedures and activities, including supporting documentation for future work; and the research, selection, and implementation of an appropriate web platform supporting an image exhibit, comprehensive timeline, and narrative history. By developing a web exhibit, the vaccine manufacturer now has a visible product used for outreach and promotion. The creative manipulation of an open source, simple web service served the needs of the archivist, the institution, and the budget. Collaboration between the manufacturer and the medical school has increased general communication and connection between the two. Finally, by providing very clear guidelines, education, and documentation for the project and all aspects of archival work, invested parties could make more appropriate planning decisions and be better prepared to continue the project in the future. Collaboration, communication, and creativity by all parties grounded and guided this project and are crucial to any success in projects of this type.

Conclusions: The creative use of resources and the creation of clear foundational policies and procedures--while also providing education about the nature, importance, and work expectations of archives--led to valued deliverables and a successful project. While not all initial goals were able to be addressed, by creating realistic expectations and timelines, and producing an appreciated, visible product, the project was ultimately extended with additional funding and labor.

Looking Forward, Looking Back: Celebrating Seventy-Five Years of Alcohol Studies

William Bejarano
Information Specialist, Rutgers University, Roselle Park, New Jersey

Judit Ward
Director, Information Services, Rutgers University, Piscataway, NJ

Monday, May 19
3:05 PM - 3:20 PM

Room: Regency B, Gold Level, West Tower

Objectives: To inspire short-staffed libraries to make themselves valuable and indispensable to their organizations. To share the story of how a small library took the initiative to spearhead the anniversary celebrations by assessing and offering its resources to the host institution. To illustrate how libraries can overcome challenges in collecting, reviewing, and displaying treasures of the past to benefit the future.

Methods: Our library, the oldest collection on addiction, not only represents but also hosts alcohol history. Since 2011, in preparation for three anniversaries in 2014, library staff has been reviewing, selecting, and digitizing material from its archives to increase accessibility and provide historical context. Two in-house physical exhibits were designed and created using library resources. By applying principles and best practices of modern information science, a digital archive is currently under construction to organize the wealth of information accumulated at the center and share the collection of documents, images, artifacts, and items preserved by former researchers and staff. A significant acknowledgement is the opportunity to celebrate with colleagues and host the 36th Conference of the Substance Abuse Librarians and Information Specialists in 2014 on the topic: "Looking Forward, Looking Back: Reflections on the Past and Planning for the Future."

Results: Reviewing archival resources revealed gaps and prompted us to reach out to faculty and other substance abuse librarians. The first tangible results were an in-house exhibit, a special display in the library, and an article. The daunting task of creating a digital archive of alcohol studies was broken down to manageable portions. Collaborating in house, a new digital collection evolved to provide information about alcohol studies in a historical context. Pressing dates of upcoming anniversaries kept the project on track despite problems, anticipated or unforeseen. Major challenges included facing decisions and overcoming difficulties from technological, financial, ethical, and scholarly perspectives.

Conclusions: The library benefited tremendously from choosing to become instrumental in planning and executing events to celebrate. Through offering the treasures of alcohol science from its archives, the library aimed to play a vital role in bridging the gaps within the center for the anniversaries. As a result, the library gained recognition for providing content and context for the celebrations and consolidated its status within the center as a highly appreciated component and valuable asset. Virtual and physical exhibits can meaningfully link the past to the future over time and space with the help of librarians for future benefits.

Collection Development Section
Creative Destruction/Disruption

Library Resource Discovery: Keep It Simple, Stupid!

Harold S. Bright IV
Electronic Resources Librarian, A.T. Still University, Mesa, Arizona

Michael R. Kronenfeld, AHIP
University Librarian, A.T. Still University, Mesa, Arizona

Monday, May 19
2:05 PM - 2:20 PM

Room: Regency A, Gold Level, West Tower

Objectives: In the digital environment, libraries need to develop intuitive systems that effectively retrieve highly relevant content from extensive library resources. These systems need to be intuitive to support easy patron access to and discovery of these resources. This paper focuses on one academic health sciences library's effort to build such a system around the use of a vendor-based discovery tool.
Methods: The library reviewed available discovery tools and selected the tool that seemed to work most effectively with health related resources. A single-box search interface did not provide enough precision, and the authors worked to build an intuitive, sophisticated discovery solution augmented with simple check boxes and basic limiters including disciplines. The discovery tool searches MEDLINE, over 150,000 e-books, and the majority of bibliographic databases in the library's collection. The library tried to create a federated search of point-of-care resources, but UpToDate does not allow federating its results. Embedded widgets in the discovery tool link to other resources not easily discoverable in the discovery search such as images and anatomy. User input assisted in the design of the tool. The library will utilize annual use statistics to assess the impact of the new discovery system upon the library and its resources. It is also applying to participate in the Association of College & Research Libraries "Assessment in Action: Academic Libraries and Student Access" (AIA) project to assist in assessing the effectiveness of the new discovery system in facilitating students

discovery and use of library-based evidence/information.

Results: Initial student reaction after deployment was highly positive. A few negative faculty reactions centering on advanced search functionality were allayed after training. The primary search tool on the library's entry page anchors the library's new discovery system providing access to its digital resources. Access to specific resources and platforms were moved to second-level web pages. The degree of change in use of these resources will be reviewed using use statistics collected before and after implementation of the system.

Conclusions: Academic health sciences libraries are far along in the transition from paper-based evidence/information to digital resources. The challenge librarians face is to integrate their resources and make discovery of quality information intuitive for patrons who have neither the time nor the need to become expert searchers. This paper presents the process of building a discovery system around one of the new tools available on the market to provide intuitive but precise results and to assess its effectiveness to drive further refinement.

Third Time's the Charm: Reconstructing an Existing Demand-Driven Acquisitions (DDA) Program

Nicole Theis-Mahon
Liaison, School of Dentistry, and Collections Coordinator, University of Minnesota, Minneapolis, Minnesota

Monday, May 19

2:20 PM - 2:35 PM

Room: Regency A, Gold Level, West Tower

Objectives: Describe how an existing demand-driven acquisitions (DDA) program at the University of Minnesota was deconstructed and rebuilt to better serve the needs of its users and increase sustainability. This will include a discussion of the barriers and surprises encountered and share best practices for creating a successful DDA program at other institutions.

Methods: The University of Minnesota Health Sciences Libraries collaborated with other campus libraries to revise an existing DDA program to better meet the evolving needs of its users. The libraries began by reviewing program the existing plan, with a particular focus on purchase triggers, relevance of titles in the pool, and reuse of materials after the triggering purchase. Armed with this information, the team made edits to the subject parameters of the existing approval plans that fed the DDA pool, identified and set overall parameters for the DDA program, and worked with the vendor to explore options for access

levels that met with user expectations. The change on expenditures and user behaviors after the revision were tracked and analyzed to evaluate the success of the changes and sustainability of the DDA program.

What's the Difference between Research Metrics

Dana Abbey
Health Information Literacy Coordinator, National Network of Libraries of Medicine, MidContinental Region, University of Colorado Anschutz Medical Campus, Aurora, CO

Lilian Hoffecker
Research Librarian, University of Colorado Anschutz Medical Campus, Aurora, CO

Monday, May 19

2:35 PM - 2:50 PM

Room: Regency A, Gold Level, West Tower

Objectives: To demonstrate ways librarians can assist clinicians and researchers discover their scholarly value by comparing different research metrics.

Methods: Historically, the only measure of research influence was the number of citations a researcher's articles received. Journals often take years from submission to publication and years after that for other researchers to notice and cite an article. But technology and social media innovations allow researchers to learn immediately how visible their publications are on a global scale. For this study, we identified six researchers who agreed to have their publications analyzed. Using tools in Web of Science, Google Scholar, and Eigenfactor.org, citation metrics such as the H-index, impact factor, and eigenfactor scores were gathered. Additionally, the researcher's publications were tracked in various social media sites and run through alternative metric services such as Plum Analytics to gather non-citation metrics. A table of results comparing and contrasting the different metrics is provided.

It's the End of the World as We Knew It--and We Feel Fine

Theodora A. Bakker
Associate Director, Knowledge Informatics; Associate Director, Systems and Technology, New York University Langone Medical Center, New York, NY

Neil Rambo
Chair, Department of Library and Knowledge Informatics, New York University Langone Medical Center, New York, New York

Jeff Williams, AHIP
Associate Director, Research, Education, and Clinical Support, New York University Langone Medical Center, New York, New York

Monday, May 19

2:50 PM - 3:05 PM

Room: Regency A, Gold Level, West Tower

Objectives: An academic health sciences library was thrust into a new reality with the destruction of their facility. A period of uncertainty gave way to the realization that this elimination of legacy services cleared the way for new opportunities. Takeaways include eliminating services of diminished importance provides flexibility for services more in line with the needs of today's medical center users.

Methods: In October of 2012, an academic health sciences library was engaged in formal strategic planning, development of a new liaison program, and knowledge management services. All of this was pushed aside with the complete destruction of the library's main facility, on-site collection, and staff offices. It was quickly determined that the nearly complete strategic plan was still relevant in the face of this new reality. Temporary space for the library's staff was identified, and allowed the staff to work in proximity to each other for the first time. The new liaison program was launched, and the knowledge management services were placed on an accelerated timetable. The planning for a reconstructed physical library was informed by all that had been learned about what is of most value about a physical library space to the library's users and staff.

Results: Although library staff remain in temporary space, the library has successfully maintained critical services to users and improved our alignment with supporting emerging needs throughout the medical center. In the months immediately after the destruction of the main library facility, the library struggled with communicating the message that the assistance provided by library faculty, and the online services and resources provided by the library were still available. Subsequently, there has been a growing realization on the part of medical center administration and users of the library that despite the absence of the physical facility, they still have the support they need. This has been bolstered by the efforts of liaison librarians and new knowledge management initiatives. A plan for the new library has been finalized, and the resulting mix of user and technology spaces is in sync with contemporary needs.

Conclusions: In many ways, the library's main facility hampered the library's ability to evolve to meet evolving organizational needs. Since the facility's destruction, library faculty have been free to experiment with new service models and engage with users in new ways. Although there were regrettable losses, it is likely this event will be remembered as an unplanned example of creative destruction.

Creative Destruction: Collections Reimagined in an Ethiopian Library

Emily J. Glenn, AHIP
Chief Librarian, St. Paul's Hospital Millennium Medical College, Addis Ababa

Monday, May 19
3:05 PM - 3:20 PM

Room: Regency A, Gold Level, West Tower

Description: Organized access is gaining ground in the libraries of St. Paul's Hospital Millennium Medical College, a teaching hospital with a library system that has reinvented itself many times during its short life. This paper examines the shift in attitudes, practices, and outcomes of specific projects related to library collections. Three branch libraries have been the beneficiary of a variety of donations: mergers from other closing libraries nearby, charity donations, and drive-by gifts. In preparation for a move to a new facility, the existing libraries and their means for receiving, storing, presenting, and sharing materials will be reimagined. A new library and information technology (IT) facility has been constructed and is taking shape amidst other major changes within the institution. This paper will present the state of the libraries initially and describe several collection-related interventions used during a nine-month period between August 2013 and May 2014. The author will present first-hand observations and anecdotes about leadership and changes guiding modernization of the library system and its position within a developing country.

Leadership and Management Section

Innovation and Leadership in Health Sciences Education: Scholarship and Publishing

Building a Framework Together: Embedded Understanding of Faculty Scholarly Publishing and Research Support Services

Young-Joo Lee
Nursing Librarian, Howard University, Washington, District of Columbia

Virginia Pannabecker
Health Sciences Librarian, Arizona State University, Phoenix, AZ

Monday, May 19
2:05 PM - 2:24 PM

Room: Columbus IJ, Gold Level, East Tower

Objectives: To develop an experiential understanding of what services and resources are most valuable to faculty throughout research and publishing processes. To use this understanding in combination with information in the literature to develop and provide services that anticipate researcher needs at each step of the process.

Methods: Facilitating open access publishing, best practices in literature reviews, scholarly research writing, clinical research data management, preservation, and accessibility: all of these are areas that librarians are working to support in many institutions. In this paper, two librarians from two research-1 universities provide a brief review of relevant literature. They follow with lessons learned and best practices identified during experiences as part of graduate student or faculty learning and working groups. These include: participation in a clinical research evaluation course; being a coauthor during writing, submitting, and revising of a scholarly peer-reviewed article, and negotiating copyright terms with an academic publisher; and participating in a faculty writing group for mutual motivation and constructive commentary on in-process writing projects.

Results: In this observational and participative study, the authors found that by taking advantage of opportunities to join groups in their research communities, they expanded their own skill sets while also expanding their contextual understanding of researcher support needs, including faculty, instructors, researchers, and graduate students. Through physical and online participation in learning, training, and working spaces along with their constituent communities, the authors built strong connections and mutual understanding. By being present (online or in-person) when questions occurred, they increased opportunities to provide in-context support for literature review searching techniques; citation management tools; copyright, journal selection, and publishing questions; and data management planning.

Conclusions: Each profession, discipline, and employment has its learning communities, informal or time-specific subgroups that come about as needed or for required trainings. Learning communities are where those in a given discipline or employment explore tasks in a collaborative setting and learn together, developing new skills and mastery through practice with peer and expert feedback. Such communities might take the form of a course on clinical research, an informal writing group, a seminar series, or even a cross-department event-planning group. By joining such groups, librarians can build on common experiences to form stronger relationships with their communities, gaining two critical benefits: (1) opportunities to provide research and information expertise in context and (2) greater recognition as part of the community and of what librarians do and their areas of expertise.

Building a DREAM: Medical Librarians Collaborate to Create a Health Sciences Assessment Tools Database

Lindsay Blake, AHIP
Clinical Information Librarian, Georgia Regents University, Augusta, Georgia

Kathy Davies
Chair, Research and Education, Georgia Regents University, Augusta, Georgia

James Halbert
Georgia Regents University

Christie Palladino
Georgia Regents University

Monday, May 19
2:24 PM - 2:43 PM

Room: Columbus IJ, Gold Level, East Tower

Objectives: The Directory and Repository of Educational Assessment Measures (DREAM) project built an open repository of peer-reviewed assessment measures used in health sciences education.

Methods: Librarians collaborated with the Medical College of Georgia's Educational Innovation Institute (EII) to create a medical education assessment database, DREAM. The DREAM database is hosted within the MedEdPORTAL on the Association of American Medical Colleges (AAMC) website. Librarians tailored searches to the six major Accreditation Council for Graduate Medical Education (ACGME) competencies. Librarians crafted PubMed searches to identify a variety of assessment tools for students and residents clustered around the six competencies in consultation with the DREAM project director. All searches were combed for Psychometrically Evidenced, Appearing Repeatedly in a Literature Search (PEARLS). PEARLS were sent out to reviewers, who prepared a critical analysis. A critical synthesis package, which includes librarian-created indexing and database record design scheme, is then submitted to the DREAM site. DREAM records include peer-reviewed analysis, administrative materials, and the actual instrument. All instruments in DREAM are publicly available. Instruments that do not meet specific PEARL criteria are identified in the Index of Health Professions Education Assessments.

Results: The DREAM initiative launched online October 2013 to promote assessment tools meeting PEARL criteria for evidence and public accessibility. The next phase of database development will be designing searches for the entire health sciences arena and social sciences. DREAM has gained national attention and led to further librarian involvement in projects on campus and for other organizations. Librarians are full-partners with the EII team on the DREAM project, designing not only searches, but also providing feedback, participating in strategy meetings, and assisting as needed. Library faculty are active coauthors for papers, demonstrations, and posters presented at regional and national medical education conferences. DREAM is recruiting authors to increase the number of non-proprietary assessment measures indexed by the database.

Conclusions: The collaboration between the EII and the medical library is mutually beneficial. The medical librarians have gained national recognition for their inclusion in the DREAM project. Librarians are collaborating on an article with the EII DREAM team for publication in the medical education literature. Librarians have also improved their searching skills in PubMed by expanding their knowledge of both Medical Subject Headings and indexing. The knowledgebase developed from DREAM has resulted in more efficient and productive searching for complex research projects.

Jumping in: Collaborating on an Evidence-Based Dentistry Research Grant

Richard McGowan
Assistant Curator: Research Librarian, New York University School of Medicine, New York, New York

Jeff Williams, AHIP
Associate Director, Research, Education, and Clinical Support, New York University Langone Medical Center, New York, New York

Monday, May 19
2:43 PM - 3:02 PM

Room: Columbus IJ, Gold Level, East Tower

Objectives: A dental librarian and an administrator working for an academic health sciences library collaborated with a dental school faculty and PhD student to develop a grant-funded research study of the effectiveness of evidence-based dentistry curricula. The long-term, significant time investment was balanced by the opportunity to develop skills in research design and instrument validation, and participate in original scholarship.
Methods: Once the proposed research topic was finalized, the collaborators established a weekly, in-person meeting schedule. As the faculty member had significant experience conducting large-scale, survey-based research, the three less-experienced collaborators completed self-study readings in questionnaire design and survey methodology. Each participant was required to create multiple draft survey questions that were discussed and reviewed at the weekly meetings. Potential research partners were identified through these meetings as well. The librarians identified validated research instruments that would supplement the original questionnaire, as well as identified literature to address questions that came up as the collaboration progressed. The librarians also provided recommendations and insight on the benefits of online survey delivery and usability. A consultation with a biostatistician was a critical step, adjusting the proposed approach to pursing grant funding and reinforcing the need for adequate beta-testing of the survey instrument.
Results: The survey was distributed to a number of beta testers to identify issues with question construction and gauge how long it will take participants to complete the survey. As the survey has a substantial number of questions, and the intended research subjects are practicing dentists, it was also important to determine adequate financial compensation for completing the survey. The beta test results, along with guidance provided by the biostatistician, convinced the research team that pursuing an R21 exploratory/developmental research grant will allow us to demonstrate the effectiveness and statistical reliability of the survey. It will also help establish the sample size necessary for establishing statistical significance. The research team believes this will strengthen a subsequent R01 application.
Conclusions: The dental librarian and the administrator benefitted from this long-term partnership. It has provided real-world experience in the significant

work required in developing a research study from scratch. Although they had much to learn, they also found they had a lot to offer to the research team. Throughout the now months-long collaboration, hard work has been required, and everyone knows that success in obtaining grant funding is not assured. Nevertheless, the partnership has been a significant opportunity to grow.

Drug Information: A Library-Pharmacy Partnership Resulting in Improved Educational Outcomes

Amy Chatfield
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Ian S. Haworth
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Rebecca Romero
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Monday, May 19

3:02 PM - 3:21 PM

Room: Columbus IJ, Gold Level, East Tower

Objectives: The goal of the work was to improve the quality of cited material in the context of a case-driven problem-based learning course in a professional pharmacy curriculum. To achieve this goal, librarians provided lectures and created websites aimed at improved literature searching and recognition of primary literature, with the guidance of a strong collaborative interaction with pharmacy faculty.

Methods: Course faculty and librarians collaborated to re-envision the integration of information into the course to better meet pharmacy curricular standards requiring the ability to "retrieve, analyze, and interpret the literature" (2004 CAPE Educational Outcomes). There was a particular need to support student discovery and retrieval of information related to drug administration. Direct librarian instruction in this area was implemented in fall 2010. Assessment of outcomes led to changes in 2011 and establishment of close-to-optimized instruction in 2012 and 2013. This activity has led to one publication discussing the methods of collaboration and student perceptions of the new instruction. Course faculty and librarians also developed an interest in assessing whether the

new instruction was successful in changing student citing patterns. An assessment framework was developed to analyze bibliographic citations in case studies taught prior to and after introduction of the instruction.

Results and Conclusions: Collaborating across disciplines to improve a course within an existing structure and in a larger curricular outcomes framework can be daunting but provides benefits for all members of the collaboration and the students in the course. These activities also provide data and ideas for publications coauthored by librarians and course faculty. Students reported higher satisfaction with the revamped instruction in 2010 and 2011 compared to prior librarian involvement.

A preliminary analysis of several years of citation data has shown an increase in the amount of higher-quality materials cited (such as peer-reviewed journal articles, websites from educational institutions and government groups, and books from reputable publishers) and a decrease in the amount of lower-quality sources (such as free websites and personal communications).

The librarian gained a better understanding of curriculum standards for pharmacy and was able to use this knowledge to improve the collections and services at the Norris Medical Library. The pharmacy faculty gained a greater appreciation of the value of the library and the skills of the librarian as a key resource in facilitating a student-centered health care course. This interactive approach was critical for the improvement of educational outcomes.

Medical Informatics Section

Librarians Role in the Translational Science Research Team

How an Education Role in a Clinical and Translational Science Award (CTSA) Can Generate Connections with Researchers

Jonathan Eldredge, AHIP
Associate Professor, University of New Mexico, Albuquerque, NM

Monday, May 19
2:05 PM - 2:20 PM

Room: Columbus KL, Gold Level, East Tower

Objective: Librarians often play education roles associated with Clinical and Translational Science Award (CTSA) sites. These roles can cover a range of possibilities, spanning from single presentations at meetings to integration as a teaching faculty member within a CTSA graduate level curriculum to full leadership roles in designing and managing the graduate level curriculum.
Methods: Series of case studies at the CTSA at the University of New Mexico's Health Sciences Center.
Results: Librarians' different roles open up opportunities for closer collaboration with CTSA-affiliated research teams. Presentations at meetings can attract the attention of researchers unaware of what knowledge or skills that a librarian can bring to their research team. Teaching courses within the curriculum can raise awareness among new researchers to the many ways that librarians can benefit their careers. Course instruction might open up the possibilities for mentoring junior researchers on their projects. Curricular leadership can help ensure that vital library or informatics competencies are closely integrated into a CTSA graduate-level curriculum, while forming close working relationships with curricular leaders who also play core roles as researchers. The potential for collaboration becomes magnified when the librarian can offer not only an education role, but the skills as an experienced researcher.
Conclusion: Librarians have almost a century of experiences in performing varied education roles in the health sciences. These roles provide avenues for productive collaborations with CTSA researchers.

A Medical Librarian's Role in Pharmacogenomics Research

RoseMary Hedberg
NLM Associate Fellow, Northwestern University Feinberg School of Medicine, Chicago, Illinois

Heidi M. Nickisch Duggan
Interim Director, Northwestern University Feinberg School of Medicine, Chicago, Illinois

Monday, May 19

2:20 PM - 2:35 PM

Room: Columbus KL, Gold Level, East Tower

Objectives: Pharmacogenomics (PGx), the study of how genetic make-up affects individual drug response, is an area in academic medicine experiencing exponential growth in knowledge and application to clinical care. PGx knowledge may guide clinical decision support in the prescription of drugs based on patient genotype. Physicians need access to knowledge resources that provide clinically relevant information within an electronic medical record (EMR) framework.
Methods: Northwestern University is a member of the Electronic Medical Records and Genomics (eMERGE) Network, which combines DNA biorepositories with EMR systems with the goal of returning genomic testing results to physicians at the point of care. To accomplish this, Northwestern eMERGE investigators created a new interdisciplinary team, consisting of medical librarians, information technology experts, informaticians, physicians, geneticists, and genetic counselors, each with unique expertise and a common goal of providing clinicians access to quality PGx information resources. The group's medical librarians use their expert knowledge of available information resources to help guide the development of new knowledge sources in order to connect physicians to relevant information via a prototype PGx clinical decision support framework built on existing clinical infrastructure.
Results and Conclusions: My results are not complete yet.

Update and Overview: Changes in the Clinical and Translational Science Awards (CTSAs) and Their Impact on Libraries

Kristi L. Holmes
Director, Galter Health Sciences Library, Northwestern University Clinical and Translational Sciences Institute (NUCATS), Chicago, Illinois

Monday, May 19
2:35 PM - 2:50 PM

Room: Columbus KL, Gold Level, East Tower

Diving into Data: Development of a Clinical and Translational Science Institute (CTSI) Core as a Springboard for Expanding Library Data Services

Theodora A. Bakker
Associate Director, Knowledge Informatics; Associate Director, Systems and Technology, New York University Langone Medical Center, New York, NY

Karen L. Hanson
Knowledge Systems Librarian, New York University Langone Medical Center, New York, NY

Joey Nicholson
Education and Curriculum Librarian, New York University Langone Medical Center, New York, NY

Neil Rambo
Chair, Department of Library and Knowledge Informatics, New York University Langone Medical Center, New York, New York

Alisa Surkis
Translational Science Librarian, New York University Langone Medical Center, New York, NY

Monday, May 19
2:50 PM - 3:05 PM

Room: Columbus KL, Gold Level, East Tower

Objective: The New York University (NYU) Health Sciences Library had been initiating research data management support services and was exploring further roles in this area. When the NYU Clinical and Translational Science Institute (CTSI) began development of a data management core, the library recognized an opportunity to use this core as both an outlet for planned services and a

driving force for the development of new services.

Methods: The components of the NYU CTSI Clinical Research Data Management Core emerged piecemeal, but the presence of an embedded librarian ensured that the library was aware of, and well positioned to act on, emerging needs. The need to improve access to external health databases led to a partnership with the Department of Population Health to create a searchable catalog of these databases. The core also presented an opportunity for the library to expand education efforts by partnering with the CTSI's clinical data management expert to create a series of learning modules.

Results: The CTSI-initiated plan for a data management core came to include three main elements: research data management support and education, facilitation of access to electronic health record (HER) data for research, and creation of a catalog of clinically relevant research datasets. The key role for the library was in the creation of the data catalog, with plans to begin with cataloging of large external datasets used by population health researchers (e.g., census, National Health and Nutrition Examination Survey), and then expand to include internally produced clinical and epidemiological research datasets. The library then developed a plan, in response to developing National Institutes of Health national data catalog plans, to go beyond this scope and include all internal research datasets, but the CTSI component provided a starting point with institutional buy-in for the project. The library also collaborated with the CTSI clinical research management expert to develop an outline for twelve short modules and begin work on those, with a possible outlet for those emerging from a CTSI-initiated workgroup to create a curriculum for new clinical investigators.

Conclusions: While libraries are well suited to provide services and support for research data management, one barrier to this is outdated perceptions of the scope of library activities. Expansion of institutional support for research data management often falls to Clinical and Translational Science Awards (CTSAs), so a librarian embedded in the CTSA provides the opportunity to form a partnership that can leverage the skills available within the library and the recognized research support role of the CTSA.

Building a Better Translational Researcher: The Library's Role in Training the Clinical and Translational Researcher

Heidi M. Nickisch Duggan
Interim Director, Northwestern University Feinberg School of Medicine, Chicago, Illinois

Linda O'Dwyer
Communications Coordinator and Education Librarian, Northwestern University Feinberg School of Medicine, Chicago, Illinois

Pamela L. Shaw

Biosciences and Bioinformatics Librarian, Northwestern University Feinberg School of Medicine, Chicago, Illinois

Monday, May 19

3:05 PM - 3:20 PM

Room: Columbus KL, Gold Level, East Tower

Objectives: Translational scientist training programs require planning and identification of partnerships and stakeholders as a foundation for success. Key areas are optimal for library participation. We have conducted an environmental scan and will provide examples from our institution and our Clinical and Translational Science Award (CTSA) peers to illustrate blueprints for success in library involvement in training and evaluation of the clinical and translational investigator.

Methods: The master of science in clinical investigation (MSCI) is a recent graduate degree program born from the CTSA initiative. Many clinical and translational science (CTS) institutes have MSCI programs, which are primarily intended to train clinical practitioners in the skills of translational research. These programs include courses in writing, grants writing skills, bioinformatics and statistics, team science, and research methods. CTSA institutions also fund "K awards": career development grants to early career investigators to accelerate their success in research and funding. Our environmental scan involved searches of the biomedical and library literature, searches of institutional websites, web searches to capture relevant librarian blog and news stories, and conversations with library staff involved in MSCI and K scholars education and outcomes evaluation.

Results: My results are not complete yet.

Conclusions: The library provides all the necessary elements for building and developing translational researchers: raw materials, including access to literature and databases; tools such as information-seeking strategies and guides, bioinformatics software and instruction and statistical analysis software; and a professional workforce highly skilled in methods of instruction, information management, and evaluation and impact assessment for K award program outcomes and future development.

Consumer and Patient Health Information Section

Promoting Ethical Awareness among Health Sciences Librarians

Affordable Care Act and the Role of Medical Librarians

Jackie Garner
Consortium Administrator, Centers for Medicare and Medicaid Services, Chicago, Illinois

Monday, May 19
2:05 PM - 2:30 PM

Room: Columbus GH, Gold Level, East Tower

Description: Jackie Garner in her role at the Centers for Medicare and Medicaid Services has worked extensively with community librarians, health care professionals, and other stakeholders in the marketplace this past year. She will share information about enrollment outcomes in the new Health Insurance Marketplace and how medical librarians may continue to assist consumers and professionals with health information and enrollment in a health plan. Specifically, she will highlight what it means for a consumer to have health insurance for the first time.

Consumer Health and the Provision of Birth Control Information

Christine F. Marton
Adjunct Instructor, University of Toronto, Toronto, ON, Canada

Monday, May 19
2:30 PM - 2:50 PM

Room: Columbus GH, Gold Level, East Tower

Description: The provision of factual information about birth control methods to the public has endured various controversies and bans in Western society. As the use of birth control became legal and widespread in the twentieth century as a public health measure to reduce the spread of sexually transmitted infections and as a personal choice between consenting individuals to limit family size, several organizations have been involved in information dissemination about birth control. While the role of public health departments and Planned Parenthood is well known, the role of libraries, in particular, consumer health collections and the public library system, has received less recognition. The current status of birth control information provision in consumer health collections, public libraries, and specialized collections in a large urban center was investigated primarily through searching their respective online public access catalogs (OPACs) as well as in-person visits. Consumer health collections provide information about birth control from a biomedical perspective through well-known and respected books about women's health and men's health, respectively, such as the Harvard Guide book series, while the public library system and specialized collections provide both biomedical and sociological perspectives about birth control as their collections include not only the aforementioned biomedical-focused health book series but books with political/feminist/sociological dimensions, such as *Our Bodies Ourselves* from the Boston Women's Health Collective. However, general purpose consumer health collections also may supplement their book collections with a substantial amount of non-book materials, such as pamphlets, fact sheets, and booklets, published by governments and not-for-profit public organizations that focus on safe sex.

Health Sciences Librarians, Patient Contact, and Secondary Traumatic Stress

Rachel W. Becker
Health Sciences Librarian Fellow, New York University Langone Medical Center, New York, New York

Aileen M. McCrillis
Research Librarian, New York University Langone Medical Center, New York, NY

Monday, May 19
2:50 PM - 3:07 PM

Room: Columbus GH, Gold Level, East Tower

Objectives: Although secondary traumatic stress (STS), "stress resulting from helping or wanting to help a traumatized or suffering person," has been observed in health care providers across many fields, this phenomenon remains unexplored in health sciences librarians (HSLs). The purpose of this study is to determine if HSLs with direct patient contact experience symptoms of STS from their interactions.

Methods: This study will employ a mixed methods approach, including focus groups and an online survey of HSLs with direct patient contact, either through patient education or clinical librarianship. The focus group will consist of patient education librarians and clinical librarians employed at a large academic medical center. Results from the focus group will be used to inform the development of an online survey to capture preliminary measurements of the incidence of symptoms of STS. Since there is no extant testing instrument for STS in the HSL population, the survey will be based on a validated STS instrument modified to better reflect the responsibilities of study participants. The survey will be distributed to HSLs with direct patient contact via professional email discussion lists. This study will be conducted with the approval of the institutional review board of the authors' institution.

Results: Fifty-five people from three professional email discussion lists responded to the survey. Respondents were almost entirely female and had daily contact with patients and/or their families in the form of patient education services. Preliminary results suggest a moderate presence of some STS symptoms, particularly in the avoidance and intrusion categories. Roughly half of respondents sought support for emotions they have encountered on the job, and all respondents indicated that such emotional support was available to them should they desire it.

Conclusions: Health sciences librarians with direct patient contact may experience some symptoms of STS. The emotional toll of working with patients and their families may not be fully recognized. While all respondents indicated professional support systems were available to them, only half reported using those systems, and several HSLs commented on the difficulty of accessing or paying for them.

New Construction and the Evolution of Outreach: Connecting with Family Caregivers on Facebook and Twitter

Jamie E. Peacock
Outreach Librarian, National Library of Medicine, Bethesda, MD

Monday, May 19
3:07 PM - 3:25 PM

Room: Columbus GH, Gold Level, East Tower

Objectives: To explore and develop the role of the new media outreach librarian. To increase awareness of our institution's resources among family caregivers by establishing relationships with caregiver organizations online using Twitter and Facebook. To use social media contacts to find, foster, and support offline partnerships with other government entities and community organizations already doing family caregiver outreach.

Methods: Technological and budgetary shifts have necessitated changes in a large institution's health information outreach to underserved populations. To address these climate changes, we have evolved our role as outreach librarians by taking our outreach to Facebook and Twitter. To that end, we developed a pilot project to learn more about the use of social media as a viable option to deliver health information and increase the awareness of our institutions resources among groups that are active users of online health information. We monitored and surveyed Facebook pages and Twitter accounts for discussions or questions by target populations. Responding to what we discovered about the needs of family caregivers online, our engagement expanded to include targeted promotion of our resources at exhibits, health fairs, and caregiver events.

Cancer Librarians Section
Research Survey Design for Librarians

Planning for Effective Survey Design

Jodi L. Philbrick
Lecturer, University of North Texas, University of North Texas, Denton, Texas

Monday, May 19

2:05 PM - 2:30 PM

Room: Columbus AB, Gold Level, East Tower

Description: Planning is a critical step in designing effective surveys. An overview of the planning process will be presented from research question to deployment. Personal examples will be shared with the audience.

Managing Bias in Survey Research

Jonathan Eldredge, AHIP
Associate Professor, University of New Mexico, Albuquerque, NM

Monday, May 19

2:30 PM - 2:55 PM

Room: Columbus AB, Gold Level, East Tower

Objective: The descriptive survey represents a common form of research design in health sciences library and information practice. How can surveys be better designed to yield research results applicable for practice?
Method: Didactic session: The speaker will include some active learning techniques to involve the audience.
Results: Descriptive surveys yield limited data for application in practice except, perhaps, for the exploratory stages of a series of research studies. There are numerous ways to introduce bias into descriptive surveys unintentionally. Surveys that are part of experimental designs such as randomized controlled

trials, observational studies such as cohort studies, or ones that are testing a hypothesis based on a theory might bypass some of the serious biases associated with this research design.

Conclusion: Library and information practitioners should exercise caution when deploying descriptive surveys due to the many forms of bias that can unintentionally become introduced into this type of research design.

The Value Study: An Example of Community-Based Collaborative Survey Design

Joanne Gard Marshall, AHIP, FMLA
Professor, University of North Carolina, University of North Carolina, Chapel Hill, North Carolina

Monday, May 19

2:55 PM - 3:20 PM

Room: Columbus AB, Gold Level, East Tower

Description: Survey research design is typically undertaken by researchers as a means of gathering large amounts of data in a format that can easily be measured and analyzed. The "Value of Library and Information Services in Patient Care Study," funded by the National Network of Libraries of Medicine (NN/LM) took an approach known as community-based collaborative research (CBCR), in which the survey and the study as a whole were collaboratively designed by a planning group of librarians from NN/LM, Middle Atlantic Region, and the research team at the University of North Carolina-Chapel Hill. In CBCR, representatives of the group that will benefit from the research and the researcher play equally important roles in study design and implementation. While this approach takes additional time, the survey is more likely to address the issues of key importance to the field. In the case of the Value Study, the involvement of the planning group also ensured that the survey would be usable in different kinds of health care institutions served by a variety of hospital and academic health center libraries. The large number of survey respondents (16,122 physicians, residents, and nurses) and the use that is being made of the study results in the health sciences library community demonstrate that the additional effort required in the CBCR approach is worthwhile.

Tuesday, May 20

Pharmacy and Drug Information Section

Access Pharmacy Lecture

Moulding the Future of the Pharmacy Profession in Oman: The Collaboration Between the University of Wisconsin School of Pharmacy and the University of Nizwa, Oman

Mara Kieser
Professor and Assistant Dean, University of Wisconsin, Madison, Wisconsin

Tuesday, May 20
2:05 PM - 3:20 PM

Room: Columbus CD, Gold Level, East Tower

Corporate Information Services Section

Boarding out: The Embedded Librarian

A Tale of Two Libraries: Implementing Embedded Librarianship Programs from the Perspective of a Solo Hospital Librarian Turned Academic Librarian

Alisha Miles, AHIP
Assistant Professor, Assistant Director, Public Services, Mercer University School of Medicine, Macon, GA

Tuesday, May 20
2:05 PM - 2:24 PM

Room: Columbus GH, Gold Level, East Tower

Objectives: To assess the inherent differences in creating an embedded library program based on one librarian's experiences serving in two different organizations: as a solo hospital librarian compared to an academic librarian.
Methods: Embedded librarianship has many facets that vary in complexity when comparing the development of a program within the context of two separate organizations. As a solo librarian, networks were first established as part of the foundation of the library's strategic plan to promote the library resources. Collaborative networks led to the establishment of an embedded librarianship role in informatics, rounding, and other clinical aspects. These experiences are now being utilized to establish a library liaison program and embedded librarianship program at an academic institution with indirect ties to a local hospital. The strategic steps are different as an academic librarian due to the need to navigate, network, and integrate librarians within the academic institution and the hospital. This presentation will explain the different roles at each organization, while comparing the challenges, best practices, and success of both experiences.
Results: The experiences detailed within are limited to the author's perspective of 2 organizations. As a solo hospital librarian, the embedded librarianship role

developed over the course of 4 years, while the embedded librarianship program at the academic institution is still in its first year. Each program has resulted in an increase in library usage; however, the hospital library saw dramatic increases including a 70% increase in article requests and a 183% increase in research requests within the first year. These high increases were due to several factors including the need within the hospital to fill various roles including informatics, and the hospital previously lacking a librarian. While the academic embedded librarianship program has not yet resulted in substantial usage increases, this type of organization has provided flexibility for weekly rounding with clinicians which continues to build the foundational relationships necessary for expanding the librarians' roles.

Conclusions: Understanding the organizational culture and determining the best role for an embedded librarianship program takes time, perseverance, and patience. While each experience has provided an in-depth look at embedding librarians within two different types of organizations, the inherent differences have led to unique opportunities and the development of general best practices easily modified for use in a variety of organizations.

Chunky, Sticky, and Bite-Sized: Embedding Screencasts for Information Literacy in Evidence-Based Graduate Nursing Education

Nicole E. Brown
Multidisciplinary Instruction Librarian, New York University, New York, New York

Susan K. Jacobs, AHIP
Health Sciences Librarian, New York University, New York, New York

Arieh D. Ress
Adjunct Business Librarian and Tutorialsmith, New York University, New York, New York

Tuesday, May 20
2:24 PM - 2:43 PM

Room: Columbus GH, Gold Level, East Tower

Objectives: This paper explores embedded librarianship through video screencasts that provide repeatable, asynchronous, interactive learning opportunities for graduate-level nursing students. Videos support information literacy and the evidence-based-practice curriculum and are embeddable in virtual contexts, such as learning management systems and research guides. This project contributes to the development of best practices for embedding

research instruction at the point of need.

Methods: This project uses an instructional design paradigm to create and embed video tutorials in learning environments for graduate-level nursing students at a large academic institution. This five-step model provides a framework for analyzing, designing, developing, implementing, and evaluating instruction, the ADDIE model. Partnering with graduate nursing faculty, the librarian strategically positions timely, curriculum-integrated, bite-sized "chunks" of information, such as sample database searches, filtering strategies, and bibliographic management support, in the student's virtual environment. Screencasts embedded at the point of need employ the principle of "stickiness" and the concept of visual literacy with the goal of keeping students engaged. Embedded video gives nursing students a high degree of learner control and provides them with interactivity and the flexibility of remote and asynchronous access. Evaluation and assessment will include metrics from the learning management system and library research guides.

Results: Two video webcasts were embedded in learning management systems for nursing research classes and evaluated over a 3-week period at the beginning of the semester. Topics modeled a patient/problem, intervention, comparison, outcome (PICO) question similar to the course assignment, depicting use of Boolean logic to search and apply filters in PubMed. Of 85 students and 1 "other" who accessed the webcasts and replied to a survey, 40% identified as graduate students, 58% as undergraduates, 2% as other. Survey results showed that 99% of respondents rated the webcasts as helpful. Optional comments, submitted by 50% of survey respondents, focused on the content, relevance, and length of the webcasts, and were mostly enthusiastic and positive.

Discussion/Conclusion: This project demonstrates that short, relevant, visually compelling, assignment-related screencasts embedded at the point of need contribute to student learning and are an effective best practice for embedded librarianship in nursing education.

Stepping out Even Further: Expanding the Role of the Clinical Informationist

Heather N. Holmes, AHIP
Clinical Informationist, Summa Health System, Akron, OH

Tuesday, May 20
2:43 PM - 3:02 PM

Room: Columbus GH, Gold Level, East Tower

Objectives: This session will discuss expanding the role of a clinical informationist (CI) from a hospital-based position primarily working with resident physicians to working in an outpatient internal medicine clinic focusing on patient education.

Methods: One afternoon a week has been dedicated for a CI to be in an outpatient internal medicine clinic. This is a very different role for a CI, as most are based with inpatient teams or departments. The CI has developed and maintains a "library" of a current and evidence-based resources for many common visits, but for this project the CI actively participates in a case as the resident presents it to the attending physician. Additional questions may be asked by the CI, or she will begin to pull consumer-based education materials for the patient to take home. Further, we anticipate having the CI begin doing one-on-one consults with some patients with the goal of improving clinical outcomes and patient satisfaction. A limited population of patients will be selected to facilitate measuring results.

From the Ground up: A Solo Librarian's Guide to Building a Clinical Librarianship Program

Elizabeth Laera, AHIP
Medical Librarian, Princeton Baptist Medical Center, Birmingham, Alabama

Tuesday, May 20
3:02 PM - 3:21 PM

Room: Columbus GH, Gold Level, East Tower

Purpose: To create a guide for solo hospital librarians looking to expand their role into clinical settings to provide better support for patient care teams.

Brief Description: Based on personal experience, this paper attempts to create a "how-to" guide for solo hospital librarians who wish to take their skills out of the library and into the clinical realm. The author lays out a plan from the beginning stages to methods of support and potential challenges to ways to evaluate the success of the program. This guide seeks to answer questions such as "what groups could most benefit from an embedded librarian? ", "what kinds of questions does a clinical librarian answer? ", and "why is everyone so concerned about the patient's potassium level?" Also included are tips on choosing tools and apps best suited for answering questions immediately, advice on time management, and a case study on how a solo librarian at a community-based teaching hospital became successfully embedded in a clinical teaching team.

Participants and Setting: This guide is designed for solo hospital librarians or hospital librarians in very small libraries working in community-based (non-academic) hospitals, teaching or non-teaching.

Conclusions: The literature on solo hospital librarians in the clinical realm is sparse. Many solo librarians struggle with finding ways to juggle multiple responsibilities while starting new programs or working with patient care teams. This presentation encourages solo librarians to pursue clinical activities and opens up new avenues of potential research.

Public Health/Health Administration Section

Building from Common Ground: Partnerships with Faculty, Practitioners, Librarians, and the Community for Community-Based Participatory Research

It's Engaging Work (If You Can Get It): Integrating Librarian Services into the Community Engagement Research Section of the Center for Clinical and Translational Science

Sally A. Gore
Embedded Research Librarian/Informationist, University of Massachusetts Medical School, Worcester, MA

Tuesday, May 20
2:05 PM - 2:24 PM

Room: Columbus IJ, Gold Level, East Tower

Objectives: This paper describes the successful integration of an embedded research librarian into the leadership team of the Community Engagement Research (CER) Section of the university's Center for Clinical and Translational Science (CCTS).

Methods: The librarian approached the CER leadership team to propose several ideas for integrating embedded librarian services into the team's work. Discussions with the team led to identifying key areas of need, along with several roles, activities, and/or related projects to address each. These included topics around dissemination of CER findings to different populations (e.g., research participants, the public, clinicians, other researchers, and policy makers), providing consultative knowledge and information management services, and establishing a means for locating research partners and collaborators. To meet

the needs, the librarian performed a literature review and created a catalog of resources on research dissemination; promoted a suite of knowledge management services including bibliographic management, data management, information organization, and knowledge mapping; and developed a controlled vocabulary of CER specialties and a searchable database to serve as a tool to identify potential collaborators.

Results: My results are not complete yet.

Conclusions: A great deal of valuable information is currently being generated by the CER Section of the CCTS, creating a need to capture, organize, and make accessible as much of it as possible. Doing so allows both researchers and funding agencies to best measure the true impact of this research upon the community. The CER Section leadership welcomed an informationist onto their team and viewed her expertise in information and knowledge management as a valued component.

Constructing a Role in a College of Medicine's Rural Clinical Rotation

Rick Wallace, AHIP
Assistant Director, East Tennessee State University, Johnson City, TN

Nakia Woodward, AHIP
Senior Clinical Reference Librarian, East Tennessee State University, Johnson City, TN

Tuesday, May 20
2:24 PM - 2:43 PM

Room: Columbus IJ, Gold Level, East Tower

Objectives: The library partners with the college of medicine to teach third-year students on a clinical rural rotation about searching, evidence-based medicine (EBM), and how to develop a portrait of the counties where health fairs are conducted using health statistics. This paper focuses on the process of our involvement in both the program with students and the recruitment of the physicians.

Methods: This paper will look at both responses to student surveys about the rotation along with surveys of the rural rotation preceptors to determine their views on the addition of the librarian training to the program. A major recruitment tool used by the university for preceptors is the access to the library's resources. This survey will also attempt to look at the impetus library resource access had on their agreeing to precept for the rural track program.

Results: Surveys are ongoing. Preliminary results show that the students feel

more comfortable with utilizing both resources and librarians. Preceptors feel that the library is a great tool to get them to sign up.

Conclusions: The role of the librarian in the rural clinical rotation is constantly evolving and becoming more dynamic. Many opportunities exist for future collaboration with the group.

Availability and Use of Online Health Information Resources (OHIR) in Research by the Academic Staff in a Nigerian College of Medicine

Ayodele John Alonge
Emerging Technology Librarian, University of Ibadan, Ibadan, Nigeria

Samuel Akande Bello
Medical Librarian and Head, Outreach and Logistics, University of Ibadan, Ibadan, Nigeria

Chioma Nnalu Ezeri
Certified Medical Librarian (Head, Medial Library), Federal Medical Centre, Abeokuta, Nigeria

Tuesday, May 20

2:43 PM - 3:02 PM

Room: Columbus IJ, Gold Level, East Tower

Objectives: To determine availability of online health information resources (OHIR) to the academics. To find out where the respondents accessed Internet for OHIR. To calculate ratio of the academics who are knowledgeable or skilled in the use of OHIR. To establish level of use of OHIR by the academics while conducting research. To find out the factors affecting use of OHIR.

Methods: One hundred fifty-one academic staff from 4 faculties, College of Medicine, University of Ibadan (COMUI), Nigeria took part in the survey. Using descriptive survey design and total enumeration technique, the entire 265 COMUI academics as at 2011were covered. A 30-item questionnaire, distributed in 5 sections, was used to gather information from the respondents. Having obtained permission from the faculty deans and supported by the heads of departments, the questionnaire was administered to the respondents during the various departmental meetings, ward rounds, and visit to their offices. Descriptive statistics with frequency counts and percentages run in Statistical Package for Social Science (SPSS) was used for the data analysis.

Results: The academics' mean age was 37.75. All the respondents were computer literate and involved in teaching and research. On awareness of OHIR,

96.0% were aware of HINARI, 92.1% of PubMed, 70.9% of open access journals (OAJ), 62.9% of online medical books (OMB), 89.4% of African Journals Online (AJOL), 64.2% of African Index Medicus (AIM), and 65.6% of the Cochrane Library. For actual usage of OHIR for research, a majority used HINARI (n= 129), 135 used PubMed, 94 used OAJ, 61 used OMB, 60 used AIM, and 102 used AJOL. Identifying factors affecting use of OHIR, 69.5% indicated ISP-related problems,54.3% for bandwidth, while 92.1% identified irregular power supply. **Conclusions:** The academics in the medical field in Nigeria are embracing online resources. They have seen the medium as the most convenient if not the easiest way of conducting quality scientific research.

Keeping up with Public Health Series: A Pilot Project for Public Health Researchers

Douglas J. Joubert
Biomedical Library/Informationist, National Institutes of Health, Bethesda, Maryland

Alicia Livinski
Informationist/Biomedical Librarian, National Institutes of Health, Arlington, Virginia

Nancy Terry
Informationist/Biomedical Librarian, National Institutes of Health, Bethesda, MD

Tuesday, May 20
3:02 PM - 3:21 PM

Room: Columbus IJ, Gold Level, East Tower

Objectives: Describes how National Institutes of Health (NIH) informationists developed and evaluated a series of classes on information and data resources used in public health. Each session explored the effective use of tools and resources from the social and behavioral sciences, health policy, geographic information systems (GIS), and public health.
Methods: Five classes were created for the series: (1) Evidence Based Public Health Information Resources (PH-Evidence), (2) Public Health Data Resources (PH-Data), (3) Keeping Up with the Public Health Information Deluge (PH-Deluge), (4) Introduction to GIS (PH-GIS), and (5) Online Mapping and Public Health (PH-Map). Each in-person class included a combination of lecture, hands-on exercises, and case examples. The exercises and case examples were designed to reinforce the application of knowledge to a particular public health issue. Based on the success of the in-person classes and feedback from

participants, classes were repeated as webinars. Outreach and marketing included targeted messages sent via NIH and Department of Health and Human Services (HHS) communication channels, announcements on HHS LibGuides, and outreach to HHS informationists' customer groups.

Results: Findings indicate a strong interest in public health training, especially when training is offered online (288 registered/131 attended). A majority of webinar participants indicated (strongly agreed or agreed) that they would be able to apply the information they learned in the webinar to their job (PH-Data, 88%; PH-GIS, 64%; PH-Deluge, 100%; PH-Map, 80%). Qualitative analysis indicated that most users (50%, 9/18) would apply information gained in the webinars for data analysis or gathering. Most participants rated the webinars as "excellent" or "very good," and would recommend the series of webinars to others (PH-Data, 90%; PH-GIS, 91%; PH-Deluge, 100%; PH-Map, 100%).

Conclusions: Although this was a small pilot study, it generated a number of challenges, successes, and lessons learned. We discovered that there is strong interest at NIH and HHS for public health focused classes, especially when training is offered online. Additionally, changing the format of classes from in-person (problem-based) to an online (problem-based) was a challenge and stretch for the instructors. Future plans include targeting specific user groups, experimenting with audience engagement technology, and hybrid delivery methods.

Dental Section

Educational Technology: We Build It-Do They Come?

Must-Have Web Browser Enhancers for Biomedical Researchers

Ansuman Chattopadhyay
Head, Molecular Biology Information Service, University of PIttsburgh, Pittsburgh, Pennsylvania

Carrie L. Iwema, AHIP
Molecular Biology Information Specialist, University of Pittsburgh, Pittsburgh, Pennsylvania

John LaDue
Knowledge Integration Librarian, University of Pittsburgh, Pittsburgh, Pennsylvania

Angie Zack
Web and Application Programmer, University of Pittsburgh, Pittsburgh, Pennsylvania

Tuesday, May 20

2:05 PM - 2:24 PM

Room: Columbus AB, Gold Level, East Tower

Objectives: Online biomedical articles regularly introduce readers to unfamiliar genes, proteins, drugs, and disease states. To learn more, readers typically adopt the clumsy method of leaving the article, going to a separate online database, searching for the term, then returning to the article to continue reading. We developed a browser plug-in that replaces and improves this inefficient process.
Methods: Leveraging the power of bookmarklets that contain a short java script embedded in a link, our health sciences library team of information technology experts and subject specialists created a collection of browser-enhancers that allow readers to search online databases and other resources without leaving the open article page. These tools cover commonly used queries for databases such

as Wikipedia, Uniprot, and National Center for Biotechnology Information (NCBI) resources. Installation is an easy one-time/one-step process of dragging a library-created link to the user's browser bookmark bar. As an example, selecting a gene term from an open article page and clicking the "Get Gene Info" browser-enhancer button results in a pop-up window displaying NCBI Entrez Gene database results for the selected term. In this presentation, we will describe the creation and implementation of these browser-enhancers, usage analysis, and impact on readers' browsing experiences.

Crowdsourcing Clinical Questions and Answers: Contributing to a Multidisciplinary Community of Practice

Michelle Henley
Coordinator, Instruction and Consultation Services, San Francisco General Hospital, University of California, San Francisco, California

Stephen Kiyoi
Library Director, San Francisco General Hospital, University of California, San Francisco, California

Tuesday, May 20

2:24 PM - 2:43 PM

Room: Columbus AB, Gold Level, East Tower

Objectives: We propose starting and promoting an open, crowdsourced repository of clinical questions and ranked answers. We will evaluate impact by number of questions and answers posted, number of answers voted up or down, and subjective "quality" of contributions.
Methods: There is currently no operational, open, collaborative collection of clinical questions and answers. We will conduct a literature review on past and existing repositories of clinical questions and answers to evaluate the strengths and weaknesses of previous approaches. We will also conduct literature review of clinical question gathering methods to identify a standard for use in gathering a representative sample of clinical questions at our institution. We will then use these sample questions to "seed" Quora, an online, crowdsourced question-and-answer platform with these clinical questions. After Quora is seeded, we will explain the project, and solicit librarian participation via the (em)MLA News, as well as local health sciences library email discussion lists. Participants will be able to submit questions and answers, and "upvote" or "downvote" others answers. We will analyze participation periodically to assess impact for librarians, educators, and clinicians.

Results: The literature review revealed few examples of collaborative repositories of clinical questions and answers. Medpedia, a "Wikipedia of medicine" that only physicians and biomedical researchers could edit, abruptly closed early in 2013. The National Library of Medicine's "Virtual Evidence Cart," an open, online platform to enable clinicians to submit and answer questions, did not attract widespread use outside of the pilot groups. The Critical Appraisal Resource (CAR) from the University of North Carolina (UNC)-Chapel Hill was widely used by the residents: there were 625 clinical questions entered, and 1,035 searches in the 10-month study period. But even CAR did not expand beyond the program for UNC medical residents. We are currently soliciting clinical questions to post to Quora at both San Francisco General Hospital and the University of California-San Francisco (UCSF). Response has been limited. **Conclusions:** Conclusions and discussion will be presented at MLA '14.

Designed Locally, Accessed Globally: Building a Better Evidence-Based Practice Tutorial

James Beattie
Liaison Librarian, University of Minnesota, Minneapolis, Minnesota

Anne Beschnett
Outreach Librarian, University of Minnesota, Minneapolis, MN

Jonathan Koffel
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Lindsay Matts
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Lisa A. McGuire
Associate Director, Education and Research Services, University of Minnnesota, Minneapolis, Minnesota

Andre J. Nault
Head and Associate Librarian, University of Minnesota, St. Paul, Minnesota

Elizabeth Fine Weinfurter
Liaison Librarian, University of Minnesota, Minneapolis, Minnesota

Tuesday, May 20
2:43 PM - 3:02 PM

Room: Columbus AB, Gold Level, East Tower

Objectives: To describe the revision of a globally viewed online evidence-based practice tutorial and its usage patterns before and after the revision.
Methods: The University of Minnesota Bio-Medical Library first created its evidence-based practice tutorial in 2000, and in 2007, it was updated to reflect contemporary evidence-based resources and practice and to make the tool interactive. In 2012, the tutorial garnered 790,000 page-views from around the world. In 2013, a group of health sciences librarians and an instructional designer overhauled the tutorial to add case studies covering additional health professions and provide better coverage and exercises on critical appraisal methods. In addition, the underlying technology was changed to better meet current web standards and streamline the process of making edits in the future. The revised tutorial was announced on campus, and faculty were encouraged to incorporate it into their courses. The various versions of the tutorial have been tracked using Google Analytics, and the authors investigated on-campus versus off-campus usage, traffic sources, and similar statistics.

A Plan for Evaluating Research Data Management Instruction Methods for Medical School Students

Andrew Creamer
Project Coordinator, University of Massachusetts Medical School, Worcester, MA

Sally A. Gore
Embedded Research Librarian/Informationist, University of Massachusetts Medical School, Worcester, MA

Donna Kafel
Librarian and eScience Project Coordinator, University of Massachusetts Medical School, Worcester, MA

Len Levin, AHIP
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Lisa A. Palmer, AHIP
Institutional Repository Librarian, University of Massachusetts Medical School, Worcester, MA

Rebecca Reznik-Zellen
Head, Research and Scholarly Communication Services, University of Massachusetts Medical School, Worcester, Massachusetts

Tuesday, May 20

3:02 PM - 3:21 PM

Room: Columbus AB, Gold Level, East Tower

Objectives: While there are several examples of data management instruction methods for students and research teams across disciplines, there has not been a comparison of different instruction approaches within a single discipline. This paper describes the preliminary activities for an evaluation of different methods for teaching data management to medical school students.

Methods: Because an undergraduate medical student's worklife is unique given their course of study and the demands of their curriculum, we anticipate that some methods of instruction are more effective than others for teaching complementary course material such as data management. To assess the effectiveness of different instruction methods, medical students at the University of Massachusetts Medical School are first surveyed on their familiarity and comfort with data management concepts and best practices. A survey distributed to students in the Schools of Medicine and Nursing, and the Graduate School of Biomedical Sciences during February 2014 includes questions about students' day-to-day experiences managing research data, as well as their awareness of federal mandates for the sharing of research data and their willingness to participate in elective instruction. The results of the survey serve as the foundation for planning a prospective cohort study on the effectiveness of different data management instruction methods. Based on the results of the survey, librarians plan to teach a standardized data management curriculum in multiple styles. The study plan includes instruction in multiple consecutive workshops, a single workshop, an online interactive webinar, an online tutorial, and a flipped classroom method; pre- and post-instruction evaluation on basic understanding of data management themes and best practices; and assessment of instruction methods based on evaluations and qualitative feedback.

Results: A student data management survey identifies the student cohorts with the greatest need for data management instruction on campus. In addition, the survey results prioritize content areas for a data management curriculum. Based on these factors, a prospective cohort study is planned.

Conclusions A targeted, prospective cohort study is planned to evaluate the effectiveness of different instruction methods for teaching data management concepts to medical students.

Relevant Issues Section

Protecting Patron Privacy in the Era of Surveillance

Direct-to-Consumer Genetics and Privacy: This Way to Gattaca?

Marie T. Ascher, AHIP
Associate Director, User Services, New York Medical College, Valhalla, NY

Tuesday, May 20
2:05 PM - 2:30 PM

Room: Columbus EF, Gold Level, East Tower

Lesbian, Gay, Bisexual, Transgender Privacy Issues

Jacqueline Leskovec
Outreach, Planning and Evaluation Coordinator, University of Illinois, Chicago, Illinois

Tuesday, May 20
2:30 PM - 2:55 PM

Room: Columbus EF, Gold Level, East Tower

Patron Privacy from the Access Services Perspective

Montie' Dobbins, AHIP
Head, User Access Services/Circulation, Louisiana State University Health, Shreveport, Louisiana

Tuesday, May 20
2:55 PM - 3:20 PM

Room: Columbus EF, Gold Level, East Tower

Hospital Libraries Section

Soaring from a Solid Base: Accreditation, Competencies, Standards, Values

The Value Study: Key Results and Implications for Hospital LIbrarians

Joanne Gard Marshall, AHIP, FMLA
Professor, University of North Carolina, University of North Carolina, Chapel Hill, North Carolina

Tuesday, May 20
2:05 PM - 2:24 PM

Room: Regency A, Gold Level, West Tower

Description: An overview of the results of the "Value of Health Library and information Services in Patient Care Study" will be given with special emphasis on the implications of these results for hospital librarians. There will be ample opportunity for discussion of results and how they can be used.

Improving the Quality, Safety, and Cost-Effectiveness of Patient Care through Evidence-Based Practice at the Organizational Level

Craig A. Umscheid
Assistant Professor, Medicine, and Director, University of Pennsylvania Health System, University of Pennsylvania Health System, Philadelphia, Pennsylvania

Tuesday, May 20
2:24 PM - 2:43 PM

Room: Regency A, Gold Level, West Tower

The Hospital Library Standards: A Usable Tool for Hospital Libraries

Sheila Hayes, AHIP
Senior Librarian and Web Resource Librarian, Hartford Hospital, Hartford Hospital, Hartford, Connecticut

Tuesday, May 20
2:43 PM - 3:02 PM

Room: Regency A, Gold Level, West Tower

Standards, Competencies, Milestones, and the Value of the Medical Library

Ingrid Philibert
Department of Field Activities, Accreditation Council for Graduate Medical Education (ACGME), Chicago, Illinois

Tuesday, May 20
3:02 PM - 3:21 PM

Room: Regency A, Gold Level, West Tower

Description: At the conclusion of the session, attendees will be able to:

- list requirements of the Accreditation Council for Graduate Medical Education (ACGME) related to medical library capabilities and functions to support physician education, including revisions in these standards to adapt to the reduction in print media and the growing use electronic resources;
- discuss competency-based education and the value of the medical library;
- describe best practices for connecting with and supporting resident physicians and faculty across a range of activities critical to the professional development of physicians.

Research Section

Systematic Review: The Librarians Role

Evaluating the Usability of Systematic Review Software Tools

Paul Albert
Assistant Director, Research and Digital Services, Weill Cornell Medical College, New York, NY

Diana Delgado, AHIP
Associate Director, User Support, Research, and Education, Weill Cornell Medical College, New York, NY

Allison Piazza
Student, Pratt Institute, New York, New York

Joshua E. Richardson
Assistant Director, Clinical Services, Weill Cornell Medical College, New York, NY

Tuesday, May 20

2:05 PM - 2:24 PM

Room: Regency B, Gold Level, West Tower

Objective: Systematic reviews (SRs) are time- and labor-intensive projects that can utilize support software for effective and efficient project management. However, these tools have yet to be evaluated for their usability. Given an absence of guidance in current literature, we conducted a usability evaluation of software tools for library SR projects.
Methods: Our team identified SR software by searching the web and reviewing available literature. We created a rubric to compare SR software features. The rubric helped to narrow our sample to five tools; we successfully accessed three tools for this evaluation. We based usability on seven tasks based on PRISMA guidelines and our professional experience conducting SRs. The tasks included setting up a team, documenting databases searched, and importing and exporting citations. Three reviewers scored usability according to the Nielsen-

Shneiderman Usability Heuristic Framework (1994), which measures software on variables such as consistency, complexity, and language on a scale from 0 (no usability problem) to 4 ("catastrophic" usability problem). We shared preliminary results with vendors so they could correct errors. In some cases, we used vendor comments to revise scores.

Results: The SR tools significantly varied in their abilities to support the tasks we identified. For example, 2 of 3 supported a function to export final citations, and all failed to include a function to document the source of citations. All tools could perform 2 of the 7 tasks: assigning researchers to the SR project team and importing citations. The lowest mean usability for the 2 tasks was 1.02, meaning only cosmetic changes are recommended. However, reviewers reported a total of 47 instances of catastrophic usability across all 3 tools. The most predominant in descending order were: data extraction (18), ability to review full text for including and excluding citations (15), and assigning researchers to an SR project (4). Lastly, reviewers reported that 1 tool had 3 times more barriers to task completion than the next closest tool (108 versus 36).

Conclusions: To our knowledge, this project represented the first attempt to assess the usability of SR tools. Using the Nielsen-Shneiderman heuristic framework, we found that three currently available SR tools would benefit from greater functionality and usability. Each of the three tools missed at least one basic functionality and suffered from catastrophic but fixable usability shortcomings. Our findings can help SR tool developers to prioritize future development and help users identify the tool that best meets their needs.

Reproducibility of Systematic Review Search Strategies in Cardiology, Surgery, and Pediatrics Journals

Jonathan Koffel
Clinical Information Librarian, University of Minnesota, Minneapolis, MI

Melissa L. Rethlefsen, AHIP
Education Technology Librarian, Mayo Clinic, Rochester, MN

Tuesday, May 20
2:24 PM - 2:43 PM

Room: Regency B, Gold Level, West Tower

Objectives: To measure the reproducibility of search strategies included in systematic reviews in cardiology, surgery, and pediatrics journals and identify predictors of reproducibility.

Methods: A well-described search strategy allows readers to gauge the

comprehensiveness of a systematic review and replicate it as needed. It is unclear, however, how often published search strategies are reproducible and what factors may influence this. A search was conducted to identify all systematic reviews published in 2012 in the ten highest impact factor journals in surgery, cardiology, and pediatrics. The authors independently examined the search strategies in these articles for elements of reproducibility (e.g., database names, search terms, explicit use of Boolean terms, limits) and the strategies were categorized as reproducible/not reproducible and the individual elements recorded. In addition, the authors independently recorded other characteristics of the searches and studies (e.g., librarian involvement, mention of PRISMA Statement), which they hypothesized might affect reproducibility. The data were analyzed to determine overall rates and specific predictors of reproducibility.

A Pipeline of Informatics Tools to Accelerate the Writing of Systematic Reviews

Neil R. Smalheiser
Associate Professor, University of Illinois, Chicago, Illinois

Tuesday, May 20
2:43 PM - 3:02 PM

Room: Regency B, Gold Level, West Tower

Objectives: The writing of systematic reviews is largely a manual process-- initially retrieving a large excess of articles, and reading their titles and abstracts to find relatively few relevant ones to be analyzed in detail. We hypothesized that specialized informatics tools can be developed to streamline this process significantly.
Methods: We formed an inter-institutional consortium to study the systematic review process and to develop a pipeline of tools that can assist users at critical bottleneck points: (a) A metasearch engine, Metta, was created to carry out unified, deduplicated queries across the five most utilized biomedical databases (PubMed, Embase, CINAHL, Cochrane Central Register, and PsycINFO). (b) A publication type tagger modeled the characteristics of randomized controlled clinical trials (RCTs) using machine learning. The model estimated the probability that any given article represents a RCT, and this was applied to retag all human-related studies in MEDLINE. The model identified many RCTs that had not been indexed as RCTs by publication type, and conversely, the model flagged articles that were indexed as RCT publication type but that were not RCTs. (c) An aggregator model was developed that estimates the probability that any two RCT articles in PubMed arise from the same underlying clinical trial. This model was applied to PubMed searches, to cluster together all retrieved articles that are

likely to arise from the same trial.

Results: Each of the three tools are available as working prototypes. Metta is freely available for testing and comments at mengs1.cs.binghamton.edu/metta/search.action, and we are building web interfaces for the others.

Conclusions: Our current goals are to make sure that the tools are aligned with the needs of systematic reviewers and to fit them together into an integrated pipeline. We believe that this approach should significantly reduce the time and effort needed to assemble articles for a systematic review. The automated RCT tagger also may be useful, prospectively and retrospectively, for quality control in the assignment of manual RCT publication type tagging.

Flipping the Classroom: Developing and Piloting a Successful Systematic Review Course for Librarians Utilizing Online and In-Person Instruction

Marisa L. Conte
Clinical and Translational Science Liaison, University of Michigan, Ann Arbor, Michigan

Caitlin Kelley
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Mark P. MacEachern
Informationist, University of Michigan, Ann Arbor, Michigan

Nandita S. Mani, AHIP
Assistant Director, Enabling Technologies, University of Michigan, Ann Arbor, Michigan

Judith Smith
Informationist, University of Michigan, Ann Arbor, MI

Tuesday, May 20

3:02 PM - 3:21 PM

Room: Regency B, Gold Level, West Tower

Objectives: To develop a systematic review course for librarians utilizing a "flipped classroom" model for instruction.

Methods: Librarians at the University of Michigan's Taubman Health Sciences

Library developed a pilot course to teach librarians about systematic reviews (SR) and discuss librarian roles in SR project teams. The course followed a hybrid "flipped classroom" model, with instruction provided online in an intensive two-week curriculum followed by a two-day in-person workshop. Group participation and targeted learning activities played a key role in the workshop, which culminated with a capstone project preparing librarians to deploy their new knowledge at their home institutions.

Results: A detailed course assessment plan--which included pre- and post-tests, course evaluations, and a post-course focus group--was used to obtain participant feedback and drive refinements in course organization, delivery, and content. Participants reiterated across multiple assessments that the hybrid structure of the course was not only enjoyable but facilitated and strengthened learning. A majority of participants (80%) "agreed" or "strongly agreed" that the online course had a good amount of activity, and 100% "strongly agreed" or "agreed" that the activities facilitated learning. Nearly 100% of participants "agreed" or "strongly agreed" that the in-person workshop reinforced SR concepts and practical applications.

Conclusions: The results of the assessments were overwhelmingly positive with participants expressing that the hybrid model reinforced learning and that instruction was effective. There were, however, a few areas in which the course could be improved. The pre- and post-tests, for example, could be redesigned to better gauge participant knowledge, and some of the activities could be timed differently. The participants expressed strong appreciation for the course's focus on practical applications and skills, which the instructors could build upon in future offerings. By making slight course modifications to address the issues highlighted by the assessments, the instruction team should be able to improve upon an already successful course.

Technical Services Section

The Evolving Role of Metadata in Medical Libraries: Structure for Evidence, Discovery, and Research

Medical Subject Headings (MeSH) vs. Social Tags: A Comparison of Access Points for Monographs

Julie H. Schiavo, AHIP
Assistant Librarian/Head Dental Librarian, Louisiana State University Health Sciences Center, New Orleans, Louisiana

Tuesday, May 20

2:05 PM - 2:20 PM

Room: Columbus KL, Gold Level, East Tower

Objectives: To compare the Medical Subject Headings (MeSH) terms assigned by bibliographers with the social tags assigned by users to monographs to determine if a user-defined folksonomy is a useful supplement to or replacement for a controlled vocabulary in a health sciences library catalog, with the goal of improving access to monographs.

Methods: In this controlled-comparison study, the author searched 639 titles from the allied health and basic sciences lists in Doody's Core Titles in the Health Sciences 2013 in the National Library of Medicine's catalog to identify the MeSH terms assigned by librarian bibliographers and in LibraryThing to find the descriptive tags assigned by users. The lists of MeSH terms and user-defined tags were compared to determine differences in the datasets. Terms were classified as matches, partial matches, or non-matches. The non-matches were then analyzed further to identify the type of descriptive information they contained.

Results: There were significantly more user-assigned tags than MeSH terms, but the tags were not efficient descriptors. Many tags were higher on the MeSH hierarchy. Such general terms would not be very useful for a researcher searching for a monograph as the number of items retrieved would be overwhelming. Other tags described the monograph in more specific or synonymous terms than the MeSH terms. These terms could be useful for researchers as they were mirrored natural language as opposed to a controlled vocabulary. Personal tags such as physical description, location, and

abbreviations also hold potential for aiding researchers in accessing materials within a library catalog.

Conclusions: Many libraries are opening up their catalog to their patrons' descriptions of monographs and allowing a user developed folksonomy aid in resource discovery. However these user generated terms are not always of a useful nature as they lack the controlled consistency of MeSH. User defined tags, while plentiful, cannot function alone as a source of access to library collections but may provide one of many points of access. A user-generated descriptive folksonomy provides a useful view into patrons' thinking and priorities and can supplement the MeSH controlled vocabulary. Further qualitative research is necessary to determine the actual usage of tags in a natural environment.

Research Information Architect: Building Research Information Infrastructure through ORCID Integration in University Systems

Sandra L. Bandy, AHIP
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Kim Mears, AHIP
Nursing Information Librarian, Georgia Regents University, Augusta, Georgia

Brenda L. Seago
Director, Libraries and Professor, Georgia Regents University, Augusta, GA

Tuesday, May 20
2:20 PM - 2:35 PM

Room: Columbus KL, Gold Level, East Tower

Objectives: Open researcher and contributor IDs (ORCID iDs) provide authors with an international digital identifier to aid in maintaining a professional record of scholarly activities. The university libraries sought to enhance the university's information infrastructure through the integration of ORCID identifiers in key systems, including the institution's digital repository, Scholarly Commons, and the PeopleSoft Human Resources Management System (HRMS).

Methods: Researchers often collaborate with one another on scientific publications and occasionally change their institutional affiliations. This leads to name ambiguity, where researchers cannot be correctly and accurately linked to their work. The libraries will collaborate with the host of the institution's digital repository, OpenRepository, and the university's Department of Human Resources (HR) to complete the project. Integration into the digital repository will

include the addition of ORCID iDs in the author registration process, as well as the item submission process. Integration into the university's HRMS will be piloted by analysts in the HR Department. A page modification on the employee profile will be created to include a field for an ORCID identifier.

Results: ORCID integration in Scholarly Commons is currently in development. ORCID integration in the university's HRMS will occur after a scheduled system upgrade in early 2014. Integration in the university's HRMS will facilitate integration into additional key workflows, such as the institutional faculty list, new hire orientation sessions, and SciVal Experts.

Conclusions: Librarians as research information architects can assist their institution in improving research information infrastructure. Researchers often collaborate on scientific publications and occasionally change their institutional affiliations. This leads to name ambiguity, where researchers cannot be correctly and accurately linked to their work. This project benefits researchers as a whole by increasing the adoption and use of ORCID identifiers and supporting efforts to reduce author confusion with common names. ORCID identifiers provide a necessary role in helping researchers achieve author attribution and optimize research discoverability. This is especially important when this information is used for evaluation and promotion and tenure purposes.

Content Views for a Retrieval Set of Citations: An Interactive Web-based Prototype for Librarians and Researchers

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Kevin Mitchell
Systems Developer, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania

Corey Stein
Research Assistant, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania

Eugene Tseytlin
Systems Developer, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania

Tuesday, May 20
2:35 PM - 2:50 PM

Room: Columbus KL, Gold Level, East Tower

Objectives: To develop a web-based tool useful for librarians and researchers when exploring the structure of a retrieval set overall and within thematic clusters of titles and abstracts. To offer several views of a retrieval set based on Medical Subject Headings (MeSH), phrases, and automated summaries of cluster topics.
Methods: We retrieved 1,817 MEDLINE citations for prognostic studies of oral squamous cell carcinoma (OSCC). To explore the latent structure of topics in the retrieval set, we represented citations as vectors of alphanumeric "words" and clustered them using an iterative subsampling algorithm. We extracted MeSH terms and phrases, and computed frequency distributions over the entire set and within each cluster. To summarize each cluster, we used C-LexRank to represent sentences in undirected graphs and then selected the most salient sentences; we also developed 3 other types of summaries. We used frequent terms and phrases to label clusters. We formatively evaluated summaries and the prototype interface. We offer interactive content views based on indexing, phrases, and summaries. We also offer images associated with citations in the retrieval set that appear in the open access subset of PubMed Central. Additionally, users can open links to read citations.
Results: The relative change in area under the CDF curve by number of clusters (k) stabilized at k=10 for the overall dataset and k=12 for a subset of citations for biomarker studies of OSCC. Consensus heatmaps corroborated cluster solutions. Labels for each cluster (theme) qualitatively varied depending on the dataset. For example, labels for clusters in the overall dataset included relatively more anatomical and surgical terms, whereas labels for the biomarker subset included more terms for genetic and protein markers. Mean differences in perceived information value of the 4 types of summaries were statistically significant: F (3, 60)=4.02, P=0.011. Two summaries consistently ranked highest. A prototype of the EDDA LENS is available at edda.dbmi.pitt.edu/lens/.
Conclusions: The EDDA LENS is potentially useful for supporting librarians and researchers. For example, librarians could study the distribution of indexing terms overall and by cluster to refine their searches with input from their patrons. Clinical researchers could view: open access images with links to PubMed Central via Open-i (a new NLM search engine), sentences in which phrases appear for informative context, and summaries per cluster to explore aspects of their topic. All the views could be of use to information scientists working on automatic classification, abstraction, and summarization problems.

Development of a Research Audit Database for Data-Driven Discovery of Interdisciplinary

Biomedical Research on a Large Research Campus

Margaret Burnette
Biomedical Sciences Librarian and Assistant Professor, University of Illinois-Urbana-Champaign, Champaign, Illinois

Tuesday, May 20
2:50 PM - 3:05 PM

Room: Columbus KL, Gold Level, East Tower

Objectives: To develop a new model for identify and mapping interdisciplinary biomedical research on a large research campus where project partners are often geographically dispersed. The Research Audit model will be adapted from established knowledge management methods such as the Knowledge Audit and Social Network Analysis.
Methods: Setting: A large research university with robust interdisciplinary biomedical research projects. Population Researchers and campus units involved in National Institutes of Health (NIH)-funded research projects. Database Development: A student in the Graduate School of Library and Information Science will assist with database design as part of their coursework. An Excel relational database will host both researcher and unit level information. Campus specific data will be generated from the NIH Reporter, providing project-level information, principal investigators, and department/unit information used to populate the database. Medical Subject Headings will be assigned as metadata tags to describe unit level research missions and investigator research areas. Data Analysis: A knowledge audit approach provides unit level information and the Social Network Analysis generates relationship maps. Text mining and word clouds will round out resulting data.

The Evolving Librarian: An Introduction to the Semantic Web and the Role It Plays in Librarianship

Bethany S. McGowan
Allied Health Sciences Librarian, Howard University, Washington, DC

Tuesday, May 20
3:05 PM - 3:20 PM

Room: Columbus KL, Gold Level, East Tower

Objectives: Advances in computing infrastructure and networking technologies have allowed more opportunities for specialized research support services to the technically savvy librarian. This paper will explain the value librarians bring to services such as those in research data management, digital content management, and e-science, by highlighting the role librarians play in developing the semantic web.

Methods: This narrative overview is the summarization of two systematic reviews: one literature review identified and defined the main standards and concepts associated with the semantic web, and a separate literature review was done on emerging trends in library research support. This overview provides a basic introduction to the semantic web and its main concepts, including metadata, linked data, resource description framework (RDF), extensible markup language (XML), and the role of social media. It elaborates on the unique skills librarians, even librarians outside of technical services departments, can use to help develop the semantic web. The author attended Science Boot Camp for Librarians 2013 at the University of Massachusetts-Amherst in the summer of 2013 and continued the process of becoming embedded in faculty research. These experiences are also referenced.

Results and Conclusions: Advances in computing infrastructure and networking technologies have allowed even more opportunities for specialized research support services. Technical competencies in the semantic web and beyond are becoming an essential skill set in offering the best research services. Equally important are competencies traditionally seen in librarianship: understanding governmental and institutional research agendas, knowledge of academic and research processes, and understanding an institution's local goals. Combined, such knowledge makes librarians an indispensable member of the research team.

Educational Media and Technologies Section
Top Technology Trends VII

SharePoint

Nathalie Reid
Manager, Information and Resources, and Manager, Continuing Education Program, University of California, Los Angeles, CA

Tuesday, May 20

6:05 PM - 6:21 PM

Room: Columbus AB/CD, Gold Level, East Tower

Description: Through the use of SharePoint integrated with Lync communications platform, the National Child Traumatic Stress Network connects our network of 500 geographically dispersed psychiatrists, psychologists, primary health physicians, social workers, and other professionals who interact with those who have been affected by trauma. Our vision is to facilitate collaboration and information sharing across these professionals through unification of multiple technology platforms/tools in order to create online/virtual communities. Our network has already mastered the art of virtual online training through the use of e-curriculum experts and various integrated technologies such as Moodle, MediaSite, Articulate (e-learning software), Blackboard Collaborate, and Webex on our Learning Center for Child and Adolescent Trauma (+70,000 members and +200 trainings).

Infographics

Kate Flewelling
Outreach Coordinator, University of Pittsburgh, University of Pittsburgh, Pittsburgh, Pennsylvania

Tuesday, May 20

6:21 PM - 6:37 PM

Room: Columbus AB/CD, Gold Level, East Tower

Description: The use of infographics to demonstrate information in an eye-catching, visual way is an emerging trend in medicine, public health, libraries, and other fields. Infographics can be used in teaching, evaluation, web development, signage, publicity, and numerous other ways. And, it is easier than ever for people with little or no graphic design experience to create them with tools such as www.infogr.am and www.piktochart.com.

VIVO for Business Intelligence

Paul Albert
Assistant Director, Research and Digital Services, Weill Cornell Medical College, New York, NY

Tuesday, May 20
6:37 PM - 6:53 PM

Room: Columbus AB/CD, Gold Level, East Tower

Description: Libraries are taking on new roles to meet ever-changing information needs. One area where we have seen a huge influx and influence of library personnel and resources centers around locally implemented research information and discovery systems like VIVO. Weill Cornell Medical Library uses the researcher networking software VIVO to perform business intelligence at our institution including: running publication productivity reports, compliance reports, inferring expertise, and recommending grants. I will demonstrate the Weill Cornell Medical Center VIVO instance and our work on data dashboards. This topic is particularly timely, as libraries are constantly justifying their existence while at the same time medical institutions have a gaping maw when it comes to data collection, representation, analysis, and visualizations to inform local strategic efforts, compliance, and reporting activities.

3D Printing

Patricia F. Anderson
Emerging Technologies Librarian, University of Michigan, Ann Arbor, MI

Tuesday, May 20
6:53 PM - 7:09 PM

Room: Columbus AB/CD, Gold Level, East Tower

Description: 3D printing (from Makerbots to biofabrication) is dramatically impacting health through the potential to customize medical devices, create unique presurgical models of patient's organs, personalize prosthetics, create new solutions for assistive technologies, and more. Librarians can help by tracking and directing information to appropriate audiences, creating guides, teaching workshops on software and hardware choices, partnering with communities, discovering the newest tools/search engines, and generally taking core library skills into this new tech space for health care.

Late-Breaking Trends

Emily Hurst
Technology Coordinator, Houston Academy of Medicine-Texas Medical Center, Houston , Texas

Maureen M. Knapp, AHIP
Research Support and Education Librarian, Tulane University, Tulane University, New Orleans, Louisiana

Tuesday, May 20
7:09 PM - 7:25 PM

Room: Columbus AB/CD, Gold Level, East Tower

Sunday, May 18

Poster Session 1

Poster Number: 1

Time: Sunday, May 18, 3:30 PM – 4:25 PM

24/7 Access: Crafted in 2010 and Built to Last

Robyn Rosasco, AHIP, Public Services Librarian; **Susan Epstein, AHIP**, Systems Librarian; Charlotte Edwards Maguire Medical Library, Florida State University, Tallahassee, FL

Objectives: Our library has provided 24/7 access for student study space since 2010. This service has functioned as anticipated with minor policy breaches in 2010 and 2013. The purpose of this study was to determine how well 24/7 access to our library is working, obtain student feedback on security procedures, and solicit ideas from all stakeholders for future improvements.

Methods: Stakeholders for 24/7 access to our academic health sciences library include both the service providers (library, student affairs, and security/legal personnel) and the service users (first- and second-year medical students and biomedical graduate students). To evaluate the effectiveness of the library's 24/7 access service, the authors conducted a series of free-response interviews with several service provider and user stakeholders to solicit the most detailed feedback possible. The authors also administered a brief survey to determine if students were satisfied with unstaffed access to library study space. The results of stakeholder feedback were used to evaluate the value of our extensive planning for 24/7 access to the library, our thorough and consistent implementation, and our responsiveness to the needs of our students.

Results: Our library director invited (via email) 14 student/staff stakeholders to be interviewed by the primary investigator (PI) and co-PI. Three students and 3 staff members agreed to be interviewed; 5 interviews were conducted face-to-face and 1 was conducted by phone. In addition, our library director sent an email invitation to complete a 10-question survey to approximately 500 students; 114 surveys were completed. From the interviews and the survey, shared themes as well as several unique feedback items emerged. In general, the overwhelming response was that the 24/7 service meets the needs of students, providing a secure, consistent study area for students who do not choose to study in another College of Medicine study space, in another campus library, at home, or at another location. Specifically, 90% of the students were not concerned about safety/security issues in the library during unstaffed hour;, 82% indicated that the library environment was conducive to studying during unstaffed hours; and 83% felt that the library's orientation on 24/7 policies and procedures has met their needs.

Conclusions: Collecting formal feedback on our 24/7 service has validated the time spent in planning, implementation, and responding to student needs, and has also elicited several ideas for improving the 24/7 service. We plan to

continue interviewing and surveying 24/7 stakeholders on a yearly basis to solicit current feedback and continually improve the service.

Five Years of Audiobook Use in a Health System Library: Are Patrons Listening?

Matthew Hoy, Supervisor, Library/Media Support Services; **Jennifer Schram**, Library Specialist; Medical Library, Mayo Clinic Health System, Eau Claire, WI

Objectives: To evaluate the use of an audiobook collection at a library that serves a geographically spread out system of hospitals and clinics.

Methods: Collection statistics from the last 5 years will be gathered from the integrated library system (ILS), with particular attention being paid to cost and circulation. A brief survey of library patrons will also be conducted to determine who listens, how often, and where. Population: Patrons of the library at a Midwestern health system made up of 4 hospitals and multiple clinics spread over 1,600 square miles. Expected results: We expect to see high use from a relatively small population of patrons, with a low total cost-per-use.

Results: In a collection of approximately 600 items, the average cost per item was $25. The average number of circulations per item was 14, and only 12 items had never been checked out. Ninety-five patrons responded to the survey. Fifty-two percent of respondents checked out audiobooks at least once a year. These respondents most frequently listened to audiobooks in their car, while commuting. There was a positive correlation between length of commute and number of audiobook checkouts.

Conclusions: Audiobooks can be a low-cost, high-use addition to a hospital library collection. Staff who commute frequently may benefit from access to an audiobook collection.

A Conceptual Foundation for Literature Searching Performed for an Institutional Animal Care and Use Committee (IACUC)

Elaine N. Skopelja, AHIP, Research Informationist; **Kellie Kaneshiro, AHIP**, Research Informationist; **Sue London**, Electronic Education Coordinator; **Thomas Emmett**, Clinical Informationist; Ruth Lilly Medical Library, Indiana University School of Medicine, Indianapolis, IN

Objectives: Informationists from the Institutional Animal Care and Use Committee (IACUC) Team from an academic medical library were asked to supply literature searches for the IACUC animal protocol review form. The need for consistency and efficiency called for a logical conceptual foundation to improve the workflow and process of these activities. Additionally, both investigators and the IACUC were unsure about the need to search multiple databases.

Methods: The IACUC Team analyzed investigators' search strategies on actual protocols and compared them to search strategies used by the informationists. In the literature, there are several existing articles providing optimized search strategies, primarily using PubMed. However, there is a need for more information regarding the usefulness and/or the necessity of using multiple databases. A concept map and a process flow diagram were developed. The process flow diagram illustrated the team's workflow. Using the workflow diagram the team developed a concept map to identify areas for process improvement and enhancement.

Results: We selected ten animal protocol review forms and, for each, performed two searches (refinement and non-animal alternatives) in Ovid MEDLINE and EMBASE. To ensure consistency, librarians were assigned individual protocols. Results indicated that IACUC searches performed in Ovid MEDLINE that include the In-Process and Daily Update files and incorporate both keywords and subject headings are near-equivalents to an EMBASE search. However, there will always be research areas that fall outside of the scope of MEDLINE or EMBASE. An example within our ten protocols would be research on wireless bladder monitors that necessitated using an engineering database to retrieve additional cutting-edge research in the form of conference publications. We reviewed the databases selected by the investigators. PubMed was the primary database used, although Google Scholar, IEEE Explore, and Web of Science were also searched. The number of keywords/keyword phrases used by the investigators ranged from four to thirty-four per protocol. Terms were either very broad (e.g., "alternatives" or very narrow "Kv1"). Boolean operators were rarely specified, making it difficult if not impossible to determine how search terms were

combined.

Conclusions: When searching Ovid MEDLINE, the In-Process and Daily Update files must be searched, and both keywords and subject headings must be used. We found that EMBASE did not significantly contribute to unique results in our samples. However, there will always be research that falls outside the scope of MEDLINE. It was informative to review the investigators' search strategies and database selections. We highly recommend creating a repository of 3R search hedges.

Poster Number: 4

Time: Sunday, May 18, 3:30 PM – 4:25 PM

A FlashClass Is Born! How Brainstorming, Groupon, and Flash Mobs Revitalized a Library Instruction Program

Patricia M. Weiss, Reference and Information Technology Librarian; **Rebecca Abromitis**, Reference Librarian; **Mary Lou Klem**, Reference Librarian; Health Sciences Library System, University of Pittsburgh, Pittsburgh, PA

Objectives: In an academic health sciences library, classes were marketed months in advance. Registration was not required, and most topics were offered repeatedly. New topics were solicited periodically from individual librarians. This project's objectives were (1) to create a new strategy for promoting in-house classes and (2) to develop and evaluate a group-based process for generating fresh class topics.

Methods: Two innovations were tested: (1) FlashClass, a new format inspired by "deal of the day" and flash mob social media constructs, was developed for scheduling and marketing instruction sessions. Weekly e-invitations announced FlashClass sessions for the following week and invited recipients to register. FlashClasses were held only if minimum registration was achieved. (2) To generate fresh class topic ideas, instruction librarians participated in a structured retreat. Strategies such as pre-retreat playful assignments, transgressive brainstorming triggers, and mash-up exercises were used to stimulate creative thinking.

Results: Participating librarians generated 17 topic "buds" in the September 2012 retreat, contributing to a lineup of 19 unique classes offered in 2013. Seeded by the library newsletter's email list, the FlashClass e-invitation subscriber list reached 8,300. Weekly e-invitations were mailed during 3 distinct FlashClass sessions between February and August 2013. Twenty-seven of 42 classes (64.3%) achieved minimum registration and were taught as scheduled. Mean registration for these was 5.0, and mean attendance was 3.9. More classes met minimum registration in the summer session (71.4%) than in winter (58.3%) or fall (56.3%).

Conclusions: The objectives for this project were met: We updated our instruction model so it is more agile and potentially better attuned to patron needs in the age of social media and niche interests. Visibility became central to our marketing, with weekly class "offers" promoted through e-invitations, library newsletter articles, and announcements on the library home page. FlashClass titles and descriptions were revised to be more specific and to include popular culture references. The retreat--emphasizing creativity, connections between unlikely concepts, and noncritical brainstorming--was highly productive, leading to new classes such as systematic review organization and effective presentation

techniques. Building on our initial success, a second retreat was held in January 2014, generating thirty-eight topic buds for this year's FlashClass calendar.

A Guide for Open Researcher and Contributor ID (ORCID)

Merle Rosenzweig, Informationist; **Caitlin Kelley**, Graduate Student; **Mari Monosoff-Richards**, Graduate Student; University of Michigan–Ann Arbor

Objectives: ORCID provides a standard unique author identifier that distinguishes an individual researcher from every other researcher and, through integration in key research workflows such as manuscript and grant submission, supports automated linkages between researchers and their professional activities. Having an ORCID solves the name ambiguity problem and ensures that researchers' work is recognized.
Methods: Our institution is promoting ORCID across our campus. This guide was developed to help us in marketing the use of ORCID by our researchers, in understanding ORCID, and guiding them through establishing an ORCID.
Results: This guide has proved invaluable in assisting our researchers in navigating the process of establishing and maintaining an ORCID.
Conclusions: ORCID has been instituted as an author identifier in MEDLINE, as a cataloging field by the Library of Congress, and more, and more publishers are requesting authors submitting manuscripts to provide their ORCIDs. In developing this guide, we are joining in the promotion of the use of ORCID in the scientific and publishing community in facilitating the disambiguation of author names and assuring that authors get credit for their research and professional activities.

Poster Number: 7

Time: Sunday, May 18, 3:30 PM – 4:25 PM

A Longitudinal Analysis of a Small Health Sciences Library Users Survey

Katherine Russell, Medical Librarian, CDU Health Sciences Library, Charles R. Drew University of Medicine and Science, Los Angeles, CA; **Roland Bernard Welmaker, Sr.**, Manager, Technical Services/Research Instructor, MSM Library, Morehouse School of Medicine, Atlanta, GA

Objectives: The project seeks to discuss five years of statistical data and analysis of a small health sciences library users survey. The goal of the survey was to identify key indicators for patron satisfaction and to use the feedback from patrons to plan and to develop a user-centric library.

Methods: The library disseminated an annual survey that consist of ten questions both in print and online. During the first two years, the library's survey was distributed only in the library to patrons who visited the library. Over the next two years, the survey was delivered to program directors who handled out print copies of the instrument to students in the university's educational programs. The final year, the survey was given to program directors for distribution to students and also it was available online using SurveyMonkey. The library staff sent a link of the survey using the university's email system to students, administrators, faculty, and staff. A software program will be used to analyze the results that include survey data from 2009-2013.

Poster Number: 8

Time: Sunday, May 18, 3:30 PM – 4:25 PM

A Look at the Clicks behind Bringing Health Information to the Community Blog

Monica Rogers, Health Information Literacy Coordinator, National Network of Libraries of Medicine, MidContinental Region, Health Sciences Library, Creighton University, Omaha, NE

Objectives: The Bringing Health Information to the Community blog tracks content use by counting clicks per link. This project will correlate clicks per link on topics with the topics that subscribers rate most useful based on a questionnaire. Identify most clicked topics, identify topics subscribers rate most useful, and determine if questionnaire results closely align with link clicks.

Methods: Use bitly.com to track link clicks on blog posts, tag blog posts with appropriate resource topic, and use SurveyMonkey to distribute questionnaire to subscribers asking them to rate the usefulness of content per topic. Compare questionnaire results with bitly link clicks.

Results: Between August 2012 and August 2013, the 3 most clicked resources were in content types ranked #7, #8, #10, #11, and #4, respectively. In the snapshot of the blog in August 2013, the top 3 most clicked resources were in content types ranked #6, #3, and #2.

August 2012 to August 2013, 3 most clicked resources:

- The Substance Abuse and Mental Health Services Administration's "Preventing Suicide a Toolkit for High Schools," 1,861 clicks. Categories: Mental Health, Children/Teen
- Nourishing USA's "The Soup Kitchen Culinary & Nutritional Guide," 1,376 clicks. Categories: Low Income, Websites
- The Association of American Medical Colleges and Association of Schools of Public Health's Report of Expert Panel "Cultural Competence Education for Students in Medicine and Public Health," 682 clicks. Category: Minority Health Concerns
-

August 2013
3 most clicked resources:

- US Census Bureau's "Interactive Census Map: Languages Spoken in American, " 320 clicks. Category: Multilingual
- The World Health Organization's "Health Literacy: The Solid Facts," 114 clicks. Category: Health Information Literacy

- Association of Schools and Programs of Public Health and Centers for Disease Control and Prevention's joint Public Health Fellowship Program, 82 clicks. Category: Funding opportunities

Conclusions: An anomaly of the survey results between highly ranking types of contently yet having little to no representation in the most clicked resources, might be explained by the narrow scope of the content type. For example, numerous readers might need funding opportunities, but funding opportunities themselves have highly specific parameters so a specific opportunity will only be applicable to a small percentage of readers. Alternately, the most clicked resources tend to have board applications.

Poster Number: 9

Time: Sunday, May 18, 3:30 PM – 4:25 PM

An MLA Chapter Shouts AHIP, Hip, Hooray!

Jenny Pierce, AHIP, Public Services Librarian, Health Sciences Library, Rowan University School of Osteopathic Medicine, Stratford, NJ; **Beth A. Lewis**, Director, Library Services, Talbot Research Library, Fox Chase Cancer Center, Philadelphia, PA; **Robert T. Mackes, AHIP**, Executive Director, Health Sciences Library Association of New Jersey, New Castle, DE; **Gary E. Kaplan, AHIP**, Senior Librarian, Information Services, Scott Memorial Library, Thomas Jefferson University, Philadelphia, PA

Objectives: The application process for the Academy of Health Information Professionals had a terrible reputation among our chapter members. Does providing emotional and financial support to medical librarians as they apply increase the likelihood that they will complete the portfolio process? The poster describes one chapter's attempt to support member participation in the academy application process.

Methods: In 2011, the chapter president called for the creation of a grant to support members' application for membership in the academy. Over the next two years, the academy liaison created an innovative grant process. Seven awards were made available. Applicants submitted their portfolio to the academy on a rolling schedule. Preference was given to general members; board members could apply later. The Awards Committee managed the grant process. First, applicants notified an appointed grant coordinator, who is a member of the academy, as they began the process of creating a portfolio. The grant coordinator put applicants in touch with each other to create a peer support group. The grant coordinator was also available as an academy mentor. Once the portfolio was submitted and accepted, applicants could apply for reimbursement for the cost of academy application.

Results: Six awards were given in 2013 out of a possible seven. Out of the six, one applied for Distinguished Membership, three applied for Senior Membership, one applied for Regular Membership, and one applied for Provisional Membership. All received their academy membership.

Conclusion: The range of member levels in our cohort makes it clear that librarians at all points in their careers could become members but find the application process overwhelming. Awardees felt the academy liaison and the members of the cohort were the most positive part of the experience. This project shows that if a chapter provides emotional and financial support, it can encourage increased academy membership among members. The chapter plans to continue the award moving forward.

Poster Number: 10
Time: Sunday, May 18, 3:30 PM – 4:25 PM

A Partnership in Introducing and Promoting Nursing Reference Center at the Point of Care

Amy C. Knehans, AHIP, Clinical Outreach, Liaison and Instruction Librarian, George T. Harrell Health Sciences Library, Milton S. Hershey Medical Center, Penn State College of Medicine, Hershey, PA; **Victoria Schirm**, Director, Nursing Research, Nursing, Penn State Hershey Medical Center, Hershey, PA

Objective: Introduce and promote the Nursing Reference Center (NRC) at the point of care throughout the Department of Nursing and Council Structure.
Methods: Collaboration between health care professionals and librarians can significantly affect quality improvement initiatives. The Penn State Hershey Nursing Research and Evidence-Based Practice Council (NREBP) consists of members from each nursing unit and a medical librarian. In the summer of 2013, the council established a goal to develop the means for translating research and/or evidence into practice at the point of care. To help achieve this goal, the NREBP Council, with the librarian's assistance, introduced and promoted the NRC at the point of care throughout the Department of Nursing via the shared governance council structure.
Results: Over 150 nurses received an overview of NRC during in-service training on the clinical units. Another 60 nurses were trained during regular scheduled council meetings. The NRC was also integrated into the hospital's electronic medical record system, which allowed easier access. Council members developed tools and templates to gather information related to utilization of NRC on their units. Responses were received from over 40 clinical nursing units, with an overall 22% response rate. Nurses were asked if they were using the NRC to assist in patient care during their shifts; 33% of those who answered the question accessed it at the point of care. When asked to what extent they found NRC information helpful for patient care, 30.9% found it very helpful, 51.9% found it somewhat helpful, and 17.2% found it not helpful at all. Not all who answered the survey had received training.
Conclusion: Introducing and promoting library resources that help translate research and/or evidence into practice remains a challenge. Creating a partnership between the library and the Department of Nursing via the shared governance council structure has shown to help raise awareness and increase use of NRC at the point of care. Council members will continue to identify specific strategies to implement the NRC on their clinical units and promote use of the NRC to guide competency, education, nursing interventions, policy development, and product evaluation.

Poster Number: 11

Time: Sunday, May 18, 3:30 PM – 4:25 PM

A Road Map to Creating Capacity in Education and Reference

Lisa K. Traditi, AHIP, Associate Professor/Head, Education and Reference; **Douglas Stehle**, Head, Access Services; **Melissa De Santis, AHIP**, Deputy Director; **Gerald (Jerry) Perry, AHIP**, Director; Health Sciences Library, University of Colorado Anschutz Medical Campus, Aurora, CO

Objectives: To create more capacity for education and reference librarians to work on systematic reviews, specialized consultations, teaching within the curriculum, and partnering with campus faculty in an academic health sciences library serving five schools and one college, as well as the clinical and research enterprises.

Methods: Our journey started by consolidating 3 service desks into a single service desk (SSD), moving librarians to a virtual reference service. This move required staff buy-in, aided by appointing task forces to recommend how to make the move successfully. Phase 2, Merging the Education and Reference Departments, achieved efficiencies in management and team productivity. In phase 3, a newly created library technician III position took on many scheduling and administrative tasks, working up to 15 hours of the 40 Ask Us service hours. In phase 4, the roadblock of having librarians scheduled on Ask Us versus the demand for consultations, classes, and campus partnerships was bypassed by hiring a library and information science (LIS) graduate students to cover Ask Us and work on projects. Phase 5 involved exploring Springshare products LibAnswers, LibCal, and LibAnalytics to achieve more efficiency.

Results: One-on-one consultations and classes within the curricula have increased since the move in 2007. SSD staff have a more sophisticated level of skill at assessing patron needs and knowing when to appropriately refer to the librarians. Diversifying the education and reference team by including a paraprofessional and LIS students continues to provide appropriate coverage and enriches the team. Additionally, the librarians enjoy the ability to partner with the graduate students on projects.

Conclusions: Many staff and librarians expressed serious concerns about moving to an SSD model. Our experience has shown that, by working to include everyone in the planning process and ongoing initiatives, service and staff satisfaction are not harmed. Our library patrons continue to receive excellent and timely service at all service point of our library. Next steps will be to continue reviewing who staffs the Ask Us service and potentially incorporate more library staff into the service.

Poster Number: 12

Time: Sunday, May 18, 3:30 PM – 4:25 PM

A Snapshot of Evidence-Based Nursing Practice: A History of Progress

Jennifer DeBerg, Clinical Education Librarian, Hardin Library for the Health Sciences, University of Iowa–Iowa City

Objectives: This project will provide a glimpse of the evolution of evidence-based nursing (EBN) practice. Learning about the historical origins of EBN and charting the progress in the past few decades may provide an enhanced appreciation of accomplishments and obstacles, resulting in a deeper understanding of the profession.

Methods: Journal and book literature will be reviewed to determine key practice changes resulting from an expanding evidence base in the field of nursing. Citation analysis may also be utilized to identify trends in the journal literature. Select EBN leaders at the author's institution will be surveyed to provide insight that cannot be captured by solely relying on published findings. Information gathered will be synthesized and reported, including limitations.

Results: My results are not complete yet.

Conclusions: Equipping information specialists with enhanced understanding of the nursing profession may allow them to strengthen roles as facilitators of evidence-based practice. Learning and reflecting on the history of progress in EBN is not only valuable in understanding the culture and needs of this profession, it may also offer insight about how other disciplines evolve in their adoption of evidence-based practices.

Poster Number: 13

Time: Sunday, May 18, 3:30 PM – 4:25 PM

A Window on the Social Media World: Exploring Strategies for Sharing Health Information with the Public

Kristina V. Elliott, Intern, National Library of Medicine, National Institutes of Health, Potomac, MD; **Melanie Modlin**, Deputy Director, Office of Communications, and Public Liaison, National Library of Medicine, Bethesda, MD; **Jamie E. Peacock**, Outreach Librarian, Division of Specialized Information Services, National Library of Medicine, Bethesda, MD

Objectives: To research methods of social media use in health settings and establish recommendations to effectively provide reliable health information to the public.

Methods: A large federal biomedical library serving the public. Population: The library's social media account followers. A literature review on providing health information through social media was conducted using health and information sciences databases, Google Scholar, and citation chaining. Through an iterative web search, the author also pinpointed authoritative and expert-identified sites that evaluate and rank the most effective federal government social media accounts. From this research, the author determined that a social media site's number of followers indicated effective information sharing in an online environment. She then evaluated current social media information sharing strategies to find library-applicable methods of social media use in order to enhance the effectiveness of the library's online health information sharing processes.

Results: A literature review found few recommended social media best practices for health sciences libraries. A survey of federal government social media accounts found the most effective accounts used similar strategies. These strategies included: linking and promoting live events, sharing behind-the-scenes photos and videos, making use of social media several times per day, and using hashtags to increase conversation participation on specific topics.

Conclusions: Incorporating both the literature review and survey of social media accounts, the author recommends specific implementations of information sharing strategies relevant to health science libraries' goals. The use of social media by health sciences libraries requires continued research, especially in the areas of online community building and targeting audiences by demographics and information needs.

Poster Number: 14

Time: Sunday, May 18, 3:30 PM – 4:25 PM

Addressing Survey Validity for the Evaluation of a Literature Search Service

Shauna-Lee Konrad, Health Information Consultant, Health Sciences Library, London Health Sciences Centre, London, ON, Canada; **Erin M. Boyce**, Clinical Librarian, Health Sciences Library, University Hospital, London Health Sciences Centre, London, ON, Canada; **Sandra McKeown**, Clinical Librarian, Health Sciences Library, London Health Sciences Centre, London, ON, Canada; **Jill McTavish**, Clinical Librarian, Health Sciences Library, London Health Sciences Centre, London, ON, Canada

Objectives: To consider types of validity evidence and their role in survey study design. To strengthen the validity of a survey that evaluates a mediated literature search service provided by clinical librarians in a large teaching hospital.

Methods: A literature review revealed that an assessment tool has not been published for evaluating the quality of librarian mediated literature searches. A preliminary tool was drafted for this purpose. As a result of a facilitated project "pre-mortem," where colleagues were asked to assess the tool and anticipate failure risks, several limitations of the preliminary tool were found, including double-barreled questions, inconsistent wording, and failure of the tool to provide measurable results. To strengthen the validity of the survey, researchers reviewed the literature to gain familiarity with survey best practices and consulted an expert specializing in library and information science survey methodology. Various steps were then taken to strengthen the validity of the study, particularly focusing on the survey tool. Improvements such as "talk-alouds" with five key client groups, a one-month pilot study, and extensive question redesign were utilized.

Results: The restructured tool evaluates two key areas: (1) perceived quality of literature search results and (2) perceived quality of literature search service. Problem questions were removed, demographic questions were refocused, and wording consistency was improved. Bias was reduced through systematic, blind sampling; independent survey administration; and an extended evaluation period to account for workload changes and an increased sample size. The pilot also revealed unexpected limitations to survey design, such as problems loading the survey from a mobile phone, which were addressed. Researchers also plan to calculate Cronbach's alpha coefficient to assess internal validity.

Conclusions: Assessment of survey reliability is limited by the single-setting application of this tool. Evaluation of services is often essential to demonstrate the library's value to administration and stakeholders. Simple steps to enhance survey validity will allow librarians to draw stronger conclusions from their research and obtain information that facilitates tangible service improvements. Strengthening the validity of our research tools yields more refined and

actionable data, enables more precise service improvement, increases the likelihood of publication, and ultimately contributes to and strengthens the evidence base of the profession.

Poster Number: 15

Time: Sunday, May 18, 3:30 PM – 4:25 PM

Advancing Research Communication and Scholarship: A New Conference in 2015

Jackie Wirz, Biomedical Research Specialist/Assistant Professor; **Robin Champieux**, Scholarly Communication Librarian/Assistant Professor; Library, Oregon Health & Science University, Portland, OR

Description: Advancing Research Communication and Scholarship (ARCS) is a new conference focused on the evolving and increasingly complex scholarly communication network, which will occur April 26-28, 2015, in Philadelphia. Our vision is to move beyond discipline- and community-specific discussions of scholarly communication and engage diverse stakeholders in conversations and projects to improve and evolve the system. Working from the premise that understanding and improving knowledge communication in the digital age must be a cross-disciplinary and cross-functional conversation, ARCS aims to involve a diverse set of participants and topics. Librarians, scholars, scientists, students, publishers, funders, administrators, and programmers will shape and attend ARCS. Issues addressed will include modes and models of dissemination, access, impact, reuse and reproducibility, assessment, peer review, institutional repositories, digital humanities, and e-science. ARCS hopes to identify and promote areas for collaboration, recognize both shared and divergent priorities in the sciences and humanities, provide a forum for sharing interdisciplinary research, build open resources for organizations and individuals, and positively affect the scholarly communication network across the research cycle.

Altmetrics Analysis

Edith Starbuck, Information Services Librarian; **Charles P. Kishman, Jr.**, Information Services Librarian; **Kristen Burgess**, Clinical and Research Informationist; **Peggy Frondorf**, Librarian; University of Cincinnati, Cincinnati, OH

Objectives: The University of Cincinnati Health Sciences Library is interested in assessing the relevance and extent of current altmetrics tools for selected departments in the College of Medicine (COM) when compared with traditional metrics. The purpose of this initial analysis was to determine the extent to which altmetrics compare to traditional metrics.

Methods: The analysis was conducted on a selective sample (n=208) of tenure-track faculty from 20 COM departments. Author publications were limited to peer-reviewed articles and invited editorials from 2009 through 2013 in Scopus. Additional factors analyzed included author h-index (overall and selected years), field of study, cross-institutional publications versus publications out of one institution, and the journal impact factor (IF).

Results: All publications from 2009-2013 were analyzed by department according to unique faculty, unique publications, average journal IF, average Scopus h-index, Scopus times cited average, and altmetrics average. There were a total of 4,210 articles and 3,678 unique publications. Of the 4,210 total articles, 29% had altmetrics and 71% had 0 altmetrics. Of the top 20 articles with highest altmetrics scores, 30% were from Neurology and Rehabilitation Medicine and 20% from Internal Medicine. The top 20 altmetrics articles came from the last 3 years: 1 from 2011, 2 from 2012, and 17 from 2013. Of the top 20 articles with highest traditional metrics (defined as Scopus article citations), 60% were from Neurology and Rehabilitation Medicine and 15% from Internal Medicine. The number of top 20 cited articles across all years included: 6 from 2009, 4 from 2010, 3 from 2011, 6 from 2012, and 1 from 2013. All but 1 of the top 20 altmetrics articles were cross-institutional publications. All of the top 20 traditionally cited articles were cross-institutional publications. The average h-index for 2009-2013 for authors of the top 20 traditionally cited articles was 16 and the average journal IF was 17. The average h-index for 2009-2013 for authors of the top 20 altmetrics papers was 14, and the average journal IF was 13.

Conclusions: While analyses are ongoing, the extent to which altmetrics compare to traditional metrics is minimal. COM departments with highly cited publications also have publications with high altmetrics. Altmetrics are a recent development, and their impact on scholarly communication continues to evolve.

An Analysis of Clinical Questions Asked at Professor Rounds: A Ten-Year Review of Topics

Nancy A. Bianchi, Library Associate Professor/Health Sciences Librarian, Dana Medical Library, University of Vermont–Burlington

Objectives: Questions asked at residents' educational conferences can serve as valuable catalysts for learning. Although finding answers to these queries is the ultimate goal, the topics of these questions themselves can be equally instructive. This ongoing research further analyzes clinical questions asked at conferences through the use of a scholarly medical thesaurus to describe their subject content.

Methods: Professor rounds is a biweekly educational conference in pediatrics attended by residents, medical students, university faculty, community preceptors, and a liaison librarian. Each conference highlights a general pediatric, pediatric intensive care unit (PICU), neonatal intensive care unit (NICU), or outpatient case presentation followed by a didactic session. The librarian participates at professor rounds by actively listening, noting pertinent patient details, and gathering questions that arise during the case presentations and discussions. These questions may be direct requests for information or they may be queries embedded in the discussions that the librarian recognizes as an information need. Back at the library, the librarian searches the literature for answers to these clinical questions and returns her findings to the chief resident. Building on ten years of data, a review of these clinical questions was conducted using the National Library of Medicine's Medical Subject Headings (MeSH) thesaurus to describe the subject content of these queries asked at Rounds.

Results: A total of 306 questions were collected at pediatric professor rounds from 2003-2013. Each question was categorized broadly using a subcategory descriptor in the 12-level MeSH hierarchy. The 5 most common question topics included: nervous system diseases (48 questions, 16%), bacterial infections and mycoses (35 questions, 11%), digestive system diseases (34 questions, 11%), chemicals and drugs (31 questions, 10%), and cardiovascular diseases (29 questions, 9%). The "complications" subheading was the most frequently used MeSH subject descriptor, assigned to 41 questions (13%). Eighty-four questions (27%) encompassed more than 1 topic and were allocated 2 MeSH headings. Eight questions (3%) were considered nonclinical in nature and could not be described by the MeSH vocabulary.

Conclusions: Knowing the subject content of questions that arise at residents' educational conferences can help guide the teaching content of clinical training sessions as well as the development of medical information resources. Educators, librarians, and even authors/editors can more effectively meet the

information needs of residents by studying the subject content of questions that are asked at educational rounds.

Poster Number: 18

Time: Sunday, May 18, 3:30 PM – 4:25 PM

An Analytic Survey of Five Popular Evidence-Based Practice Summary Databases in Taiwan

Hui-Chin Chang, Lecture/Director, School of Public Health/Library and Evidence-Based Medicine Center, Chung Shan Medical University/Chung Shan Medical University Hospital, Taichung, Taiwan; **Tzu-heng Chiu**, Professor/Director, Center of General Education/International Cooperation Division, National Central Library, Taipei Medical University, Taipei, Taiwan; **Long-Yau Lin**, Professor/Doctor, School of Medicine/Department of Obstetrics and Gynecology, Chung Shan Medical University/Chung Shan Medical University Hospital, Taichung, Taiwan; **Chih-Lung Wu**, Assistant Professor/Doctor, School of Medicine/Department of Orthopaedic Surgery, Chung Shan Medical University/Chung Shan Medical University Hospital, Taichung, Taiwan; **Pei-Chun Chao**, Assistant Professor/Dietitian, School of Health, Diet, and Industry Management/Department of Nutrition, Chung Shan Medical University/Chung Shan Medical University Hospital, Taichung, Taiwan; **You-Tsz Yu**, Assistant, Evidence-Based Medicine Center, Chung Shan Medical University/Chung Shan Medical University Hospital, Taichung, Taiwan

Objectives: This research aims to investigate commonly used summary databases such as UpToDate, DynaMed, Best Practice, First Consult, and ACP Medicine, which can help medical professionals to procure new evidence-based medicine (EBM) evidence collated by professional appraisal in a short time. Besides describing the particular features of each distinct database, questionnaires were also designed in order to acquire satisfactory feedback among users.

Methods: First of all, we define and illustrate each characteristic of the following subjects: contents incorporated in different databases, reference source, reviewer background, reference journal reading principle, evidence level, paper reassessment principle, frequency of database revision, search function, payment model in Taiwan, mobile version service, and latest information(update)Alert function. We investigated institutes that have subscribed to such databases in the past and in the present, and in order to do so, we emailed 200 copies of a user satisfaction surveys to each institute. The librarian or whom it may concern then randomly selected users to fill out our survey and return it by email, then process it with descriptive statistics and related statistical analysis.

An Assessment of Doctoral Biomedical Student Research Data Management Needs

Kate Thornhill, Student, Graduate School of Library and Information Science, Simmons College, Waltham, MA; **Lisa A. Palmer, AHIP**, Institutional Repository Librarian, Lamar Soutter Library, University of Massachusetts Medical School, Worcester, MA

Objectives: This analysis explores specific institutional repository (IR) data management needs of the university's biomedical sciences doctoral students. Awareness, intentions, attitudes, and concerns about depositing, sharing, and publishing supplemental research data into the library's institutional repository were explored.

Methods: A data needs assessment survey focused around the Digital Curation Centre's lifecycle model and National Science Foundation's requirements for data management was sent to 470 students via an email discussion list. Information gathered from the survey and digital repository literature aided in the construction of an overarching student data curation profile and criteria for repository functionality to meet the needs of both researchers and the repository manager.

Results: Eighty-two biomedical PhD students responded to the data needs survey, a response rate of 17.4% percent: 70.5% (n=62) were unaware that they had the option to deposit their research data sets into the IR. File format of data sets varied greatly but most common were TIFF (n=48), PDF (n=47), and JPG (n=41). Of the respondents, 30.7% (n=27) did not know the average size of their data sets. A network shared drive was the most common means of storing data (n=62, 72.1%), but many used multiple methods: 96.2% (n=25) reported using a metadata data entry standard developed by their lab; 12.9% (n=11) stated they would not be willing to share data sets openly or publicly.

Conclusions: Responses from the survey and interviews suggest that an IR needs to be flexible to accommodate the research data needs of biomedical PhD students. Functionality to handle various file types, large files, and embargoes is required. Education and outreach by library staff about the IR, data documentation, data sharing, and many facets of research data management would be useful. A broader environmental scan and further research are required to evaluate repository functionality in light of the needs of both researchers and the repository manager.

An Emerging Medical Library's Endeavor to Track Institutional Scholarly Publications

Evan Sprague, Library Assistant, Medical Library, Oakland University William Beaumont School of Medicine, Rochester, MI

Objective: Tracking institutional publications is an arduous task that many libraries choose to undertake in order to meet Liaison Committee on Medical Education requirements for accreditation. An emerging medical library developed a procedure to locate and track publications on behalf of their medical school. This poster depicts the strategies used for this endeavor, including modeling the plan–do–check–act (PDCA) cycle developed by Shewhart and popularized by Deming.

Method: Our initial strategy incorporated advance affiliation searches from five sources: PubMed, Web of Science, Scopus, Google Scholar, and Google Books. After comparing search results to a similar report compiled only by author self-reporting in another department, it was concluded that our searches missed many citations. As a result, a variety of citation collection methods were utilized in order to achieve a more comprehensive report of faculty scholarly activity. We began supplementing our search results with citations volunteered by the faculty and expanded our searching to additional databases such as CINAHL and EMBASE. We also reached out to our book vendor with the hope that it could provide reports on books authored by our faculty. This poster will describe the mechanics of the searching methods and the results achieved by these methods for institutional publications spanning from 2011 to 2013.

Results: Preliminary results for 2012 and 2013 show an increase in unique citations collected by including these new search methods. Citations for 2011 are still being processed. There were many challenges encountered during this manual process. This poster will discuss some of the challenges encountered and lessons learned.

Conclusions: The increase in citations collected have resulted in a more comprehensive report of scholarly activity. The process is highly time consuming and must be done manually. Alterations in future searches are currently being reviewed to yield more improvements. The methods used for this project can be adapted and used beyond the scope of this project, such as within systematic reviews.

Poster Number: 21

Time: Sunday, May 18, 3:30 PM – 4:25 PM

An Enhanced Search Interface and Metadata Scheme for the Open Helix Genomics Tutorials

Jeremy Bartczak, Metadata Librarian; **Bart Ragon**, Associate Director, Knowledge Integration, Research, and Technology; **Anson Parker**, Web Developer; Claude Moore Health Sciences Library, University of Virginia–Charlottesville

Objectives: The University of Virginia (UVa) Health System' Claude Moore Health Sciences Library sought to increase access to genomics learning materials by purchasing a suite of tutorials produced by Open Helix. Staff wanted to target the bioinformatics community by featuring the tutorials on a collaborative web presence between the Health Sciences Library and the School of Medicine's Bioinformatics Core and Division of Biomedical Informatics. Access would be enhanced via a rich metadata scheme, custom taxonomies, and additional discoverability in the UVa Library's online catalog.

Methods: The library negotiated to have all Open Helix tutorial content delivered directly for upload, search, and display on its own Drupal content management framework. A metadata scheme was designed to describe tutorials as content types by author, summary, subject, genomics resource type, and genomics resource creator. After subject evaluation and analysis of all tutorials, a taxonomy was designed from terms from the Medical Subject Headings (MeSH), National Cancer Institute, and Software Ontology vocabularies. An authority taxonomy was also created incorporating preferred names from the Library of Congress authority file when available. A final step involved documenting uniform resource identifiers (URIs) from subject ontologies and authority headings to potentially publish linked data triples using the Drupal resource description framework (RDF) extensions and RESTful web services plug-ins. An Apache Solr search index was added to enhance Drupal search functionality.

Results: Technology infrastructure for the project provided a powerful search interface featuring full-text search, faceting across elements, item count display within filters, and a resource recommender mechanism. External Open Helix resources were branded within a collaborative, subject specific web presence.

Conclusions: Drupal provides an efficient platform for describing and navigating a curated collection of library resources. The user friendly interface allows non-programmers to edit and add content using custom descriptions and taxonomies. User experience testing is currently underway to gauge the results of the Solr enhanced search interface. Results will be reported at the presentation. Experimentation with Drupal's RDF extensions and RESTful services plug-ins came with mixed results: RDF description will be used to ingest tutorial metadata into UVa's Blacklight-based online catalog, but publishing linked data triples using external URIs from authoritative sources was unsuccessful.

Poster Number: 22
Time: Sunday, May 18, 3:30 PM – 4:25 PM

An Evaluation of a New Guideline Development Process Used by the Society of Critical Care Medicine

Charles P. Kishman, Jr., Information Services Librarian, Donald C. Harrison Health Sciences Library, University of Cincinnati, Cincinnati, OH

Objectives: In January, 2013, the Society of Critical Care Medicine published the revised "Clinical Practice Guidelines for the Management of Pain, Agitation, and Delirium in Adult Patients in the Intensive Care Unit." The 2013 guideline used grading of recommendations assessment, development, and evaluation (GRADE) methodology to evaluate the literature, a librarian to conduct literature searches and to create and maintain a bibliographic database, rigorous psychometric analyses of assessment tools, group consensus through the use of anonymous electronic polling, and creation of a care bundle for use by practitioners. The goal of these new procedures was to increase the level of objectivity in the development process.
Methods: Because the new process differed so dramatically from previous methods a twelve-item anonymous survey was sent to all of the guideline task force members after submission of the guidelines. This survey was used to analyze the impact of this revised method for development of future clinical practice guidelines and provide an overall evaluation of the process as compared to the previously used methods.
Results: Answers were received from fifteen out of twenty members. The survey focused predominantly on the use of GRADE methodology. All fifteen respondents would recommend the use of GRADE to others. Ten found the use of the GRADE process better than developing a guideline without the use of GRADE. Thirteen felt having a mentor/expert on guideline panels was essential. Nine felt that incremental training was essential, while only three felt that webinar training or face-to-face training were essential. Twelve felt that the use of the GRADE system helped to decrease bias in reporting results, and thirteen felt that it helped standardize the literature review process. Ten felt the addition of a librarian to the process was essential. Eleven felt that anonymity in voting was essential.
Conclusions: The changes implemented by the Society of Critical Care Medicine were well received by the members of the Pain, Agitation, and Delirium (PAD 9) Guidelines Committee. Particularly strong support was found for use of GRADE in evaluation of the literature and the use of a librarian to conduct the literature reviews and maintenance of a bibliographic database. These changes are to be incorporated in the development of all future guidelines from the society.

Time: Sunday, May 18, 3:30 PM – 4:25 PM

Building Infographics and Marketing a Hospital Library

Daina R. Bouquin, Data and Metadata Services LIbrarian, Samuel J. Wood Library and C. V. Starr Biomedical Information Center, Weill Cornell Medical College of Cornell University, New York, NY; **Helen-Ann Brown Epstein, AHIP**, Chair, Hospital Libraries Section, MLA, East Windsor, NJ

Objectives: There is a crisis in hospital librarianship. Hospital administrators think the Internet can replace the library and the librarian. The King, Rochester, and Values Studies, along with the MLA Vital Pathways Project, distinctly demonstrate the value of a hospital library. As part of the VALUES2 Initiative of the Hospital Libraries Section (HLS) of MLA, an infographic visualizing the data from these influential studies was created to market the value of hospital libraries and information professionals.
Methods: Using Piktochart Pro infographic software available online, an infographic was created using data gathered from the King, Rochester, and Values Studies, and other sources to support the VALUES2 Initiative of the HLS. These studies, conducted over the past twenty-six years, investigated the value and roles of librarians and information resources to health professionals, clinicians, patients, and families.
Discussion: Although infographics are widely and increasingly used in marketing campaigns, the use of infographics in marketing hospital libraries has not been thoroughly explored. By selecting an online infographic software with a freely available version and comprehensive instructions, this effort aimed to present a case that could be replicated using alternative data sources, while maintaining a low bar of entry for librarians who are inexperienced with data visualization and graphic design software. This example supports the goals of the VALUES2 Initiative, which was formed as a result of a charge from the MLA Board to create tools and strategies to demonstrate to hospital administrators that hospital library doors should remain open and hospital librarians should remain in place.
Conclusions: An attractive infographic, along with other convincing deliverables included in the HLS VALUES2 ToolKit, such as how to create a bibliographic analysis of staff publications, how to package news of neighborhood competing hospitals, and how to create a comfortable space for meetings and collaboration, clearly demonstrate the value of the hospital library and the hospital librarian.

An Interdisciplinary Model: Integrating Library Instruction in Pharmacy Educational Programs for International Students

Mariana Lapidus, Associate Professor/Reference and Instructional Librarian; **Caroline Zeind**, Associate Provost; **Elizabeth Baertlein**, ESL Faculty Associate; Massachusetts College of Pharmacy and Health Sciences University, Boston, MA

Objectives: Design innovative educational programs for international pharmacy students using an interdisciplinary faculty team of experts in pharmacy, English as a second language, and library. Assess the effectiveness and benefits of integrating bibliographic instruction within these programs as a means of building upon library foundations skills to best prepare international students for advanced learning, internships, and US professional licensure examinations.

Methods: Bibliographic instruction for international students at the university has significantly expanded during the last years due to the growing number of incoming international students. Subsequently, the university opened an International Department and English Language Academy in 2012. As the result of effective interdisciplinary faculty team-work between the library, School of Pharmacy, and the International Department, this instruction was successfully integrated into three courses, which are outlined in this poster. Specific topics covered by bibliographic instruction and the teaching methodology used to educate international students about library resources, literature searching, and literature retrieval are identified. International students' demographics, information needs, challenges, and solutions of delivering library content to this target audience are outlined. The effectiveness of bibliographic instruction and students' perceptions are measured based on the students' performance, course evaluations, and licensure examinations.

Results: In all three courses discussed, bibliographic instruction was integrated at the beginning of the course to provide information on library resources, literature searching, and literature retrieval. Active learning methodologies were utilized, including sessions with application of library databases and retrieval skills. The students have found these sessions to be very beneficial since there are differences in databases and retrieval strategies in the United States and their native countries. Students' performance and course evaluations have confirmed the importance of library instruction sessions in preparing them to acquire advanced drug literature evaluation skills and be productive in their future role as pharmacists.

Conclusions: The interdisciplinary model utilized by the faculty team at the university in order to educate and train international pharmacy students has

proved to be successful. The international pharmacists had an opportunity to apply their drug information searching and retrieval skills during internship rotations; they have also passed licensure requirements to practice in the United States. This interdisciplinary approach can be effectively applied within various institutions to enhance international students learning, expand the educational role of librarians, and emphasize faculty collaboration across different departments and disciplines.

Poster Number: 25

Time: Sunday, May 18, 3:30 PM – 4:25 PM

Analysis of Topic and Competency Area for Continuing Education Courses of the Taiwan Medical Library Committee Annual Meetings: A Thirty-Five-Year Overview (1979-2013)

Tzu-heng Chiu, Professor/Director, Center of General Education/International Cooperation Division, National Central Library, Taipei Medical University, Taipei, Taiwan; **Chun-Ching Liang**, Head, NTU Medical Library, National Taiwan University, Taipei, Taiwan

Objectives: The Medical Library Committee (MLC), Library Association of the Republic of China (Taiwan) (LAROC) was established in 1978 and held a two-day annual meeting from 1979, inviting scholars/experts to have speeches in hot topics of the year. Since then, the MLC annual meeting has been the most important continuing education (CE) event for medical librarians in Taiwan. The author analyzed titles of thirty-five years of speeches, trying to present their distribution of topics and competency areas.

Methods: Applying the methodology of website content analysis, the author first collected all titles of the 233 speeches presented in MLC annual meetings from 1979 to 2103 via website of the MLC LAROC (www.lac.org.tw/committee/med/index.htm), and then coded these CE courses based on their topics and counted the frequency of each topic. In order to compare with the CE courses provided in MLA annual meetings in United States, these courses were further categorized into 7 areas of core competencies that MLA announced in its education policy statement "Competencies for Lifelong Learning and Professional Success" in February 2007.

Results: The most popular topics in the 35-year period are: "Application of Information Technology (IT)," "Evidence-Based Medicine (EBM)/Evidence-Based Nursing (EBN)," "Database Introduction and Searching," "Public Relations and Marketing," and "Evaluation and Assessment," accordingly. As to the competency areas, the distribution is very unbalanced: 32.19% of the courses are in the area of "200s Leadership and Management," and 31.76% are in "400s Health Sciences Resource Management. " Followed by the areas of "300s Health Sciences Information Services, " "500s Information Systems and Technology," and "100s Health Sciences Environment and Information Polices. " However, there were only 2 courses in the area of "600s Curriculum Design and Instruction. "

Conclusions: This research shows that the distribution of CE courses of our annual meetings are strictly unbalanced among the MLA's seven core competencies. However, the teaching role of medical librarians is more and more important in the digital era. The author suggests the "Curriculum Design and

Instruction" related training should be improved. It is the author's hope that the research result can sever as the reference for future CE course planning of the MLC annual meeting in Taiwan.

Poster Number: 27

Time: Sunday, May 18, 3:30 PM – 4:25 PM

Assessing Strategies to Communicate Library Value

Erin N. Wimmer, AHIP, Teaching and Learning Librarian; **Jeanne M. LeBer, AHIP**, Associate Director, Education and Research; Spencer S. Eccles Health Sciences Library, University of Utah–Salt Lake City

Objectives: The objectives of this poster are to present results of the work of this library's Communicate Value Team. The team is tasked with: Conducting an assessment of user needs; devising effective strategies to promote library services and resources; and determining best methods of user engagement and education.

Methods: An interdisciplinary team of this library's staff is exploring ways to communicate the value of the library's services, resources, and people. Team members meet twice monthly to review current communication channels and develop user assessment strategies. User assessments are implemented, and the feedback evaluated to determine how the library is currently meeting user needs and how to move forward. This feedback also builds both the library staff's and users' understanding of library value. In addition, the team is evaluating, revising, and building information channels for improved communication, with the goal of engaging and educating users about the library. Recommendations for new strategies are proposed and presented to the library's Leadership Team for approval and implementation.

Results: The team evaluated a faculty survey conducted last year in preparation for creating additional surveys of staff and students. Based on faculty survey data, the team discovered that promotion of library services and resources needs to be enriched so that more of the health sciences community is aware of, and using, library services and resources. To adequately demonstration the value the library adds to the health sciences community, the team is identifying new strategies to proactively promote the library, including creating a new communication strategy that will encourage greater engagement between users and library services and resources.

Conclusions: Based on the results of the survey, the team will split into smaller working groups to focus on projects that address user needs. Promotions will be tailored to the audiences appropriate for identified services and resources, and engagement efforts will be increased.

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Time: Sunday, May 18, 3:30 PM – 4:25 PM

Assessment of Impact of Library Instruction on Health Information Searching Skills and Knowledge in Radiographic Science Students

Ruiling (Raylene) Guo, AHIP, Associate Professor and Health Sciences Librarian; **Dan Hobbs**, Associate Professor and Program Director, Radiographic Science; **Wendy Mickelsen**, Assistant Professor, Radiographic Science; **Teri Peterson**, Statistician; Idaho State University, Pocatello, ID

Objectives: The purpose of this study was to establish an effective partnership in training radiographic science students by incorporating library instruction into the radiographic science changing curriculum and to assess radiographic science student skills and knowledge in health information literacy and their self-reflections before and after the library instruction.
Methods: Seventeen radiographic science students were given library instruction on planning literature searches, developing search strategies to effectively search health and medicine-related databases, evaluating quality of health information, and using EndNote to format references in the American Medical Association (AMA) citation style. Radiographic science student learning outcomes were assessed using pre- and post-test analysis. A self-reflection survey was performed to explore any difference in student confidence and comfort before and after receiving library instruction. Pre- and post-tests including self-reflection surveys were collected. All the data were entered into an Excel spreadsheet and then exported to IBM SPSS 21.0. Frequency and descriptive statistical analyses were performed. Paired sample testing was conducted to compare the means of students' pre- and post-test scores.
Results: The results showed that the pre-test mean score was 66.47 and the post-test mean score was 91.18. There was a statistically significant difference in the outcomes of student learning before and after the library instruction (t=-6.424, *df*=16, *PPP*
Conclusions: The study indicates that library instruction makes a difference in increasing radiographic science student skills and knowledge in health information literary. The results show a positive impact of the librarian instructional program on the success of student learning. A follow-up survey of student learning outcomes is needed for examining the knowledge retention in radiographic science students. This study also emphasizes the need for partnerships between health sciences librarians and radiographic sciences faculty to educate future competent leaders and health professionals in radiographic science.

Baltimore to Nairobi: A Collaboration to Improve Medical Education in Kenya

Ryan Harris, AHIP, Reference Services Manager and Research and Education Librarian ; **Alexa Mayo, AHIP**, Associate Director, Services; Health Sciences and Human Services Library, University of Maryland–Baltimore

Objectives: This poster describes the University of Nairobi College of Health Sciences (CHS) Library and University of Maryland Health Sciences and Human Services Library (HS/HSL) collaboration to assist the CHS Library in developing services, skills, and resources to meet changing information needs in a digital world. The collaboration aims to improve the quality of medical education in Kenya.

Methods: The Partnership for Innovative Medical Education in Kenya, a National Institutes of Health (NIH)-funded international collaboration, is building a program in medical education centered on HIV prevention, treatment, and care. One of its aims is to improve the quality of medical education in Kenya. The development of new services, skills, and resources at the CHS Library is critical to the program's success. In 2012 and 2013, the library hosted learning visits for CHS librarians/information technology (IT) professional. In August 2013, two librarians visited the CHS Library to provide targeted support, offering instruction and facilitating discussions on best practices. The site visit allowed the HS/HSL team to experience the library environment and hear from CHS Library staff about their work processes and organizational values. A report with recommendations to enhance the CHS Library followed the visit.

Results: The site visits strengthened the HS/HSL team's understanding of the CHS Library and the types of changes necessary for its continued development. It also confirmed the need for additional staff at the CHS Library, specifically a degreed librarian who could assist with incorporating instruction into the curriculum and with the development of additional research services.

Conclusions: The staff at the CHS Library and HS/HSL have developed a shared vision for the project that contributes to its sustainability. The ingredients for success are evident in the program: shared goals and values, shared vision for addressing challenges, easy communication, and a long-term commitment to the program' success. Staff at the HS/HSL and the CHS Library continue to collaborate to advance the aims of improving medical education in Kenya.

Poster Number: 30

Time: Sunday, May 18, 3:30 PM – 4:25 PM

Barriers to Evidence-based Public Health Practice: How Are Academic Libraries Addressing the Need?

Amber Loos, Health Sciences Librarian, Morris Library, Southern Illinois University, Carbondale, IL

Objectives: A review of the literature reveals a number of barriers to the use of evidence-based practice by public health professionals (e.g., limited access, skills, and time to properly search the literature). The goal of this research is to inventory the resources that academic libraries provide in order to address these barriers for public health professionals as well as their current students.
Methods: The URLs of the websites of academic libraries and health sciences libraries that are affiliated with universities accredited by the Council on Education for Public Health (CEPH) were collected. These universities were identified as the study population because they offer accredited degrees in public health and were assumed to be the most likely universities to have libraries that offer evidence-based public health resources. The researcher inventoried and described different types of evidence-based public health resources found on the library websites. The number of libraries offering different types of evidence-based resources was quantified.

Poster Number: 31

Time: Sunday, May 18, 3:30 PM – 4:25 PM

Bibliometrics Informing Nursing Scholarship

Margaret (Peg) Allen, FMLA, Consultant, Health Knowledge Consultants, Stratford, WI; **Shelley Arvin**, Associate Librarian, Cunningham Memorial Library, Indiana State University, Terre Haute, IN; **Pamela Sherwill-Navarro, AHIP**, Librarian/Instructor, Library, Remington College of Nursing, Lake Mary, FL; **Holly Hubenschmidt, AHIP**, Head, Instruction, Liaison, and Reference Services, Webster University Library, Webster University Library, St. Louis, MO; **Joy C. Kennedy**, Librarian and Consultant, , Evanston, IL

Objectives: The 2012 Nursing and Allied Health Resources Section (NAHRS) Selected List of Nursing Journals used data from citation analysis, online databases, and nursing journal editors to create a resource for nursing scholarship and to support development of nursing and interdisciplinary journal collections. The 2012 list was produced by the NAHRS Research Committee Journal Project team. The goal of this poster is to present NAHRS Research Committee recommendations for continuing a Selected List of Journals for Nursing, including revision of the 2010 Mapping the Literature of Nursing and Allied Health Professions Project Protocol.
Methods: Methods for the 2012 selected list included developing a master list of database coverage including journals from the Key and Electronic Nursing List, top cited journals from mapping the literature of nursing studies and additional journals that met the selection criteria. Descriptive data were added including journal title changes. Database coverage included years indexed in nine subject indexes and five citation indexes. Full-text coverage was assessed for fourteen sources. Additional data included analysis of evidence-based and continuing education content and selected data from a collaborative survey of nursing editors.
Results: The Journal Project leaders for the 2012 NAHRS Selected List of Nursing Journals recommended new methodology for creating a second edition [Sherwill-Navarro P, Kennedy JC, Allen M. Developing an evidence-based list of journals for nursing. J Med Lib Assoc. 2014 Apr;102(2):105-9]. With the increased number of mapping studies submitted to the *Journal of the Medical Library Association (JMLA),* the editorial board has raised the bar for acceptance. Since the mapping studies provide evidence for journal selection, protocol revision is critical. The new protocol provides early access to data needed for expanding the master list of database coverage. Expansion of the master list will provide additional nursing and interdisciplinary journals to consider for updating the selected list. Relevant results from the 2014 NAHRS membership survey will be analyzed to help inform NAHRS Research Committee recommendations.
Conclusions: NAHRS Research Committee recommendations for continuing the Mapping and Journal Project activities will include:

- Revised Mapping the Literature of Nursing and Allied Health Professions: Project Protocol
- Methodology for updating the selected list, including selection criteria for nursing and interdisciplinary journal titles

The poster and related documents will be available at www.nahrs.mlanet.org.

Poster Number: 32

Time: Sunday, May 18, 3:30 PM – 4:25 PM

Bioinformatics Training for Librarians: Experiences and Planned Services

Frances Chu, Associate Director, Reference and Outreach, Harriet K. and Philip Pumerantz LIbrary, Western University of Health Sciences, Pomona, CA; **DeDe Leshy**, Senior Medical Librarian, Medical Library, Cedars-Sinai Medical Center, Los Angeles, CA; **Edith Starbuck**, Information Services Librarian, Donald C. Harrison Health Sciences Library, University of Cincinnati, Cincinnati, OH; **Traci Tosh**, Information Specialist, Research, Schaffer Library of Health Sciences, Albany Medical College, Albany, NY; **Amy C. Studer**, Health and Life Science Librarian, Health Sciences Libraries, University of California–Davis

Objectives: This poster explores the experiences of librarians who attended a bioinformatics training course, A Librarian's Guide to the National Center for Biotechnology Information (NCBI), by the National Library of Medicine (NLM) from March to April 2013. The librarians ranged from those with a strong prior understanding of bioinformatics and NCBI tools to those with no knowledge about molecular biology and search tools.

Methods: The poster summarizes the librarians' experiences with A Librarian's Guide to NCBI. It presents plans they have for implementing bioinformatics database services at their institutions, including details such as intended audiences, the selection of NCBI databases to highlight, and marketing strategies for promoting services.

Results: The 5 librarians who attended the training course, A Librarian's Guide to NCBI, were from varied backgrounds. Three had degrees in sciences/health sciences with 2 having a prior history of being registered nurses/nurse practitioners. Other demographic details include 4 librarians who work in an academic setting and 1 who works in an academic medical center. The full-time equivalent (FTE) students and faculty varied between very large (over 30,000) to small (a few thousand). All librarians support the training of health professional and biomedical researchers. All 5 had only used PubMed and MeSH databases of the NCBI databases prior to taking the course. In terms of developing a bioinformatics program, all plan on providing training. Several librarians have already developed and taught classes, including incorporating NCBI databases information into a biomedical engineering class, a drug discovery and development class and molecular epidemiology class. Another librarian has hosted workshops with NCBI presenters, provided a guest lecture in an epidemiology graduate seminar and training for fellow librarians in the institution. Several librarians have promoted the NCBI databases and are planning future workshops. All librarians targeted students in the biomedical research arena from basic sciences to clinical sciences. Two librarians have utilized these databases

to answer research questions posed to them.

Conclusions: In conclusion, the training course, A Librarian's Guide to NCBI, provided a high-level overview of molecular biology and NCBI resources. The content was intense and daunting, but in the era of big data and translational medicine, librarians must expand their skills to include bioinformatics resources to remain relevant to their customers.

Poster Number: 34

Time: Sunday, May 18, 3:30 PM – 4:25 PM

Blueprint to Success: A Federal Library Checklist

Teresa R. Coady, Library Director, Medical Library, Orlando VA Medical Center, Orlando, FL; **Cornelia E. Camerer**, Chief, Library Service, Deputy Director's Office, North Florida/South Georgia Veterans Health Service, Gainesville, FL; **Nancy Clark**, Director, Library Network Office, Department of Veterans Affairs, Dallas, TX

Background: The Veterans Affairs Library Network (VALNET) is a health sciences library network of national significance. The network services 153 medical centers and treatment facilities throughout the United States. VALNET librarians provide knowledge-based information for clinical and management decision making, research, and education to enhance the quality of care for veterans enrolled in the VA health care system. With over 30 databases, 20,000 e-books, and 7,000 online periodicals, VALNET provides an exemplary university-like knowledge network for health care professionals and allied health employees. VALNET serves a diverse group of users, including veterans, their families, and their caregivers; VA staff; plus students and trainees in affiliated teaching programs.
Objectives: The goal of this poster was to develop a quick checklist for federal medical librarians that can be used as a blueprint for success. The checklist capitalizes on the use of federal librarian competencies, MLA standards, strategic planning, knowledge management, leadership development, and mentorship.
Methods: Three experienced librarians, with combined experience of over eighty years in the profession, explored the idea of setting up a checklist for novice and experienced federal librarians. The checklist serves as a metric to assist librarians with refreshing their competencies, skills, and abilities, and align their knowledge management aptitude with their organizations' strategic objectives for optimal return on investment (ROI).
Results: A checklist was developed that included the following major topics: leadership, management, standards, collection development, acquisitions, mentoring and networking, strategic planning, professional development, knowledge management, and the Joint Commission.
Conclusions: We will share the checklist with various contingencies and solicit feedback. We plan to include VALNET, the Federal Libraries Section of MLA, Federal Library and Information Network (FEDLINK) members, Department of Defense (DoD), and other federal libraries.

Poster Number: 35

Time: Sunday, May 18, 3:30 PM – 4:25 PM

Book Reviews in Ophthalmic Journals

Gale Oren, AHIP, Librarian, Kellogg Eye Center, University of Michigan–Ann Arbor

Objectives: Published book reviews have traditionally been one of the tools librarians use to make selection decisions. As scientific publishing is changing, the question being asked is whether book review publication is in decline. This study examines the evolution of book reviews in ophthalmic journals over the past thirty years from quantitative and qualitative aspects, and discusses future implications.

Methods: Book reviews published in twenty top ophthalmology journals (per 2012 ISI impact factor list) that go back at least thirty years (1983-2013) will be counted at five-year intervals and assessed. In addition, several open access ophthalmology journals will be examined for book review inclusion and format.

Bridging Cultures with Institutional Treasures of the Past

Fatima M. Mncube-Barnes, Library Director; **Christyne Douglas**, Archivist; **Philip Walker**, Librarian; **Amelia Whitehead**, Clinical Librarian; Meharry Medical College, Nashville, TN

Objectives: Institutional celebrations attract students, faculty, alumni, donors, family, and friends. The purpose of this paper is to highlight institutional treasures dating back to 1876, used in celebrating past anniversaries, building dedications, symposia, and alumni events, bridging cultures between the young and old at Meharry Medical College.

Methods: Past archive queries and projects from campus constituents pertaining to various form of celebrations were identified and listed. The listing of events was confirmed with the Offices of Marketing and Communications, Alumni, and Development. Memorabilia relating to these events were gathered and photographed, and were digitized and made accessible on the college website.

Results: The library identified a variety of events, such as anniversaries; newsletters; and departmental symposiums, which the archives has been involved in throughout the years. Some of these materials have been essential in answering patron questions. Each project has provided opportunities to assess the collection's strengths and weaknesses. By identifying collection gaps, the archives were able to actively solicit donations to continue to build the collection for future queries.

Conclusions: This project uncovered historical gems about the history of the Meharry Medical College Library and the archives. Some of these findings served as a catalyst to identify future digitization projects such as a history of the library and guardians of the college legacy. Student records from 1876-1970 were processed. This searchable database is in the process of being merged with processed collections of alumni as well as digitized yearbooks and catalogues. This project also stimulated the creation of exhibits to highlight physician and nurse alumni who became catalysts of change in their communities.

Poster Number: 37

Time: Sunday, May 18, 3:30 PM – 4:25 PM

Bugs, Band-Aids, and Befuddlement: The Hands-on Challenges of Assisting Researchers with National Institutes of Health Public Access (NIHPA) Compliance

Jennifer A. Lyon, AHIP, Clinical Research Librarian; **Christina Moore**, Program Assistant; **Olivia Davey**, Compliance Coordinator; **Wajeeh Bajwa**, Director, Regulatory Knowledge and Research Support Program; **Alicia Turner**, Assistant Director, Quality Improvement; University of Florida–Gainesville

Objectives: The process of assisting researchers to comply with the National Institutes of Health (NIH) public access policy is a complex effort that requires time, patience, planning, and an ability to deal with a wide range of problems. The purpose of this poster is to illustrate the challenges that compliance support personnel have faced and describe some of the solutions.

Methods: Examples of challenges and problems encountered while providing assistance to faculty authors and principal investigators will be gathered from compliance experts in multiple, collaborating academic research support units at a premiere university. These cases will be reviewed and synthesized, with a focus on understanding and identifying author issues, academic system barriers, publisher-based problems, and NIH computer system bugs. Examples of both rare and frequently observed problems in each of these areas and some proposed resolutions--or, at least, makeshift measures--will be organized and illustrated.

Results: A wide range of challenges have been identified in our experiences with faculty, students, and principal investigators (PIs). These include technical issues with the NIH websites (My NCBI, NIHMS, eRA Commons), mistakes in the NIH PACM system, location of older manuscripts, author changes of location, author resistance to completing the process, PIs seeking help "at the last minute," contact with and cooperation from journal publishers, and many other issues. We provide illustration of sample cases on the poster.

Conclusions: We have succeeded in cutting the number of NIH public access policy non-compliant articles from the University of Florida in half (from ~1,200 to ~600) over a 1-year period. Our experience has illuminated the variety of technical, communication, and social issues with engaging researchers in fulfilling federal compliance regulations.

Poster Number: 38

Time: Sunday, May 18, 3:30 PM – 4:25 PM

Building a Better Instruction Session: Can Student Performance Tell Us How?

Elizabeth Moreton, Health Sciences Librarian, Lovejoy Library, Southern Illinois University, Edwardsville , IL; **Jamie Conklin**, Health Sciences Librarian, Lovejoy Library, Southern Illinois University, Edwardsville, IL

Objectives: This study reports on the effectiveness of using nursing student performance on a library assignment to inform revisions of the instruction session and assignment and, in doing so, to improve learning outcomes and increase success rates for nursing students in future iterations of library instruction sessions.

Methods: Two health sciences librarians analyzed library assignment scores for beginning nursing students in the fall of 2012 in order to evaluate their instruction techniques and assignment. After discovering 5 key areas that needed improvement, the librarians revised the instruction to incorporate more active learning and edited the assignment to fix or remove ineffective questions that were problematic for students. In the fall of 2013, approximately 180 beginning nursing students participated in the new library session and completed the revised assignment. This poster will compare student performance on the pre- and post-revision assignments to determine if the modified library session benefitted the students and if student performance is an effective tool to guide session revisions in the future.

Results: For the most part, the changes to the instruction and assignment did improve student scores. Restructuring and simplifying the assignment led to 16% fewer questions left unanswered compared to the previous year. Practicing truncation and phrase searching with instant polls in class lead to a 29% reduction of truncation in incorrect locations in the word and a 21% reduction in poor phrase searching. A new table in the assignment, however, led to a 15% increase in truncating words that did not need it and caused some students not to phrase search when they should have. The table also accounted for 54% of the questions left unanswered.

Conclusions: Reviewing student scores on library assignments is a useful method for identifying problematic areas for students. Problem areas in the 2012 assignment prompted the librarians to include active learning in the 2013 instruction sessions and to simplify the assignment. These improvements increased the overall student scores. The librarians identified a few problem areas in the 2013 assignment that will need to be corrected in 2014, thus showing that instruction and assignment design is an iterative process.

Poster Number: 39
Time: Sunday, May 18, 3:30 PM – 4:25 PM

Building a Framework to Assess Our Value

Terrie R. Wheeler, Chief, Education Services Branch; **Alicia Livinski**, Informationist/Biomedical Librarian; **Douglas Joubert**, Informationist/Biomedical Librarian; **I. Diane Cooper, AHIP**, Informationist; **Bradley Otterson**, Informationist/Biomedical Librarian; **Nancy Terry**, Informationist/Biomedical Librarian; NIH Library, National Institutes of Health, Bethesda, MD

Objective: Health sciences librarians provide knowledge-based information to support federal health agencies' missions and goals. We conducted a study to determine the value of services and information provided, based on users' decisions and/or actions related to their work in patient care, policy/administration, research, or education.

Methods: We conducted a survey to explore the value of library information provided by the National Institutes of Health (NIH) Library to 16 operating divisions and staff divisions within the Department of Health and Human Services (DHHS). Fifteen of the 16 agencies participated. The survey was sent to users who requested specific information services (i.e., document delivery, editing/formatting of manuscripts, instruction on searching, mediated literature searching, or reference). A convenience sample of 121 responses was gathered. This sample size represents 15% of the total number of requests from these agencies in the prior year. Each user was asked to select 1 of 4 categories that best described the nature of the information request. These categories were patient care, policy/administration, research, and education. A short series of questions followed that were specific to the category selected. Survey questions were adapted from previous value studies, and new questions were developed with user input. The survey was piloted and refined, with the final survey launched in April 2012.

Results: A majority of respondents selected the research and policy/administration (53% and 31%, respectively) categories; relatively few selected the education and patient care (10% and 6% respectively) categories. Respondents overwhelmingly noted that the information they received from the librarian either completely answered their question (91%) or partially answered their question (9%), and that the information was extremely influential (56%) or somewhat influential (38%) on their work. They also indicated that if the librarian had not provided the information, they would have searched Google, asked a colleague for help, or not looked at all. The survey also sought to gauge the financial impact of the information to the user or to the organization; however, this was difficult to ascertain. Two respondents indicated that the information was useful in seeking grant funding.

Conclusions: As demonstrated by the data we collected, DHHS employees value the information provided by librarians for decision making and answering

policy, research, and administrative questions. This study highlights the value and influence of information provided by librarians for the work of DHHS employees.

Poster Number: 40

Time: Sunday, May 18, 3:30 PM – 4:25 PM

Building a Literature Review: A Citation Analysis of Medical Educator's Research Patterns in Balint Group Studies

Len Levin, AHIP, Head, Education and Clinical Services, Lamar Soutter Library, University of Massachusetts Medical School, Worcester, MA; **Young-Joo Lee**, Nursing Librarian, Louis Stokes Health Sciences Library, Howard University, Washington, DC

Objectives: This study analyzes how medical educators search literature, using as an example Balint Groups. Drawing from literature on medical educators' search skills, the authors hypothesize that they have not used a systematic approach in their pre-intervention reviews. Instead, it is expected that researchers use literature conveniently found and readily available. Using a citation analysis, this hypothesis will be explored.

Methods: Balint Groups began in England in 1950s as a means of teaching students and residents "patient-centered" communication skills. In the United States, it was first adopted in family medicine, then later in different specialties. Due to its international and cross-discipline scope, it is hypothesized that searching for existing literature on Balint Groups can pose a challenge to medical educators. In this study, an exhaustive literature review on Balint Groups will be conducted using the MEDLINE, CINAHL, PsycINFO, EMBASE, and ERIC databases. A validated inclusion criteria will be used to select papers from this cohort of results. The authors will then create a comprehensive list of citations used by the selected papers. The analysis will focus on identifying and examining citation patterns to explore factors such as origin of publication and level of evidence of the most highly cited references.

Results: In selecting citations, the authors excluded articles that were (a) older than 2003, (b) bibliographies only, (c) opinion-based letters to the editor (with no citations), and (d) meeting abstracts. One hundred twelve papers were selected. Citations from these papers were reviewed, and Balint-specific citations were selected. The resulting list contained 314 citations, 283 from journal literature and 31 from books. References to primary Balint literature (e.g., books originally published by Michael and Enid Balint who defined Balint Group process) equaled just under 25% of the total citations. The top 10 cited journal articles equaled 30% of the total citations. Of these top 10, 5 were published in the 2000s, 3 in the 1990s, and 2 in the 1980s. Psychiatry, primary care, and doctor-patient relationships where the areas most widely studied using Balint Group practice.

Conclusions: The authors conclude that the hypothesis is correct. Of the 334 total citations retrieved in the initial search, the cited output equals approximately

30% of the available research on Balint Groups. Of this, only 6% is from the top primary resources (Balint-authored books) and top 10 cited papers.

Poster Number: 42

Time: Sunday, May 18, 3:30 PM – 4:25 PM

Building a Transformational Information Literacy Session for First-Year Health Sciences Seminar Students: A Case of Instruction Using Organized Chaos

Xan Goodman, AHIP, Health and Life Sciences Librarian, University Libraries, University of Nevada–Henderson

Objectives: This poster will describe how storytelling, popular culture, and the Cephalonian method were used to teach the threshold concept of the information cycle to a group of first-year students enrolled in a freshman health sciences seminar.

Methods: A classroom lecture on the information cycle for a large first-year seminar health sciences course for over two-hundred students was taught using mixed methods. The Cephalonian method was used to encourage class participation and was incorporated throughout the lecture. Lecture was taught using storytelling with a public health case study as the foundation of lecture. Intimate partner violence was selected as the public health issue, and the pop culture case of intimate partner violence between Chris Brown and Rihanna was used. Finally, formative in class assessment was conducted using LibGuides polling software and student search activity. These techniques were used for the purpose of teaching the information cycle so students can apply their new knowledge about the information cycle to their selection of resources for their final project.

Results: Results from the formative assessment showed that over 90% of students knew the parts of the information cycle after lecture. The second question posed some difficulty for students in terms of indicating what type of material is published first along the information cycle. Class assessment allowed students to model their searching and to receive guided practice.

Q1. How many steps in the information cycle? Results: 1 1.39% 1 vote, 5 0 0 votes, 6 95.83% 69 votes, 3 2.78% 2 votes

Q2. Books on a subject are published before scholarly or academic journal articles? Results: True 16.67% 12 votes, False 83.33% 60 votes

At the end of fall semester, a random sample (n=237) of photographs of the students' final term project posters were taken. These final project included an annotated bibliography.

Conclusions: Based on examining a sample of random images taken it appears that students were able to correctly identify scholarly articles to include in their annotated bibliographies. During the random photographing of final work, one student commented that she changed her topic to domestic violence based on the lecture about the information cycle, that demonstrated that articles were

written and available about the topic. The sample also revealed that even if students selected the correct article type, formatting an annotated bibliography correctly proved challenging.

Poster Number: 43
Time: Sunday, May 18, 3:30 PM – 4:25 PM

Building an Innovative Infrastructure in Clerkship Curriculum: Integrating Virtual Library Services with Tablet Technology

Lori A. Fitterling, Digital Services/Reference Librarian, D'Angelo Library, Kansas City University of Medicine and Biosciences, Kansas City, MO; **Marilyn J. De Geus**, Director, D'Angelo Library, Kansas City University of Medicine and Biosciences, Kansas City, MO; **Angie Clemmer**, Access Services Serials Coordinator, D'Angelo Library, Kansas City University of Medicine and Biosciences, Kansas City, MO; **Elizabeth K. McClain**, Assistant Dean , Clinical Education, Kansas City University of Medicine and BiosciencesCollege of Osteopathic Medicine, Kansas City, MO

Objectives: The purpose of this study is to analyze the impact of virtual library services as embedded in clerkship curriculum initiatives utilizing campus-wide tablet technology. It is anticipated that there will be an increase in learning outcomes with student success that will promote competency of information literacy.
Methods: The library, in collaboration with the Clinical Affairs Department, developed nine clerkship disciplines by selecting subject-specific content and embedding virtual code within each course syllabus. The syllabi were presented to the department chairs of the nine clerkship disciplines. Upon approval, syllabi were uploaded to the various clerkship modules in the online learning system (Blackboard), and digital learning objects were added; specifically, "Ask a Librarian" chat service widget, subject LibGuides, virtual tutorials, and other library resources. All material was tested for compatibility with tablet technology as mandated by a university wide initiative. Page views of online resources as referenced in the course syllabi will be tracked from July to December 2013. Students will be surveyed about their tablet usage, access to library links placed in the course syllabi, and their ability and confidence in using the embedded resource links.
Results: Faculty and students agreed the librarians made highly valued contributions to the clerkship curriculum, and the iPad initiative was successful in accessing library resources. The usage of the library e-book resources outlined in the syllabi increased, as did the chat service embedded into course syllabi. LibGuide topics for Clinical Clerkship Resources and Point of Care Resources showed an increase in usage. Fifty-five percent of preceptors and 57% of students reported using the syllabi, with only 4% of students reporting no usage. Challenges identified include: lack of preceptor training in use of the syllabi, the perception by students about syllabi use, time constraints, variability of clinical sites use of syllabi, and access to library resource issues.

Conclusion: Future project goals include providing opportunities for student and preceptor training, simplification of the syllabi, developing a "resource toolbox" for preceptors and determining new ways of access to the syllabi. The effectiveness and value of librarians working as an integrated team with faculty in clerkship education will continue to be monitored and evaluated. The librarians were powerful partners showing the impact they have beyond the traditional functions of the library by contributing significantly to the mission of the Kansas City University of Medicine and Biosciences in educating the students to become the best physicians they can be.

Poster Number: 44

Time: Sunday, May 18, 3:30 PM – 4:25 PM

Building and Maintaining Relationships with Nursing and Allied Health Faculty

Gwen Wilson, Health Sciences Librarian, Mabee Library, Washburn University, Topeka, KS

Objectives: To demonstrate how a health sciences librarian developed and continues relationships with nursing and allied health faculty as a means to provide more effective information services to all students and faculty.

Methods: Setting/Participants: An academic health sciences librarian serving a school of nursing, allied health sciences programs, and kinesiology program. Brief description: This poster describes the methods the health sciences librarian used to build relationships with nursing and allied health faculty, challenges encountered, and benefits of these relationships for the health sciences librarian, faculty, and students. These benefits include: an increase in collaborative projects between the health sciences librarian and faculty, additional students directed to the health sciences librarian as a recommended resource from the faculty, and enhanced relationships between the health sciences librarian and faculty regarding future research-based assignments.

Results: The health sciences librarian used multiple methods, such as email and meetings, to establish and build relationships with nursing and allied health faculty. During the fall semester, the librarian conducted fourteen library instruction one-shots and was embedded in seven courses through the learning management system. Over the last year, the health sciences librarian was consulted with regarding two research-based assignments.

Conclusions: By building and maintaining relationships with nursing and allied health faculty, the health sciences librarian has seen an increase in collaborative projects, requests to be embedded in individual classes, and meetings with students based on faculty referrals.

Poster Number: 45

Time: Sunday, May 18, 3:30 PM – 4:25 PM

Building Awareness: Applying Project Management Techniques to Faculty Outreach

Debra A. Werner, Librarian, Science Instruction, and Outreach and Biomedical Reference Librarian; **Ricardo Andrade**, Biomedical Librarian; John Crerar Science Library, University of Chicago, Chicago, IL

Objectives: To determine if applying project management techniques to faculty liaison responsibilities increases liaison interactions and user awareness of library services, resources, and collaborative opportunities. Secondary outcomes include increased: resource use, collaborations, and librarian knowledge of departments' research focuses.

Methods: Librarians at an urban academic health center applied project management techniques to faculty liaison activities. This approach was used to address the challenges that exist when small numbers of liaison librarians have responsibilities for many academic departments. The project' ultimate goal was to utilize librarian time to the fullest while increasing the liaison activities and user awareness of library services, resources, and collaborative opportunities. Project management techniques used included: goal setting, identifying milestones, determining tasks to reach the milestones, timeline development, and allocating resources. Project management techniques required the librarians to approach liaison work as a whole, rather than piecemeal, to systematically and strategically prioritize when to contact each department and the most appropriate outreach methods.

Results: Using project management techniques allowed two librarians to reach out, in a five month period, to thirty-one biomedical departments and sections with which an existing relationship usually did not exist. Careful planning and preparation before initiating the outreach permitted the librarians to quickly respond to requests and easily track the progress of each group contacted. The project resulted in:

1. Opportunities for the librarians to inform and educate the faculty as most were unaware of some library services and resources.
2. Increased liaison interactions due to the number of faculty meetings at which the librarians presented.
3. Increased librarian knowledge of departments' research focuses and providing a better understanding of information-seeking behavior and information needs.

Conclusions: Using project management techniques led to increased liaison activities resulting in faculty awareness of library services, resources, and

collaborative opportunities. In addition, the librarians gained knowledge of faculty needs, which informed collection development activities and services. The interactions with faculty clarified the need to better communicate library services, many of which were unknown to faculty and researchers. Further research will be done to determine if the increased liaison activities resulted in subsequent demand for consultations, instruction sessions, and purchase requests.

Poster Number: 46

Time: Sunday, May 18, 3:30 PM – 4:25 PM

Building Blocks for the Future: Reflections from MLA Leaders

Objectives: Health sciences libraries and librarians have undergone considerable change over the years in nature, function, and conditions. This poster will explore how several leaders in the medical library profession have developed the tools and skills needed to impact and influence the future of health sciences information practice and contribute to the portfolio of future leaders.
Methods: The changing environment of information practices requires the need for highly skilled and successful leaders. In order to explore how our key leaders have transitioned from their early beginnings to being part of the vanguard, a mini survey will be conducted of several recent MLA presidents to determine how people, places, events, and activities may have shaped their leadership abilities. Who or what were their influences or role models? Are there commonalities? What challenges did they face as they addressed their "Presidential Priorities?"This survey will explore the leadership pathways they have taken.

Building for Innovation with Library-Hosted 3D Printing and Scanning

Hannah F. Norton, Reference and Liaison Librarian; **Clifford D. Richmond**, Systems Information Department Director; **Sara Gonzalez**, Adjunct Assistant University Librarian; University of Florida–Gainesville

Objectives: To identify the local uses among clinicians, researchers, educators, and students for 3D printing and scanning. Based on existing uses at other institutions and our library users' disciplines, potential uses include creation of anatomical models for instruction, procedure testing, rapid prototyping, and patient-specific planning.
Methods: Through institutional funding for innovative technology projects and in collaboration with the university's science librarians, our library purchased a Makerbot Replicator 2 printer and 3D NextEngine Scanner. Initial implementation of 3D printing and scanning in the library has included outreach to specific groups with a perceived interest in three-dimensional modeling, with plans to expand publicity throughout the health sciences center once the logistics of the service model have been thoroughly tested. Although our campus houses other 3D printers in individual faculty labs and a Fab Lab, hosting 3D printing at the libraries and using lower cost equipment is expected to minimize barriers for all members of our campus community to experiment with 3D printing and scanning in their research and education.**Results:** Even with a soft roll-out of 3D printing services with minimal advertising, the service has generated significant excitement among the library's patrons and health sciences center administration. Initial implementation efforts have focused on logistical concerns such as generating a payment system and mechanism for accepting print jobs; with these details worked out, we plan to publicize the 3D services comprehensively starting in the fall of 2014. The creation of an email discussion list on maker-spaces and 3D printing in libraries (LIBRARYMAKERSPACE-L@LISTS.UFL.EDU) has provided a valuable sounding-board for implementation questions and a community of interested colleagues with whom to share ideas.
Conclusions: The introduction of 3D printing and scanning has demonstrated our library's interest in innovation, new technology, and partnering with patrons in their research and teaching projects.

Poster Number: 48

Time: Sunday, May 18, 3:30 PM – 4:25 PM

Building Future Researchers: Training High School Research Academy Students in the Use of Academic Medical Library Electronic Resources

Mary Congleton, AHIP, Outreach Librarian/Collection Coordinator, Medical Center Library, University of Kentucky–Lexington

Objectives: To determine how best to educate high school students attending a campus-based health research academy in the use of academic medical library electronic resources.

Methods: 1. Work with campus-based academy sponsors to determine the outcome-based goals of the students. 2. Research to see what other academic medical libraries have done when educating high school students in the use of medical library resources. 3. Assess best training format based on technology available to students throughout the two-week camp. 4. Determine which library resources best fit the students' information needs. 5. Develop a post-academy survey to be given to the students to determine the impact of the library training on the students' goal-based outcomes.

Results: In July 2013, a one-hour training session was provided to twenty-six high school students attending the two-week Area Health Education Center (AHEC) Research Youth Academy at the University of Kentucky (UK). Hands-on demonstrations of National Library of Medicine electronic resources and UK Medical Center Library electronic resources were given with special attention to tools and features found in MedlinePlus.

Conclusions: The students successfully completed their research projects after receiving training on electronic resources from the library and mentoring from a research assistant.

Building on a Solid Foundation: A New Model for Chapter Meetings

Robert E. Johnson, Clinical Services Librarian, Norris Medical Library, University of Southern California, Los Angeles, CA; **Danielle Linden, AHIP**, Manager, Burlew Medical Library, St. Joseph Hospital, Orange, CA; **Nita Mailander**, Director, Fleming Library, Grand Canyon University, Phoenix, AZ

Objectives: The Medical Library Group of Southern California and Arizona (ML:GSA) responded to financial challenges of the chapter and its members with a cost-efficient meeting, eliminating creature comforts and refocusing on content. The meeting was held on a college campus, participants roomed and ate on campus, and the meeting generated not only income but overwhelmingly positive reviews.

Methods: As a response to both external and internal financial challenges, the meeting moved away from hotels and conference centers toward a "summer camp" model held on a college campus, stripped of typical comforts. The novel idea of this meeting was to shed the extracurricular trappings and distractions (as well as the associated costs) and focus solely on the content. By hosting a meeting at an alternative site while supplying the same content to which members are accustomed and posting income of over $10,000, MLGSCA has established a precedent of substance over style. This model can be used to demonstrate both what is sacrificed and what is achieved in cost-cutting efforts, and leaders can present these options to the membership when decisions need to be made.

Results: The attendance was comparable to the prior 2 meetings, participant survey results were overwhelmingly positive, and our chapter generated over $10,000 of income.

Conclusions: Each meeting will have its own set of challenges and qualities, therefore future planners cannot follow our process exactly. However, future planners will have a reference point for creating a valuable experience for members, while also saving money for their members and organization.

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Time: Sunday, May 18, 3:30 PM – 4:25 PM

Building on Good Foundations: Constructing a Research Data Management Program for a Research University

Margaret Henderson, AHIP, Director, Research Data Management; **Teresa L. Knott, AHIP**, Director and Associate University Librarian; Tompkins-McCaw Library for the Health Sciences, Virginia Commonwealth University, Richmond, VA

Objectives: The director of the university health sciences library (DHSL) and the new director of research data management (DRDM) must develop an eighteen-month plan to create a research data management program for the entire university. The program needs to support mandated data management plans and sharing, and encourage good data management practices throughout the institution.

Methods: Collaborating with constituent groups, the DRDM worked with the DHSL to create a roadmap to deploy research data support across the university. Building on early work done at research and health sciences libraries with well-developed research data management services, the team opted not to conduct extensive faculty and research needs assessment regarding data management, assuming that discipline research data needs are similar from institution to institution. A strengths, weaknesses, opportunities, and threats (SWOT) analysis was done to assess the data landscape of the university and identify areas where further professional development would be helpful for the DRDM and DHSL. The university website was used to identify researchers who seemed to be working with data, and these people were contacted with a series of open ended questions. The literature was reviewed to identify best practices and tools for use in research data management.

Results: The program started with targeted meetings and presentations to faculty. The team assessed and took steps to address team knowledge deficits. Collaborative relationships were developed with liaison librarians in both libraries to extend their awareness of research data management and provide appropriate referrals. Plans were made to develop and share a core curriculum with liaison librarians for instruction in their areas. A communication plan was developed with the aid of the libraries' communication officer and web developer. Strategic partnerships were identified and pursued. Progress will be assessed to ensure that the needs of the research community are being met.

Poster Number: 53

Time: Sunday, May 18, 3:30 PM – 4:25 PM

Building on Our Success: Analysis of a Literature Search Service

Carol Friesen, MHIKNET Librarian, Manitoba Health; **Mê-Linh Lê**, HSC Librarian; **Melissa Raynard**, Librarian; **Carol Cooke**, Health Sciences Centre/Web Librarian; University of Manitoba, Winnipeg, MB, Canada

Objectives: Librarians within a university health library setting conduct literature searches for a wide range of health professionals requesting evidence-based information. Data about this successful service have been gathered since 2004. The purpose of this project is to analyze these data in order to understand the use of the service and to move forward with recommendations for improvement in service procedures.

Methods: Data about literature searches for health professionals has been compiled in an Access database since 2004; satisfaction survey data has been gathered in SurveyMonkey since 2006. The analysis of these data will include considerations of: (1) librarian workload: the time it takes to finish searches, the number of databases used in searches, subject coding to form word clouds of frequently requested topics; (2) user profiles: coding of user professions, which professions request multiple searches; and (3) satisfaction survey results: how well the literature search service meets the needs of health professionals.

Results: Results describing the complexity, user profiles, and satisfaction survey results of the university health library's literature search service will be available at MLA '14 in Chicago.

Conclusions: This analysis will provide an understanding of trends and patterns in the use of the literature search service, a key service provided in this university health library setting. Based on this analysis, recommendations for improvements in literature search procedures can be made. Further steps include an environmental scan of similar services and a review of best practices for librarians conducting literature searches for evidence-based information, to ensure that the service is responsive and continues to meet the needs of its users.

Poster Number: 54

Time: Sunday, May 18, 3:30 PM – 4:25 PM

Building on Success: Circulating iOS Apps to Enhance Student Learning

Amanda Chiplock, Emerging Technologies Librarian, Health Professions Division (HPD) Library, Nova Southeastern University, Davie, FL; **Desman Ford**, Technology Support Engineer, Health Professions Division (HPD) Library, Nova Southeastern University, Fort Lauderdale, FL

Objectives: Building on the success of our iPad initiative, four of our seven colleges now require incoming students to have iPads, creating a need to circulate paid iOS apps for download onto users' iPads and iPhones to enhance student learning. Program-specific apps will be purchased in various quantities, depending on the perceived need to accommodate specific classes.
Methods:

- Ten apps were selected to circulate, based on curricular needs and student feedback, for thirty-day loan periods.
- Circulating procedures and a borrower agreement were developed for review by an Apple senior systems engineer.
- Codes were purchased utilizing the Apple Volume Purchase Program.
- Each app was cataloged. A barcode number was assigned to each "copy" or code.
- Users came to the library for app download by designated staff members using the library's Apple ID account on the users' devices.
- To check out apps, the barcode corresponding to an available copy of the app(s) was scanned in the library's integrated library system (ILS).
- To check in apps, users came back to the library to have the app deleted off of their devices and checked in via the ILS.

Results:

- Circulation statistics from August 2, 2013, to February 13, 2014: 302 total checkouts, 98 renewals.
- Most popular were anatomy apps and apps recommended on a syllabus as study aids.
- 95% of borrowers checked out the app(s) on iPads; 4% on iPhones; 1% on both at one time.

Unexpected results:

- Students from all colleges participated, not just from the 4 colleges requiring iPads.
- 15 students were 1-2 months late returning the app.
- Additional copies were needed of the popular apps to meet the demand.

Conclusion: Based on circulation statistics for circulating iOS apps and positive verbal feedback from students and faculty, we will continue the program through August 2014. The results indicate the project's focus should be circulating apps as study aids. We will continue to encourage faculty to evaluate and recommend iOS apps to be incorporated into the curriculum. Due to budget constraints, we will purchase only one to sixty copies of an app, depending on class size. We will continue the thirty-day loan period, with renewals. In the future, we may use mobile device management software to circulate apps to remote users, as well as students on main campus. We anticipate that circulating iOS apps will continue to be a popular library service, supporting the curriculum of all seven Health Professions Division colleges.

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Time: Sunday, May 18, 3:30 PM – 4:25 PM

Building Solid Foundations: Basic Science Graduate Students and the Library

Karen E. Gutzman, Associate Fellow; **Marcy Vana**, Bioinformationist; **Kristi L. Holmes**, Bioinformaticist; Bernard Becker Medical Library, Washington University in St. Louis, St. Louis, MO

Objectives: As students in the basic sciences construct their future careers, they can certainly benefit from library services and resources. This project aims to provide librarians with insight into the process of graduate education and specific information needs of students at different points along their graduate education, and suggest possible ways to improve services, communication, and resources for these groups of students.

Methods: We investigated the information needs of basic science graduate students through a short questionnaire and informal conversations with current and past graduate students. We also reviewed the curriculum structure and laboratory experiences of graduate school programs to determine innovative ways to reach these students.

Results: Basic science graduate students feel they benefit from a variety of library services and resources, such as sessions on searching literature databases, using reference management software, and assessing and increasing their scholarly impact, access to needed research software on library computers, options for software licensing, and training opportunities focused on commonly used scientific databases and software tools. A review of the curriculum structure and laboratory experiences provided a creative backdrop for imagining how and when the services and resources can be offered in the future.

Conclusions: Undertaking graduate studies in the basic sciences is not an easy task. Students face long hours working on difficult coursework and designing and carrying out experiments in the laboratory. They also face deep competition for their future careers. The library can support students during these times by learning the ebb and flow of the graduate curriculum; acting as a respite from the lab; offering sessions with insight on scholarly communications, research impact, and copyright; and supporting database and software availability and training needs.

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Building Sustainable Partnerships: Libraries as Partners in Creating and Supporting Campus Green Teams

Joan Marcotte Gregory, AHIP, Associate Director, Resources and Facilities; **Karren Nichols**, Administrative and Sustainability Coordinator; **Myron Willson**, Director; University of Utah–Salt Lake City

Objectives: Getting green teams started on campus can seem an impossible challenge. Building on the successful implementation of library green teams, the Office of Sustainability on this campus sought out and has partnered with the main campus and health sciences libraries to begin developing a network of green teams.

Methods: Lessons learned from successful and unsuccessful efforts are shared.

Results: Campus libraries by their very nature are setup to interact and connect with colleges, departments, centers, divisions, and units all over campus, often having a liaison librarian for each discipline and/or college or administrative unit served. The libraries contribute their organizing and collaboration expertise, and share their enthusiasm for sustainability: developing models, creating toolkits, testing ideas, and then sharing them widely. Regular gatherings are hosted by the libraries to encourage collective problem solving and dissemination of information and new ideas. Educational opportunities are developed collaboratively by the libraries and made available campus-wide.

Conclusions: The libraries are supporting implementation of green teams campus-wide. This partnership with the Office of Sustainability provides yet another way for the libraries to connect with faculty, staff, and students.

Building Technology Services that Address Student Needs

Jeanne M. LeBer, AHIP, Associate Director, Education and Research; **Nancy T. Lombardo, AHIP**, Associate Director, Information Technology; **Erin N. Wimmer, AHIP**, Teaching and Learning Librarian; Spencer S. Eccles Health Sciences Library, University of Utah–Salt Lake City

Objectives: The objectives of this poster are to present the results of a technology use survey. The technology use survey was conducted to:

- assess incoming student knowledge of and interest in devices and software
- identify patron device and software preferences
- inform library decisions to proactively serve the student population.

Methods: Incoming health sciences students are technology savvy, yet the question remains how do librarians identify and respond proactively to address the technology needs of students. The library is conducting a sixteen-question survey to assess incoming students' knowledge of and interest in technology devices and software. Survey questions were developed by colleagues at a peer institution and edited to match this library's student population. Two years of student responses are being compiled, compared, and reviewed as a means for informing library decisions related to technology and software preferences.
Results: Two years of survey results are representative of the student population across the health sciences. Tabulated results have been assessed to determine optimal library response to student technology practices and needs. Based on the results, instruction and event programming has been adjusted. A monthly "Appy" Hour event highlights mobile apps and gaming for health development. Students indicated a need for PowerPoint instruction, and librarians responded by promoting consultation services. In addition, instruction sessions on social networking tools are under development.
Conclusions: The aggregate data will help the library determine whether it has been successful in meeting student needs and how it can continue to build technology and information services in the future. Librarians have reevaluated the purchase and provision of tablets and other mobile devices and apps. Survey result data will be used to develop the library's communication plan. Based on the number of students using Mac products, librarians are addressing the need to become more proficient with IOS platform.

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Time: Sunday, May 18, 3:30 PM – 4:25 PM

Building Together: Collaborating with Faculty to Integrate Information Literacy into a First-Year Interprofessionalism Course

Charlotte Beyer, AHIP, Instruction and Reference Librarian, Boxer Library, Rosalind Franklin University of Medicine and Science, North Chicago, IL

Objectives: Before 2009, faculty commented students entered programs with varying degrees of information literacy. The instruction and reference librarian in collaboration with the first-year interprofessional course steering committee created an activity designed to provide students with basic information retrieval knowledge needed to complete their programs. This poster describes development, evaluation, and revision of the activity as well as lessons learned.
Methods: To design this activity, the instruction and reference librarian was appointed to the interprofessionalism course steering committee, which included faculty representatives from each of the colleges. After meeting with this committee, it was decided to focus strictly on retrieval processes such as accessing e-books, journals, and articles. The faculty and librarian felt this information would give the students a base of knowledge that they could build on as they completed their programs. In September 2011, students reviewed the retrieval processes through a PowerPoint presentation in the Desire to Learn (D2L) portion of the course. After reviewing this presentation, students completed an online multiple choice exam designed to assess their understanding of the materials. After receiving feedback from the steering committee, the decision was made to change the review material from a PowerPoint to a video format for 2012.
Results: In September 2011, 506 students took the quiz and 474 passed the quiz with a grade of 85 or better. In September 2012, 535 students took the quiz and 534 passed with a grade of 85 or better. Faculty on the steering committee commented informally that their students were better able to access articles assigned for class as a result of this activity. They also commented that they noticed students seemed to retain the information better when presented in the video format.
Conclusions: Since the inception of the information literacy activity, students have been asking more sophisticated reference questions, which indicate they are retaining information learned in the first-year course. In 2013, the librarians have started to work with a few of the departments in the steering committee to offer more advanced information sessions to their students, building upon the base they learned in the first-year course. One of the major factors that made this

activity a success is faculty collaboration. This allows librarians to pinpoint what information faculty and students most need to be successful.

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Cabinets in the ALCVault: Your Secret Is Safe Here

Judit Ward, Director, Information Services, Center of Alcohol Studies, Rutgers University, Piscataway, NJ

Objectives: To share a novel application of an electronic document management solution to archive, organize, and manage content, while providing security to store confidential information. To inspire short-staffed libraries to make themselves valuable in their organizations by taking the initiative. To illustrate how small libraries can overcome challenges by collaboration, planning, and the best use of their resources.

Methods: The library initiated a project to archive and store its historical and current material in a secure and sustainable manner. For our unique collection of public, restricted, and confidential information, we chose a single electronic file storage and retrieval system, MaxxVault, a leader in providing customized document management solutions in education, government, finance, and health care. This is the first digital collection using the software and exploring its use for digital archives. After setting up necessary hardware and software, library staff experimented with workflows to develop new digital collections, to migrate existing databases from different platforms, and to create a uniform appearance for all. Considering rights management of various items, separate protocols had to be established for material available either for public or in-house use. Special attention was given to confidential information at every stage of digitization.

Results: Partnering with MaxxVault, the library benefits from a top-notch software package to preserve its valuable documents, including public-access and restricted material. The Alcohol Library Collection Vault (ALCVault) is now the new home for confidential documents, library and archive collections gathered for seventy-five years at the center. Well-planned and coordinated efforts of team members (librarians, software engineer, graphic designer, assistants, and students) from inception to release played key roles in building a diverse and robust platform for our digital collection. Developing task-appropriate yet convenient document and records management workflows improved communication with other groups and increased the visibility of the library.

Conclusions: The library gained new appreciation through its new role to curate valuable documents of the host organization while building a digital platform for the archives. ALCVault is based on MaxxVault, a successful electronic document management solution, which helps archive, organize, and manage content, while providing security to store confidential information. Digital content creation and its continual management based on collaboration with every group in the organization fostered creativity via feedback and led to new avenues in digital

libraries. The platform is embraced by the institution for its security, usability, visual appeal, quality, and accessibility.

Campus Grants Introduce New Information Resources: Engagement Opportunities for Students, Campus Services, and the Library

Marcia Henry, Health Sciences Librarian; **Annaliese Fidgeon**, Digital Learning Initiatives Librarian, Research, Instruction, and Outreach Services; **Lynn D. Lampert**, Chair, Research, Instruction and Outreach Services; Oviatt Library, California State University, Northridge, CA

Methods: Observations of the development of two websites, Women's Health Research portal at www.whr.nlm.nih.gov, and the California State University-Northridge Student Health 101 at www.readsh101.com/csun.html, over the past year as well as describing the two grants that are supporting the outreach efforts made by the Oviatt Library and the university Counseling Center to bring engaging health-related websites to the attention of our campus community. Various assessment tools, surveys, and survey results of each grant to gather student, staff and faculty input are analyzed. Related outcomes are described of one grant's contributions of digital learning objects (DLOs) into MERLOT, an open and peer-reviewed collection of digital learning materials, with future enhancements for learning exercises to reach an international community.
Results: Results from the surveys taken of 120 students in a variety of venues (small informal gathering, classes ranging from 15-60 and 1 online class) indicated most participants did not usually start with National Library of Medicine (NLM) or National Institutes of Health (NIH) websites when seeking medical and/or health-related information. Written responses given after students view the 2 DLOs show students appreciate finding out about useful websites prepared by NIH and NLM. The videos were viewed over 800 times, received a 5-star rating from MERLOT reviewers. The university counseling's grant showed a very simple, early newsletter, but observations of our local implementation showed active outreach to the campus resulted in dramatic improvement for the presentation of articles, and the expansion of participating campus services grew from 3 to 25 departments.
Conclusions: Grants provided funding to buy appropriate subject related items and pay staff time to create new learning materials. Librarians/information professionals discovered that its funding agencies were interested in suggestions and acted to implement observable improvements to their websites and promotional materials. The NIH/NLM grant provided insight into innovative ways in which non-Science majors can be introduced to important interdisciplinary content from Science and Health related resources that support gender difference research in many undergraduate disciplines within the arts and humanities and social sciences. The grant also allowed the library to further its

growing practice of promoting important information resources via its online media by disseminating video-based discipline learning object tutorials that were later added to Merlot, an open educational resource (OER) program of the California State University System.

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CampusGuides: A Solution for the Hospital Library?

Lorelei Woody, Medical Librarian, Cleveland Clinic Alumni Library, Cleveland Clinic, Cleveland, OH

Objectives: To illustrate how the SpringShare product CampusGuides (LibGuides content management system [CMS]) can be effectively implemented in a hospital library setting.

Methods: Our large nonprofit health system consists of one main campus and several regional hospitals, each with varying degrees of library services, access, and staffing. When our free wiki-based website platform went down unexpectedly, we needed a quick solution for our library web pages. This poster details our transition to LibGuides CMS/CampusGuides and illustrates some of the changes and iterations we have gone through as part of successfully implementing this platform. For a low cost, our regional hospital libraries got access to a web guide infrastructure that is easy to learn and quick to customize. We are able to track resource use in new ways and have greatly improved the usability of our sites via embedded training materials. Popular among academic centers, we show that CampusGuides can be a valuable tool for hospital library systems.

Results: After implementing LibGuides at our main hospital location, extending to CampusGuides (now LibGuides CMS) for our regional hospital libraries was a logical transition. Many benefits are those expected with the base LibGuides package: the ability to quickly create, publish, and customize web guides; reuse links; add multimedia content; and run usage reports and statistics. Our patrons have responded positively to the highly customized information portals we can create and to the training videos we can embed. Usage reports are easy to run and provide information (like which page the user was on when they clicked into a resource) that helps inform our collection decisions and education efforts. Unlike the base package, LibGuides CMS offers the creation of "groups," allowing each hospital location to have their own home page, style, and formatting, while adhering to an overall template.

Conclusions: Library websites across our hospital system are now easier to maintain, have a much more consistent "look and feel," and are more responsive to users' needs. Although chiefly designed for the academic arena, LibGuides CMS (formerly called CampusGuides) meets our needs for providing tailored online services for our regional hospitals, while offering a standardized, central management system.

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Capturing the Pulse of Its Members: HealthLINE Membership Survey

Lisa Huang, Allied Health Sciences Librarian, Central Park Campus Library, Collin College, McKinney, TX

Introduction: HealthLINE (www.dfwhealthline.org) is a consortium of medical librarians and libraries in North Central Texas. The group meets quarterly and includes both institutional and individual members who enjoy continuing education opportunities, professional networking, and interlibrary loan cooperation. Membership is usually around 100. A membership survey was needed because:

- HealthLINE held its first membership survey in 2004.
- The Great Recession has altered libraries.
- Dynamics of the membership has changed.

Objectives: To gather HealthLINE member demographics, capture the challenges and needs of its members, solicit input for future planning, and evaluate the organization's services.

Methods: Members were solicited through the HealthLINE discussion list to participate in the anonymous survey between June 16 and July 8, 2013. SurveyMonkey was utilized to capture the responses.

Results: Sixty-two percent of our members participated in the survey, with a 92.6% completion rate. The organization received an A- grade among its members. HealthLINE will consider solutions and changes to address issues raised by the survey in order to better meet the demands of its members.

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Clinical Research Scholars as a Microcosm for Exploring Effective Library Support for the Translational Research Community

Diana Nelson Louden, Biomedical and Translational Sciences Librarian, Health Sciences Library, University of Washington–Seattle

Objectives: A pilot project working with clinical research scholars was initiated with two goals: (1) build relationships with faculty in a translational science institute and (2) explore mechanisms for educational and research support. Collaboration with this small group offers the librarian an opportunity to ascertain researchers' information needs, to provide individualized training and research support, and to solicit feedback on effectiveness.

Methods: The Clinical and Translational Science Awards (CTSA)-supported KL2 Mentored Clinical Research Scholar Program trains junior faculty from the university's six health sciences schools to become future clinical and translational research leaders. In response to an expressed need for "advanced library training" by the scholars, a number of outreach activities evolved: the liaison librarian assessed the information needs and interests of this group, seminar content was developed for an initial guest lecture, a web-based biomedical sciences toolkit was expanded, and topics suitable for brief email updates were identified. Throughout the academic year, the librarian offers individual assistance with current awareness alerts, literature searching, and grant-related information support. She also sends group messages on topics such as ORCID and scientific data resources. Future assessment will investigate the effectiveness of these various methods of support and engagement.

Results: The pilot project is continuing through the 2013/14 academic year. A second guest lecture focusing on resources and strategies for grant-related activities has been scheduled. In the five months since the project's inception, seven of the seventeen scholars have consulted individually with the librarian. Individual assistance has included developing a systematic approach for current awareness alerts, using the National Center for Biotechnology Information's (NCBI's) ClinVar and MedGen databases and conducting searches to support a new clinical research study. Repeated interactions with this group are helping the librarian understand the researchers' work and challenges and are enabling her to offer more tailored support.

Conclusions: The leaders of a CTSA-supported KL2 program have offered an entrez for a librarian to work with a small multidisciplinary group of clinical and translational researchers. At the end of the pilot project, a survey will be administered to the KL2 scholars to obtain feedback on the utility of the content,

the effectiveness of the delivery methods, and the value of one-on-one librarian assistance. Survey results will then inform decisions on how to provide effective library support to current and future research faculty in the university's KL2 program.

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Closing the Gap: Serving Nursing Students on a Separate Campus

Anne M. Linton, AHIP, Director; **Laura Abate**, Electronic Resources and Instructional Librarian; **Elaine Sullo, AHIP**, Coordinator, Information and Instruction Services; **Steven Brown**, Serials and Systems Librarian; Himmelfarb Health Sciences Library, George Washington University, Washington, DC

Objectives: To provide collections and services to a newly established undergraduate nursing program located thirty miles from the main campus and health sciences library. While the library was experienced in providing resources and services to graduate-level students as well as distance education students, adapting resources and service for an undergraduate population and at a quasi-distant location provided new challenges.

Methods: Initially, key textbooks were identified and acquired in print format and several full-text electronic resources targeted to this population were licensed. A bachelor's of science in nursing (BSN) Library Resources portal, distinct from the library's home page, was created to deliver electronic resources to the new campus. As existing e-resources licenses were reviewed and renegotiated as necessary to permit access from this new location, the portal transitioned from static pages in the course management system and was relaunched using Serials Solutions' 360 Core. Closer relationships with an existing educational library, colocated at the program's locale, were established, and remote reference and instructional opportunities were deployed as they became available.

Results: The BSN Library Resources portal provides stable access to core information resources and allowed the library needed time to determine how best to serve a new program on a remote campus. Due to the physical distance of both students and faculty and the alternate access method, ongoing faculty and student outreach was essential. Challenges included confusion over each library's role, communication with faculty regarding scope of resources and access methods, and a sense of inequity regarding resources available to undergraduate versus graduate nursing students. As the BSN program evolved to include more health policy, original research, and interaction with graduate students, the BSN Library Resources portal grew in breadth far beyond the core nursing texts and journals initially identified. In parallel with the expansion of the collection, reference and outreach efforts expanded to include an embedded librarian program, online educational sessions, faculty surveys and training, and increased use of instant messaging for reference.

Conclusions: The BSN Library Resources portal allowed the library to make careful decisions regarding the licensing of electronic resources. As the program supported by the portal grew and evolved, the focused set of resources available

on the portal were inadequate to serve upper-level needs in courses where undergraduate students collaborated with graduate students on health policy briefs. The program's growing emphasis on health policy and original research resulted in the licensing of additional resources for the remote campus.

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Collaboration Delivers a New Search Experience to Library Users

C. Steven Douglas, AHIP, Head, Collection Strategies and Management; **Everly Brown**, Head, Information Services; **Brad Gerhart**, Web Developer; **Ryan Harris, AHIP**, Reference Services Manager and Research and Education Librarian ; **Maria M. Pinkas**, Metadata Management Librarian; Health Sciences and Human Services Library, University of Maryland–Baltimore

Objectives: The University of Maryland Health Sciences and Human Services Library serves a student population of over 5,000 in the Schools of Medicine, Dentistry, Pharmacy, Nursing, and Social Work. After evaluating several products, the library chose EBSCO Discovery Service (EDS) as its discovery tool. A committee of librarians and staff from throughout the library was formed to implement EDS.

Methods: Librarians from both the public services (Services) and resource management (Resources) divisions of the library, along with a web developer from Computing and Technology Services (CATS), collaborated to customize the product for the library's user base. The committee worked closely with EBSCO and stakeholders to customize the product, leading to a soft roll-out on September 6, 2012, and a formal launch on April 15, 2013. The multi-division approach allowed for librarians to draw on complementary strengths. The Services librarians focused on user experience, while Resources librarians provided technical expertise. Feedback from users was elicited, and this--along with the results of a usability study conducted by the web developer and the library's special projects, research, and assessment librarian--led to additional adjustments.

Results: Since the hard roll out on April 15, 2013, usage statistics show that the resource has been extensively used. Comments have been overall favorable.

Conclusions: By working as a team, Resources, Services, and CATS were able to deliver a better designed product for the library's users. Resources librarians drew on their expertise in metadata standards and the delivery of electronic resources while Services librarians were able to contribute their knowledge of user needs and search habits to hone the product for its intended audience.

Comparing Two Student Populations to Ascertain Validity and Continuity for a Longitudinal Study in Information Literacy

Valeria E. Molteni, Academic Liaison Librarian, Martin Luther King Jr., Library, San Jose Sate University, San Jose, CA; **Emily K. Chan**, Academic Liaison Librarian, Martin Luther King Jr., Library, San Jose State University, San Jose, CA

Objectives: This study compares the surveyed values of two student cohorts (fall 2012 and fall 2013) enrolled in an undergraduate mandatory writing course. This course is generally students' first exposure to the health care literature; it promotes the utility of clinical research to support evidence-based practice. Students responded to a survey consisting of questions on demographics, confidence, and performance.
Methods: The research study examines two applications of the same survey given to a mandatory writing class. Students taking the fall 2012 and fall 2013 undergraduate class provided demographic information, as well as self-reported confidence levels in performing a variety of information literacy tasks. In addition, students responded to a seven-question information literacy quiz to ascertain mastery of research-related topics. Student answers were obtained through Qualtrics, an online survey platform, and manipulated with Microsoft Excel. The observed values from both surveys will be compared to identify similarities and inconsistencies between the two samples. It is important to establish a level of continuity and base understanding of the two populations, as the authors would like to utilize both datasets in a longitudinal study.
Results: There were fewer students in the fall 2013 cohort than the fall 2012 cohort; however, males represented a greater relative percentage of the sampled population. The fall 2013 student population became more homogenous, as the Asian/Pacific Islander population's relative percentage increased. There were lower relative percentages for Caucasians and Latino/as in the fall 2013 cohort. Both fall 2012 and 2013 cohorts reported very similar levels of confidence when separating among the groups of excellent-good, fair, and poor. The performance of the fall 2013 cohort was better than the fall 2012 cohort; fall 2013 students were correct more often and did not mark "Not Sure" as often as the fall 2012 cohort students.
Conclusions: Despite gender and ethnic/racial differences between the fall 2012 and 2013 cohorts, students still exhibited very similar levels of confidence in performing the four information literacy tasks. However, this confidence did not completely correspond to mastery of the information literacy tasks, as evidenced by the ability to correctly answer content questions. The fall 2013 cohort

performed better than their fall 2012 counterparts, with greater numbers of questions answered correctly and fewer "Not Sure" responses.

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Cultivating Fallow Fields: A Program to Train Undergraduate Student Workers to Be Effective Communicators of Health Information Skills in an Academic Medical Library

Rick Wallace, AHIP, Assistant Director; **Nakia Woodward, AHIP**, Senior Clinical Reference Librarian; **Recia Taylor**, Public Services Coordinator; Quillen College of Medicine Library, East Tennessee State University, Johnson City, TN

Objectives: The goal of this project is to: (1) identify key concepts public services workers need to know; (2) conduct a short training session with each worker; and (3) measure changes by a pre- and post-test. The training session focused on specific tasks that the worker may be asked to do in the course of their work.

Methods: East Tennessee State University (ETSU) librarians created a written test that covered specific library resources, policies, etc. The test was pilot tested. Each of the 7 student workers plus 2 regular public service workers were given a 1-hour one-on-one training class. A pre-and post- training exam was given. The results were then scored on a scale of 102.

Results: A paired t-test of the pre- and post-test showed a statistically significant difference at the 0.001 level.

Conclusions: We have mainly used undergraduate students to "baby sit" our library's front service desk. If they can be trained effectively, their (and our) value to patrons increases greatly. Often they are the main contact with patrons.

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Development and Deployment of Online Learning Modules in the Age of Massive Open Online Courses (MOOCs)

Heather L. Brown, AHIP, Head, Access Services; **Alissa Fial**, Reference/Education Librarian; **Teresa L. Hartman**, Head, Education; **Marie Reidelbach, AHIP**, Associate Director, User Services; McGoogan Library of Medicine, University of Nebraska Medical Center, Omaha, NE

Objectives: Faced with reduced time for in-person instruction, as well as an increasing number of distance education programs, a team of academic health sciences librarians developed online learning modules that are easily integrated into the university' learning management system. This poster examines this development and challenges of creating online instructional modules.

Methods: Searching in the PubMed database was chosen as the instructional subject, as the database is essential for all health sciences students to learn. Influenced by the instructional styles and methods utilized in massive open online courses (MOOCs), the team scripted the module content with a conversational and approachable affect. The instruction was portioned into separate, brief modules, which include developing a search strategy, keyword searching, Medical Subject Headings (MeSH) searching, use of filters, accessing full text, and requesting interlibrary loan. The modules were created in the Articulate Studio software program, which includes the ability to insert in-module quizzes. Before marketing and deployment of the modules, the effectiveness of the modules and content were assessed by a group of graduate students.

Results: Though the topic of the module was very familiar to the team, the creation of the modules took longer than anticipated. The team approach, while beneficial to the process, did delay development due to time commitments and general coordination. Upon assessing the modules with student (n=13) input, the team learned that while students were comfortable (46.2%) with PubMed before viewing the modules, they reported feeling very comfortable (61.5%) after viewing the modules. The reception of the modules was positive overall, with 100% recommending that others complete the modules. The simplicity and brevity of the modules were echoed as positive attributes of the modules. Problems with audio quality and confusion with the quiz structures were mentioned as well. When asked what they learned, many of the students pointed that the MeSH searching piece was particularly helpful.

Conclusions: Librarians have a finite time available to develop informative courses, and the need for in-person course delivery is shrinking. The level of understanding students possess about accessing vital information databases is often unknown. This module is a well-received online learning method that faculty

can add to curricula to introduce or refresh students' knowledge on how to conduct a database search.

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Emerging Technologies Help Bridge the Gap between Health Information and the Community

Andrew Youngkin, AHIP, Emerging Technologies/Evaluation Coordinator, National Network of Libraries of Medicine, Southeastern/Atlantic Region, Health Sciences and Human Services Library, University of Maryland–Baltimore; **Megan von Isenburg, AHIP**, Associate Director, Public Services, Medical Center Library & Archives, Duke University, Durham, NC; **Kimberley R. Barker**, Emerging Technologies and Systems Manager, Claude Moore Health Sciences Library, University of Virginia–Charlottesville; **Mary Mauldin**, Executive Director, Professor, Office of Instructional Technology and Faculty Resources, Medical University of South Carolina, Charleston, SC; **Alisha Miles, AHIP**, Assistant Professor, Assistant Director, Public Services, Medical Library and Learning Resources Center, Mercer University School of Medicine, Macon, GA; **Andrea Wright**, Technology and Information Resources Librarian, Baugh Biomedical Library, University of South Alabama, Mobile, AL; **Amanda Chiplock**, Emerging Technologies Librarian, Health Professions Division (HPD) Library, Nova Southeastern University, Davie, FL

Objectives: In this ever-changing environment of medical librarianship, the constant bombardment of information through multiple media is a familiar challenge in need of creative solutions. To more effectively communicate with a widespread constituency and membership, and to efficiently build foundations for the distribution of information resources, emerging communication technologies might be employed to collect, analyze, organize, manage, and disseminate health information.
Methods: Technologies such as Google Hangouts, Google Docs, SurveyMonkey and Doodle Poll assist the committee with planning and implementing meetings to design content, strategies, and trainings, and to collect and analyze information gained from each other and the constituency. To deliver and display this information, the committee maintains a Google+ Community and holds webinars and online presentations using various technologies such as Adobe Connect.
Results: These tools were implemented to various degrees of success, which can be measured by the committee's efficiency in increasing participation in committee meetings, completing projects in a shorter amount of time, opening multiple channels of communication, and reaching and engaging constituents in new, effective ways. Also discovered were obstacles including firewalls, reliability of new technology, longevity of technologies, and learning curves. With limited implementation of these emerging technologies, future assessment efforts will be needed to capture more definitive measures of success.
Conclusions: In order to more effectively communicate with constituents and

members, various web-based and cloud-based emerging technologies were identified and implemented. These tools have enabled the committee to become more efficient and productive in collecting, creating, managing, delivering, and displaying information. As technology evolves, these digital tools will continue to be evaluated and new technologies will be identified to facilitate better communication and collaboration with all benefactors and stakeholders.

How Does the Readability Level of Patient Education Material on Top-Rated Hospital Websites Compare to Recommendations from Health Literacy Experts?

Susan Keller, Medical Librarian, Medical Library, Children's National Medical Center, Washington, DC

Objectives: Assess the readability level of patient education materials found on the websites of the *US News and World Report* top twenty adult orthopedic hospitals.

Methods: Identify the top twenty hospitals using the *US News and World Report* 2013 list. Find patient education materials related to hip replacement surgery, one of the most commonly performed surgical procedures. Using a consistent number of words selected from each document and a variety of online readability tools, obtain an average grade level for each selected document. Compare the grade levels found with the recommendations from the National Institutes of Health. Quality indicators such as currency and authorship will also be assessed. Other factors such as the presence of audio and video displays will also be noted.

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Implementing OpenInfobuttons: A Search Tool for Clinicians at the Point of Care

Karen L. Hanson, Knowledge Systems Librarian; **Catherine Larson**, Web Services Librarian; **Aileen M. McCrillis**, Research Librarian; **Joey Nicholson**, Education and Curriculum Librarian; **Karen Yacobucci**, Content Management Librarian; New York University Langone Medical Center, New York, NY

Objectives: The New York University (NYU) Health Sciences Library implemented a clinical search tool using OpenInfobuttons. The tool is designed to meet information needs at the point of care and supports rapid browsing between a curated and categorized list of sixteen e-resources.

Methods: Many clinical information seekers go directly to a known resource such as UpToDate for their information needs and may not become familiar with other tools available through the library. Those who choose to go to the library website must determine which resources might be appropriate for their need and then access them one at a time, which can be time consuming. The new search tool facilitates faster access to a broader selection of content by making it easy for the user to apply the same search to a number of resources. The clinical search tool was created using OpenInfobuttons, open source software designed for integration into an electronic medical record. Access to the tool was integrated into the institution's web portal and the library's website.

Results: The OpenInfobuttons tool underwent a quiet release in July 2013, when it appeared as a fourth search tab on the library's home page. Since then it has been demonstrated by library liaisons to several clinical groups. Informal feedback from these groups has been very positive, with several emergency medicine directors indicating that it would be useful among residents. Still, use has remained low and the search log indicates that 17% of searches are for specific electronic resources, rather than a disease, drug, or intervention. In other words, some users are not yet clear on its purpose. Recognizing that the full potential of the tool is not being exploited, the tool has been restyled to be more prominent and intuitive. The tool has also been rebranded as MedKit, and a marketing campaign initiated to attract and educate users.

Conclusions: OpenInfobuttons provides a useful portal to access multiple curated resources from a single interface. It is, however, an unfamiliar way to present resources to clinicians, and so it is important to take measures to ensure users are educated in how to use and access the tool.

Matas Library and the Tulane Emerging Scholars Environmental Health Sciences Academy

Elaine R. Hicks, Education/Health Literacy Librarian, Rudolph Matas Library of the Health Sciences, Tulane University, New Orleans, LA

Objectives: Participants will be able to replicate a 2-hour information literacy session for 11th grade science students.

Methods: Instruction was designed to complement library education at the secondary level. The health sciences librarian consulted secondary school librarians at two schools participating in the Emerging Scholars Environmental Health Sciences Academy, curriculum standards for environmental science at the secondary level, and American Association of School Librarians (AASL) standards. Instruction outcomes included developing a research question, using library resources, and consulting a librarian if needed, using database features to develop and execute successful search strategies, comparing results from two different sources of information, and creating a report with bibliographic information in appropriate format. Two activities challenged students to compare database features, and create a citation in American Psychological Association (APA) style. A LibGuide online handout supports all instruction provided (libguides.tulane.edu/EmergingScholars/).

Results: A one-minute reflection revealed that students appreciated learning how to search in databases as opposed to their Google searches and how to create citations easily. The project principal investigator and project manager who attend the class will recommend it for the teacher academy section of the Emerging Scholars Environmental Health Sciences Academy in summer 2014.

Conclusions: Understanding environmental science curriculum standards and library instruction standards for secondary education, combined with meeting with school librarian, was critical in preparing an appropriate lesson plan that had the right content and proceeded at an appropriate pace. The activities and a detailed lesson plan communicated to the environmental science faculty that this was an important opportunity for the library to add value to the student experience.

Poster Number: 74

Time: Sunday, May 18, 3:30 PM – 4:25 PM

Personal Librarian: An Instructor, Consultant, and Information Resources Mentor

Lyubov L. Tmanova, Translational Science Librarian, Samuel J. Wood Library and C.V. Starr Biomedical Information Center, Weill Cornell Medical College, New York, NY

Objectives: To elucidate the role and effects of a personal librarian on graduate students' performance and development of research and information literacy skills.

Methods: A personal librarian served as an instructor, consultant, and information resources mentor for graduate students enrolled in a graduate-level course. An observational cohort study was conducted to determine an effects of early exposure (first semester of graduate study) to health informatics information resources, course-integrated library instructions, comprehensive reference sessions, individual consultations, structured research support, and a librarian-faculty educational partnership on the development of a solid foundation of knowledge and familiarity with health informatics resources, information literacy, course performance, and development of research skills in graduate students. The students' knowledge of health informatics resources, information literacy, and research skills were evaluated by administering surveys, evaluating class performance, and requesting faculty feedback.

Results : Data obtained from the library orientation survey highlighted the need for student-focused course-integrated instructions, individual consultations, research references, research information management tools, and subject-specific electronic educational resources for graduate students enrolled in the "Research Project in Health Informatics" course. The faculty-student-librarian educational collaboration is an effective means for development of research skills, integrative competencies, information literacy, subject-specific knowledge, and scientific communication and presentation skills in graduate students. The course-integrated instructions and educational resources, consultations, reference sessions, and librarian-faculty-student collaboration increased students' course performance.

Conclusion: The personal librarian concept--focused on teaching, consulting, and informing graduate students about information literacy at the beginning of the first semester--increases students' ability to perform effective and efficient searches of the scientific body of literature, identify knowledge gaps, formulate research questions, manage information resources, and write literature reviews. The assertion-evidence approach of scientific communication and presentation, introduced to students, has resulted in better preparation of the scientific presentation and more effective communication of the students' research. The library-faculty-student collaboration and communication partnership allowed the

assessment of students' knowledge and research skills, identification of gaps, and response to students' individual needs, while fostering the development of necessary skills in a timely manner. Thus, the involvement of a librarian in the graduate school curriculum at the beginning of the students' graduate study improves performance and contributes to the development of research and information literacy skills.

Concepts, Terms, and Metadata for Building Semantic Interoperability of Research Consents and Permissions

Elizabeth Eisenhauer, Doctoral Student, School of Nursing, University of Michigan–Detroit; **Marcelline R. Harris**, Associate Professor, Division of Nursing Business and Health Systems, School of Nursing, University of Michigan–Ann Arbor

Objectives: To develop a knowledge-based system for data and biospecimen sharing across federated repositories. This approach leverages a model-driven software paradigm that requires an "ontology"or set of concepts, terms, and relationships that structure knowledge for semantic interoperability across systems. Here, we report on the initial step of harmonizing concepts, terms, and metadata from three consent templates.

Methods: Concepts were extracted from informed consent templates for clinical trials, behavioral studies, and biospecimen collection, all endorsed by institutional review boards (IRBs) from a single university. A two-fold method for concept extraction was employed: manual identification with consensus-based face validity and automated identification using the National Center for Biomedical Ontology (NCBO) annotator. Three terminology/ontology repositories were searched: the Unified Medical Language System (UMLS), the NCBO BioPortal, and OntoBee. Across repositories, we collected key metadata including: definitions, concept identifiers, preferred terms, synonyms, and uniform resource identifiers (URIs). When definitions were not provided, other sources (e.g., clinical research glossaries or the current literature) were searched.

Results: Analyses are in process; however, preliminary results indicate nearly 300 unique concepts were present in the IRB templates. Most concepts were associated with concept unique identifiers (CUIs) in the UMLS, but many had no associated textual definition. The most complete set of metadata was in the National Cancer Institute Thesaurus (NCIt). Several key concepts (e.g., "minimal risk") were not identified in the UMLS metathesaurus or source terminologies. Across repositories, retrievals vary based on the structure of the repository.

Conclusions: We extend work in this area in a number of ways: the bottom-up approach identified needed expansions in reference terminologies (e.g., NCIt, CHV), the comparison of repositories identified systematic variance, and having more complete metadata lays an essential foundation for future domain analysis.

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Hawaii-Pacific Chapter

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Medical Library Group of South California and Arizona

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Midcontinental Chapter

Mid-Atlantic Chapter

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Midwest Chapter

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New York-New Jersey Chapter

North Atlantic Health Sciences Libraries

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Northern California and Nevada Medical Library Group

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South Central Chapter

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Southern Chapter

Upstate New York and Ontario Chapter

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Cancer Librarians Section

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Collection Development Section

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Consumer and Patient Health Information Section

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Dental Section

Educational Media and Technologies Section

Health Association Libraries Section

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History of the Health Sciences Section

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Hospital Libraries Section

International Cooperation Section

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Leadership and Management Section

Medical Informatics Section

Nursing and Allied Health Resources Section

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Pharmacy and Drug Information Section

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Public Services Section

Relevant Issues Section

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Poster Session 2

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Time: Monday, May 19, 3:30 PM – 4:25 PM

Collaborative Research on Hospital Administrator Beliefs and Attitudes toward Evidence-Based Management in Health Care

Ruiling (Raylene) Guo, AHIP, Associate Professor and Health Sciences Librarian; **Patrick Hermanson**, Program Director and Assistant Professor; **Tracy Farnsworth**, Director and Associate Dean; **Teri Peterson**, Statistician; Idaho State University, Pocatello, ID

Objectives: The purpose of this study was to conduct collaborative research on exploring hospital administrator beliefs and attitudes toward the practice of evidence-based management (EBMgt) and to identify barriers to adopting EBMgt and needs for learning EBMgt among hospital administrators in Idaho.

Methods: A cross-sectional, descriptive, and non-experimental design was utilized in this study. A survey instrument was developed based on literature reviews and expert opinions. A questionnaire was distributed to 108 members of the Idaho Hospital Association (IHA), who were given 3 options for returning the survey: web, mail, and onsite. To determine the consistency and reliability of the instrument, a test-retest procedure was conducted among 10 health care management professionals across the nation. The survey data were collected and analyzed descriptively using IBM Statistical Package for the Social Sciences (SPSS) 21.0.

Results: Fifty-two hospital administrators returned the questionnaires for a 48% (52/108) response rate. The return results of the 3-mode survey delivery were: 25 (48%) online, 24 (46%) mail, and 3 (6%) onsite. Out of 52 respondents, 26 (50%) were chief executive officers/presidents; 11(21%) were chief financial officers; and 14 (27%) were chief operating officers and chief nursing officers. Thirty-eight (73%) had master's degrees, 4 (8%) had either a medical doctoral degree or doctoral degree, and 8 (15%) had a bachelor's degree. Seventy-one percent of hospitals were located in rural areas and 29% in urban areas. Concerning the attitudes and beliefs, 35 respondents (67%) strongly agreed and 13 (25%) agreed that it is important for health care administrators to make decisions based on the best available evidence. Twenty-six (50%) strongly agreed and 15 (29%) agreed to support the adoption of EBMgt in health care management. Eighteen (35%) strongly agreed and 28 (54%) agreed that evidence-based decision making increases the quality of their health care management decisions. The participants were most inclined to use organizational data, consult their colleagues, and engage professional websites when making decisions. Twenty-one out of 52 (40%) respondents reported that they had never been to libraries. The participants identified lack of time, lack of

training, and unfamiliarity with EBMgt as the top 3 barriers that hindered their practice of EBMgt. Forty-three respondents (83%) reported that they had not previously attended EBMgt training, and 42 (81%) were interested in receiving EBMgt training.

Conclusions: Hospital administrators showed favorite attitudes toward the practice of EBMgt in this study. The barriers to the practice of EBMgt and needs for receiving EBMgt training were identified among hospital administrators.

Building a Discovery Tool for Biomedical Researchers

Jeremy Bartczak, Metadata Librarian; **Andrea H. Denton**, Research and Data Services Manager; **Anson Parker**, Web Developer; **Inhye Kim Son, AHIP**, Electronic Services and Research Librarian; University of Virginia–Charlottesville

Objectives: The University of Virginia Health System's Claude Moore Health Sciences Library wanted to guide researchers by creating a "Research Navigator" for discovering tools, services, and online help across the university research environment. The goal was to provide a selected and annotated list of resources that end users could facet based on their stage in the research lifecycle. This initiative was part of a major library website overhaul.

Methods: A list of resources was compiled based on impact and relevance within the biomedical research community. These resources were then described and categorized by type and location in the research lifecycle: discover ideas, collect data, measure impact, preserve research, publish results, and write a grant. Additional subcategories were added to provide further refinement. An in-house web developer used Drupal and its Views module to design a form for librarians to easily add and edit content, and to create the display and search capabilities for the end user. The type, category, and subcategory descriptive scheme resulted in a hierarchy that lent itself well to faceted search. Resources were presented in a table to end users and could be filtered by selecting categories from the scheme. Filters also incorporated a selective exclude process where nonrelevant categories disappeared as the user made selections.

Results: Over sixty-five resources are now listed in the Research Navigator. The scope of the collection (e.g., whether to include in-person classes as content) is still a point of discussion for its creators. Usability testing of the interface led to refinements to the interface to improve the functionality of the site. Although there is a prominent link to the Research Navigator on the library's home page, use has been low. The tool has been advertised through directed emails and an exhibit at a local research data and technology fair, but it seems additional marketing and promotion of the Research Navigator is needed.

Conclusions: Creating the Research Navigator required not only the technical expertise to create the database and search interface, but also knowledge about end user behavior and about strategies to promote the tool. Usability testing provided a greater awareness of the search behaviors researchers employ when using such a tool and have helped to shape its functionality and future development. Finding the best method to market the Research Navigator remains a challenge, and research librarians continue to seek ways to promote this and other research resources the library offers.

Connecting the Dots: Linking Outlying Physicians to Online Evidence-Based Point-of-Care Tools

Lana Brand, AHIP, Health Sciences Librarian; **Raleigh McGarity, AHIP**, Health Sciences Librarian; **Katrina Bailey**, Library and Continuing Medical Education Manager; Educational Services, Northeast Georgia Health System, Gainesville, GA

Objectives: To determine the awareness and usage among practitioners in a hospital-affiliated physicians' group of the online, evidence-based, point-of-care tools offered by the hospital's health sciences library and to identify the most effective marketing/outreach strategies and implementation processes to increase meaningful uptake of these tools in patient care.

Methods: The targeted 121 physicians cover 20 specialties and are dispersed across locations in a largely rural area spanning 8 counties. The hospital library is approximately 60 miles from the furthest location. All practitioners have Internet protocol (IP)-authenticated access to online library resources; however, there is low awareness among this population due to physical distance and separate management. The library team identified internal partners as stakeholders: the group's chief physician executive and the director of staff development. A survey was administered at a mandatory medical staff meeting assessing baseline awareness and usage. The results identified underutilization of these tools. Access and outreach improvement was planned and implemented. Process evaluation included monitoring vendor negotiations, funds spent, products/services received, man power, marketing efforts, and adherence to the implementation timeline. Outcomes will be measured using longitudinal usage data provided by vendors and a follow-up survey.

Results: Initial survey results showed that only 16% of targeted physicians used UpToDate prior to our integration and marketing efforts. After improving access and continuing medical education (CME) functionality by upgrading to the UpToDate Anywhere subscription and by embedding the UpToDate icon in the electronic medical record (EMR), the number of UpToDate physician users has increased to 55% over the course of a year. There was an 81% increase in searches in DynaMed from the year before the integration with Isabel, a differential diagnostic tool, and related marketing efforts to the year after the integration.

Conclusions: Improving access and CME functionality is effective and, perhaps, paramount in increasing usage of library resources in a community health system setting. Vendor negotiations and internal collaboration were key elements in achieving access and CME improvements and measuring usage accurately.

A Library/School of Nursing Global Learning Collaboration: Using Student Feedback to Enhance the Experience

Carol L. Watwood, AHIP, Health Sciences Librarian/Assistant Professor; **Lorraine Bormann**, Assistant Professor; **Mary Bennett**, Director; Western Kentucky University, Bowling Green, KY

Objectives: To assess attainment of course goals and subjective learning experience in a library/school of nursing collaboration in two classroom assignments designed to teach pre-nursing students the fundamentals of scholarly research and a global perspective on health care.
Methods: Nursing 102, Introduction to Professional Nursing, introduces pre-BSN students to the nursing experience. Ninety-five students are presently enrolled. Two key aspects of the course are cultivating global citizenship and presenting the basics of scholarly research and writing skills. For the past five years, the health sciences librarian and the classroom instructor have collaborated in two classroom assignments on global health care: (1) group project in which students, using scholarly sources, compare and contrast the health systems and leading health indicators in the United States and another country; and (2) a two-to-three-page research paper comparing nursing education in the United States and another country. Student evaluations have been used; additional feedback will be obtained through structured interviews and two-minute writings.
Results: A total of 208 students took a pre- and post-test, "Computer Self-Efficacy for Time Study I and Time Study II," developed by Mary Bennett, director of the School of Nursing at Western Kentucky University. The mean score on the test--which included items such as setting up an Excel table, searching CINAHL, and using the library's online journal finder---increased from 34.80 (pretest) to 40.30 (post-test).
Conclusions: The self-perceived ability of pre-nursing students to successfully carry out computer-related tasks related to nursing research increased significantly after a school of nursing class with a library research component presented by the health sciences library. Student and faculty feedback are being used to further enhance the experience.

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Time: Monday, May 19, 3:30 PM – 4:25 PM

Designing a Wearable, Aided Device for Mobile Phones for Senior Citizens: Needs Assessment and Pilot Study of the Prototype

Chun-Yi Wang, Staff, Office of Biomedical Informatics, Taipei Medical University, Taipei, Taiwan; **Tzu-heng Chiu**, Professor/Director, Center of General Education/International Cooperation Division, National Central Library, Taipei Medical University, Taipei, Taiwan; **Chiang I-Jen**, Associate Professor, Graduate Institute of Medical Informatics, Taipei Medical University, Taipei, Taiwan; **Chun-Ching Liang**, Head, NTU Medical Library, National Taiwan University, Taipei, Taiwan

Objectives: Nowadays, more and more senior citizens use mobile phones for their daily life. However, the limited interactive screen of a mobile phone causes elders reading problems, preventing them from retrieving information via the Internet. The research teams therefore tried to design a wearable aided device. This poster reports results of the need assessment and pilot study of the prototype.

Methods: As to the need assessment, the research team sent out printed questionnaires to all thirty students of the 2013 Senior Citizen College in the Taipei Medical University, exploring their information behavior of using smartphones and attitude toward adopting wearable aided devices. Based on the findings, the research team developed a prototype. It is a micro headset mobile video projector. It can be linked to the smartphone when needed and then projects and zooms in to any convenient viewing of objects. Then, a prototype test was conducted. Four elders were invited to test this device and asked to provide suggestions and opinions about its clarity, comfort, distance, size, and weight. The collected feedback will be the reference for further improvement of the final device.

Results: The results of needs assessment indicate that the participants of this study mostly held positive attitudes toward the prototype device. In terms of design, functionality exerts as the most significant factor. Furthermore, most of the participants felt satisfied with the projection distance and the image quality provided by the prototype. It also revealed that a medium-sized and medium-weighted reading aid--that is, 4x6.5 centimeters and 40-60 kilograms--is considered as the maximum for practical use.

Conclusions: On the basis of the needs assessment, this study designed a glass-attached reading aid. The following prototype testing results laid the foundation for advanced modifications to the functionality as well as the appearance design. Lastly, A four-dimension questionnaire--including perceived usefulness, perceived ease of use, attitude toward using, and intention to use--

adapted from technology acceptance model (TAM) was conducted for a better understanding of the senior citizens' general perspectives on such reading aids.

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Time: Monday, May 19, 3:30 PM – 4:25 PM

Developing a Curriculum to Reduce Health Disparities

Alexa Mayo, AHIP, Associate Director, Services; **M.J. Tooey, AHIP, FMLA**, Associate Vice President, Academic Affairs, and Executive Director; Health Sciences and Human Services Library, University of Maryland–Baltimore

Objectives: This poster describes the University of Maryland Health Sciences and Human Services Library's (HS/HSL's) development of a National Library of Medicine (NLM)-funded online curriculum aimed at building students' skills to reduce health disparities. The curriculum aligns with national standards and was created through a partnership with an urban high school.

Methods: The 154 hour Project Student Health Advocates Redefining Empowerment (SHARE) curriculum is a versatile online resource developed to build community health advocates, promote improved health, and reduce health disparities in neighborhoods nationwide. The curriculum, built in modules and designed to be applied in a variety of settings, is aimed at high school students. It aligns with national standards such as Healthy People 2020, National Health Education Standards, and National Partnership for Action to End Health Disparities. This poster will describe the challenges inherent in designing a comprehensive health promotion and advocacy curriculum and identify benefits such a curriculum for schools, libraries, community-based organizations (CBOs) and community-academic partnerships nationwide. The project was funded by the NLM Information Resource Grant to Reduce Health Disparities and developed in partnership with Vivien T. Thomas Medical Arts Academy.

Results: The Project SHARE curriculum comprises six instructional modules: health disparities, quality health information, healthy eating, promoting health and wellness in your community, public speaking, and presenting. Each module contains up to five lessons and is supplemented by experiential learning activities that encourage students to apply skills and knowledge.

Conclusions: The SHARE online curriculum will be available in fall 2014.

Developing a Model, Library-Based Research Data Management and Curation Service to Help Scientists Archive and Share Research Data

Richard Jizba, Department Head; **Rose Fredrick**, Digital Services Librarian; Health Sciences Library, Department of Information Services, Creighton University, Omaha, NE

Objectives: To develop a library-based service that assists with research data/file management and its long-term curation.

Methods: A pilot project was identified when a senior faculty member asked the library to archive his years of research data so that they will be accessible to future investigators. All of the project data were digital and stored on the file server. The majority of these were database files (Access) with several other formats included. The library's role has been differentiating those files that are unique and essential from those that might be redundant or derivative, de-identifying patient information to comply with the Health Insurance Portability and Accountability Act (HIPAA), converting the files into archival formats, creating standard metadata, and adding document types, subject headings, and a glossary to make the data navigable. The library is recommending an electronic data capture software solution for the university, such as REDCap, to organize the study data, enable automatic de-identification, and ease the archival process overall in the future.

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Time: Monday, May 19, 3:30 PM – 4:25 PM

Developing an Omics-Focused Bioinformatics Portal for Clinicians and Basic Scientists

Margaret Gross, AHIP, Public Health Informationist; **Robert Wright**, Basic Science Informationist; Welch Medical Library, Johns Hopkins University, Baltimore, MD

Objectives: We will report on strategies used to develop an omics-focused online resource for supporting bioinformatics-based research that may assist others developing similar tools. In describing the portal development process, we will address challenges encountered and important lessons learned. We will also detail efforts to elicit feedback on the value of the portal and provide metrics on its usage.

Methods: We have used a variety of sources to develop our portal, including a core bioinformatics textbook, portals developed by peer libraries, links featured on research lab web pages, consultations with faculty, suggestions posted to the portal's blog, and bioinformatics directories. The result is a site with core resources for genomics, transcriptomics, proteomics, epigenomics, metabolomics, and pharmacogenomics. We have authored posters about the portal at different stages in its development and included them in the poster sessions of bioinformatics symposia organized by our core constituents. This has offered us the opportunity to communicate progress to our users and elicit their feedback. Since the portal's launch in September 2013, we have tracked its usage using Google Analytics.

Results: User feedback about the portal has been uniformly positive and encouraging. A number of users have asked to have specific resources added to the portal, and others have used the portal's launch as an opportunity to suggest other ways that the library could support bioinformatics research. Between the portal' launch on September 6, 2013, until February 6, 2014, Google Analytics recorded 2,121 page views for the site from 1,054 visitors. Two spikes in usage occurred after email announcements on September 18, 2013, and September 26, 2013, with 105 and 75 visitors, respectively. Usage dropped significantly after these spikes, to an average of 5 visits/day.

Conclusions: The strategies employed to develop the portal appear to have resulted in a resource of value to our bioinformatics research community. Means of reaching out to this community, including email announcements and poster presentations, have been valuable ways to elicit feedback about the portal's quality and relevance. This anecdotal feedback indicates a strong interest in the portal. Portal usage statistics likewise indicate significant interest, although the considerable drop in visits after an initial announcement period merits investigation. We will administer a survey to users as a way to more thoroughly measure the portal's value and obtain suggestions for improvements.

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Time: Monday, May 19, 3:30 PM – 4:25 PM

Disaster Health Information: Building a Bridge to National Library of Medicine Information Resources

Brenda L. Seago, Director, Libraries and Professor, Robert B. Greenblatt, M.D. Library, Georgia Regents University, Augusta, GA

Objectives: 1. Assess disaster-related health information needs of public health partners for local disaster planning. 2. Develop an instructional program to improve awareness of disaster-related health information for public health partners. 3. Create a web portal connecting public health partners to local and online resources for disaster management.
Methods: The key components of the grant-funded project were conducting an information needs assessment, developing a web portal, and providing training to the disaster response professionals. The information needs survey responses identified top local natural disaster risks, commonly used information resources, information-seeking behaviors, and instructional preferences. A web portal design was developed to quickly link the local emergency response community to information specific to each identified disaster risk. Training sessions were held throughout the health district for emergency responders to navigate the local and national information resources provided. Mouse pads and Post-It notepads were purchased and distributed to grant participants to promote the web portal resources. Pre- and post-tests were administered to class attendees, and a final project survey was distributed to the emergency response community.
Results: The disaster health web portal was launched in spring 2013 and modified based on feedback from the public health partners. Four training sessions were held for thirty-one emergency responders. The attendees represented nurses, law enforcement, public health, and emergency services across the health district. Analysis of class tests revealed a significant increase in knowledge of disaster health information resources. Printed texts and mobile resources were identified as key information formats. Final project survey results indicated higher post-training usage of the web portal resources and approval of the web portal design.
Conclusions: Awareness and training are the keys to connecting the disaster response community to vital disaster health information resources. Website tutorials were developed to guide responders to specific disaster information topics. Providing information in diverse formats, including mobile website version and a print textbook collection, was crucial to the project success. The grant project has resulted in increased knowledge of reliable information resources for disaster planning. Librarians will explore options for refresher training and

collaboration with university disaster response leaders and maintain the disaster health web portal.

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Time: Monday, May 19, 3:30 PM – 4:25 PM

Discovery-Based Instructional Design: Utilizing Discovery Learning to Engage Undergraduate Health Sciences Students in Library Research

Sarah E. Katz, Assistant Librarian/Health Sciences Librarian, Reference and Instructional Services, University of Delaware Library, University of Delaware–Newark

Objectives: To determine if teaching health sciences databases through a series of discovery-based activities increases student participation and learning within a one-time, seventy-five-minute library instruction session.

Methods: In a one-time, seventy-five-minute library instruction session, upper-level undergraduate health sciences students arrive with varying levels of knowledge, skill, and interest. During traditional instruction (lecture and demonstration followed by practice), students appear to be indifferent toward instruction as a result of varying knowledge, disengaged in discussion, and reluctant to participate. By integrating discovery-based activities into the beginning of the session, active student participation is required. During activities, students take control, taking notes regarding search techniques, identifying problems they have encountered, and asking questions they have. Following the activities, the problem areas are addressed and more advance techniques (controlled vocabulary) are introduced. Afterward, students continue to explore resources while completing a class assignment. In this poster, student learning outcomes and feedback will be discussed and compared with traditional instruction sessions.

Results: This study is still on-going in early 2014. Study will be concluded prior to the meeting in May 2014. Early results show that discovery-based activities have increased student participation in library instruction sessions.

Conclusions: While results are not yet complete, early analysis indicates that interaction and participation from students has increased with the introduction of discovery learning activities. A full conclusion will be presented in May 2014.

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Time: Monday, May 19, 3:30 PM – 4:25 PM

Distance Support Services: Defining, Discussing, and Determining Future Roles

Margaret A. Hoogland, Distance Support Librarian, A.T. Still Memorial Library, A.T. Still University of Health Sciences, Kirksville, MO; **Carolyn Schubert**, Health Sciences and Nursing Librarian, Rose Library, James Madison University, Harrisonburg, VA

Objectives: With over six million students now taking at least one course online, higher education is shifting educational and outreach approaches (The Sloan Consortium, 2011). Recently, an informal group formed to discuss librarians' new roles in online education, leading to the Distance Support Special Interest (SIG). The research will review librarians experiencing this role transformation and provide recommendations.

Methods: A survey will go out to members of the up-and-coming Distance Support SIG using Qualtrics survey software. Questions include but are not limited to discussion of work environment, challenges and rewards of serving in such a position, needs and wishes of the respondents to improve future services, and other questions, comments, thoughts, or concerns respondents decide to share. Depending on the number of responses, MLA members beyond those of the Distance Support SIG may also be solicited. Analysis will include comparison of language, phrasing, and ideas among respondents. The depth and breadth of analysis will be determined by time available and the quantity and quality of responses received.

Results: Our results are smaller and less than we anticipated. We are considering our options.

Conclusions: The conclusion we can draw so far is that our way of eliciting responses to our survey could be better. Our hope is to have a better conclusion by May.

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Time: Monday, May 19, 3:30 PM – 4:25 PM

Diversity Search Terms Unbound: Exploring, Engaging, and Envisioning Research

John D. Jones Jr., Librarian and Associate Professor, Education and Reference; **Lynne M. Fox, AHIP**, Education Librarian, Reference and Education; Health Sciences Library, University of Colorado Anschutz Medical Campus, Aurora, CO

Objectives: We created an interactive poster to engage participating at a campus diversity meeting, demonstrating the complexity of search terms available in PubMed, promoting other databases of interest to researchers, and promoting library consultation and search services for researchers.
Methods: We created a visual image of term relationships and a list of subject headings linked to the Medical Subject Heading (MeSH) term "Cultural Diversity," using Knalij for PubMed and PubMed ReMiner. The poster had a diagram of the major subdomains in diversity, t could be flipped up to reveal the number of articles in that domain, and listed narrower MeSH terms in that sub-domain under the flap. During the poster session at the meeting, we discussed creating effective search strategies for research on diversity topics. We also promoted our Ask Us electronic reference services and our in-person consultation services. We then asked participants to place a heart-shaped sticker by a topic they have researched in the past and to place a gold star near a topic that they might use in a future search strategy.
Results: We spoke with seventy-five attendees in some depth, and forty-seven to forty-nine attendees plotted past and future search terms for our session interaction.
Conclusions: Colorful, interactive poster design is an effective tool for education and marketing in an intra-campus conference setting. While librarians understand structured database complexities, many constituents do not. Using graphics and lists are good ways to help lay searchers grasp the nature of PubMed's more than twenty-two million citations. The sticker placements and subdomain flaps encouraged up-close poster examinations.

Poster Number: 88

Time: Monday, May 19, 3:30 PM – 4:25 PM

Do Medical Librarians Value MLA's Ethical Code?

Robert E. Johnson, Clinical Services Librarian; **Karin Saric**, Information Services Librarian; Norris Medical Library, University of Southern California, Los Angeles, CA

Objectives: MLA's Code of Ethics offers little guidance to individual librarians. Examples of ethical codes from other countries, however, reveal that much common ground exists at a personal level. Incorporation of individual perspectives could make the MLA code more useful in practice. We recommend that individuals create their own codes and that common findings then be integrated into the national code.

Methods: The authors will conduct an examination of ethics at Norris Medical Library using the "Thinking Ethically: A Framework for Moral Decision Making" model. Librarians will use the framework to create personalized ethical codes and then attempt to find common ground and codify an ethical code for the library. This process could be modeled to proceed in an iterative, upward manner through local, regional, and national levels, with the ultimate goal being the incorporation of common individual ethics into the national professional code. Concurrently, the authors will conduct structured interviews with leading medical libraries to examine how such institutions currently reconcile the gap between the professional code and individual ethical variations. These interviews will identify best practices and opportunities to improve ethical standards at institutional levels.

Poster Number: 89

Time: Monday, May 19, 3:30 PM – 4:25 PM

Drug Interactions: Avoiding Complications While Evaluating Two Drug Databases

Tami A. Hartzell, Medical Librarian, Werner Medical Library, Rochester General Hospital, Rochester, NY

Objectives: To avoid duplication and demonstrate fiscal responsibility, which drug information database, Lexicomp or Micromedex, meets the needs of our customers? Our objectives: (1) determine which database will become the sole drug database of the organization, and (2) identify areas for improving the use of the selected database.

Methods: This case study details the planning and evaluation methods used to determine which drug information database, Micromedex or Lexicomp, could become the sole source for drug information in a 500-bed community hospital. Primary steps included: (1) identifying key stakeholders, (2) forming a multidisciplinary task force, (3) developing and distributing use surveys, (4) training practitioners, (5) directly comparing both databases against an individual clinical encounter experienced by each participating clinician, and (6) financial versus content assessments of each database. Opportunities, unexpected challenges, and lessons learned will be shared.

Poster Number: 90

Time: Monday, May 19, 3:30 PM – 4:25 PM

Educating K-12 Professionals to Meet the Health Information Concerns of Special Needs Children and Their Parents: A Collaborative Outreach Project

Elizabeth Irish, AHIP, Assistant Director, Schaffer Library of Health Sciences, Albany Medical College, Albany, NY; **Helen A. Squillace**, Director, Pupil Personnel Services and Special Education Programs, East Greenbush Central School District, East Greenbush, NY; **Deborah M. Lyman**, Librarian, Columbia High School, East Greenbush Central School District, East Greenbush, NY; **Tammy D. Cosgrove**, School Nurse, Columbia High School, East Greenbush Central School District, East Greenbush, NY; **Enid Geyer, AHIP**, Associate Dean, Information Resources and Technology, Schaffer Library of Health Sciences, Albany Medical College, Albany, NY; **Amanda Hagzan**, Instructional Technologist, Schaffer Library of Health Sciences, Albany Medical College, Albany, NY; **Traci Tosh**, Information Specialist, Research, Schaffer Library of Health Sciences, Albany Medical College, Albany, NY

Objectives: To educate a K-12 school district's nurses, librarians, social workers, psychologists, and related special education staff to meet the health information needs of special needs children and their parents by improving knowledge of and access to reliable health web-based resources.

Methods: A planning team was formed to examine the feasibility of a partnership between an academic health sciences library and a K-12 school district. From their discussions and the results of a staff needs assessment, two train-the-trainers sessions for school staff and one session for the special needs parents were developed with a National Network of Libraries of Medicine (NN/LM), Middle Atlantic Region (MAR)-funding award. The high school librarian and nurse presented the consumer class to the parents. All school librarians and nurses were equipped with iPads to provide mobile support to school staff and parents seeking advice at the point of need. Health sciences librarians received iPads for consultations as needed. Post-session surveys including test questions were conducted with the target audiences. /p>

Results: The needs assessment received an 88% response rate. Most respondents indicated searching Google and WebMD. After the sessions, over 50% of professional staff responding to the survey recognized National Library of Medicine (NLM) resources. Almost 60% would recommend PubMed to a colleague. Of the follow-up survey of special needs parents group, 80% attending the class indicated that the number of times that they have searched for health information has increased. Almost 17% of nurses and librarians indicated that requests for assistance has increased and includes finding information on a

condition, finding articles on a medication, and selecting the appropriate resources.

Conclusions: The project details a very successful partnership. The results demonstrate the resources are being used, and the school librarians and nurses are being sought after to assist in finding health information. The application was broader than originally anticipated as the resources were also of interest to educators for inclusion within the middle school and high school curriculum. Resources were added as links to libraries' websites as appropriate. For groups wishing to replicate this program, cooperation between institutions is the key to success. Project planners worked well together, respecting each other's strengths, knowledge, and contribution to the project.

Embedding Sustainable Structures for Partnership: Informationist Collaboration with Newly Formed Institute for Health Care Policy

Judith Smith, Informationist; **Jean Song**, Assistant Director, Research and Informatics; Taubman Health Sciences Library, University of Michigan–Ann Arbor

Objectives: To collaborate with a new institute for health care policy to meet their information discovery and management needs.

Methods: In 2012, the University of Michigan-Ann Arbor created a new institute in 2012 dedicated to health services research. The Institute for Health Care Policy and Innovation (IHPI) colocates researchers across disciplines at the North Campus Research Complex (NCRC) and constitutes one of the largest communities in United States of physicians, health scientists, and health policy analysts focused on the delivery and improvement of health care. In all information services projects, informationists strove to connect Institute faculty and staff to relevant information resources, as well as human resources on campus and beyond to serve as an information hub. Specific services included a pilot project analyzing research impact using the Becker Model of Research Impact; facilitating knowledge regarding a faculty expertise tool, Michigan Experts; supplying monthly publication output of institute members; and providing complex literature searching consultations.

Results: Working with faculty and staff on this range of projects fostered trust and created solid partnerships between IHPI faculty and staff and informationists. While there have not been formal evaluation measures to date targeted to assess the value of embedding information services into this population, anecdotal evidence indicates that the institute values the information services provided. This anecdotal evidence includes repeat questions from and multiple consultations with key institute staff and faculty members including the institute's director and interim managing director, and ongoing discussions to create and manage publication feeds of IHPI members.

Conclusions: Developing long-lasting structures for collaboration takes proactive and continuous efforts. As the institute is still in its initial stages, informationists need further outreach to understand how best to collaborate with this interdisciplinary research group. Informationists have a sturdy foundation for collaborations, and future steps involve: integrating resources and services for understanding research impact; creating a tailored resource portal for information discovery; and maintaining visibility of information services through pre-existing communication structures, such as their institute newsletter. Informationists also plan to use a brief "exit interview" following project or consultation conclusions to

determine the perceived value of informationist partnerships and deepen understanding of information needs.

Empowering Researchers to Increase Their Impact via Altmetrics and Open Access

Yingting Zhang, AHIP, Information and Education Librarian, Robert Wood Johnson Library of the Health Sciences, Rutgers University, New Brunswick, NJ; **Minglu Wang**, Data Services Librarian, John Cotton Dana Library, Rutgers University, Newark, NJ; **Laura B. Mullen**, Psychology/Behavioral Sciences Librarian, Library of Science and Medicine, Rutgers University, Piscataway, NJ

Objectives: This poster will demonstrate how librarians can empower researchers to increase their impact via altmetrics and open access. In today's constantly changing library world, the focus of academic librarians is evolving from reader services to researcher services. Altmetrics are being increasingly used to measure the impact of scholarly works and researchers.

Methods: Since altmetrics are not the same as traditional bibliographic metrics, the authors will give a comparison of the two kinds of metrics, understanding that altmetrics are not replacing the traditional ranking system but rather serving as a supplemental measure. Social media play a very important role in the emergence of and increasing attention to as well as the usage of altmetrics. The authors will analyze all the possible ways to show how altmetrics can increase the impact of scholarly works and researchers.

Results: Altmetrics allow researchers to increase their research impact. They can achieve this by self-archiving their research output in open access domain such as institutional repositories, governmental repositories, and open access journals that are accessible via various kinds of social networking tools.

Conclusions: Traditional bibliographic metrics are not sufficient to fully measure researchers' impact in today's academia. Researchers should take advantages of open access repositories and journals to allow their published research results to be accessible in the Internet via various kinds of social media and to be measured by altmetrics in addition to traditional metrics.

Enjoying the Skyline: Providing Researchers with a View of Impact

Karen E. Gutzman, Associate Fellow; **Cathy C. Sarli, AHIP**, Scholarly Publishing and Evaluation Services Coordinator; **Kristi L. Holmes**, Bioinformaticist; Bernard Becker Medical Library, Washington University in St. Louis, St. Louis, MO

Objectives: The process of determining research impact can seem incredibly complex. Continued research funding requires investigators to communicate their research effectiveness to funding agencies. Libraries can assist in this ambitious and challenging endeavor by identifying research outcomes and outputs to help investigators better understand their impact and help them recognize how research dissemination affects impact.
Methods: The Washington University in St. Louis Institute for Clinical and Translational Sciences identified the communication of research impact as a priority area. The library designed a screening process to select six investigators representing various career stages and areas of research for analysis of research impact. A reporting template was developed to document background information and collect publication data from three resources. Sample interview questions were created to allow for in-depth consultation with investigators. The reporting template contains guidance for background information, instructions for capture of publication data, and interview questions to allow for replication of use by others and to ensure consistency for reporting purposes. We will present ideas of how the tools can be leveraged by librarians and investigators alike, ultimately allowing them to visualize their own striking "research skyline" for reporting purposes, grant applications, promotion activities, and more.
Results: Library staff completed a reporting template for each investigator. Included in this template is extensive background information including education, areas of research focus, and funding history. Publication data were gathered from three major resources and the data were analyzed in several ways, including the creation of temporal, geospatial, and topical visualizations. Various interview questions were developed to allow for in-depth consultation to identify additional indicators of research impact beyond publication data.
Conclusions: The process of identifying meaningful indicators of research impact is a daunting feat. Impact becomes noticeable as research is built upon and disseminated, and requires ongoing documentation of research outputs and activities. While there are many citation metrics to provide an overview of impact, an in-depth investigation into those numbers, and in other areas of interest, as outlined in the Becker Medical Library Model for Assessment of Research Impact, will greatly benefit the investigator by providing better understanding of how and where their research is making an impact.

Poster Number: 94

Time: Monday, May 19, 3:30 PM – 4:25 PM

Enriching Conference Participation Using Social Media at #macmla2013

Carolyn Schubert, Health Sciences and Nursing Librarian, Rose Library, James Madison University, Harrisonburg, VA

Objectives: Social media's growing presence in personal interactions, news reporting, and education are just some of the ways this technology is changing our in-person and virtual interactions. While social media has been used in conjunction with the past few annual Mid-Atlantic Chapter (MAC) meetings, understanding who is participating and how they participate can help identify other patterns for year-round networking.

Methods: The meeting planning team created an outline identifying all key communication channels and groups, including the MAC Messages blog and Twitter, to promote the annual conference. The author used several quantitative methods to track social media posts related to the conference: (1) The WordPress web analytics of the MAC Messages blog track how many people read the conference posts and how many responded; (2) Storify captured and archived the tweets sent to the #macmla2013 conference hashtag; and (3) tweet archivist provided additional analytics regarding distribution of messages across Twitter participants and their larger social impact based on the number of followers. Thematic analysis of tweets will identify patterns of content or talking points among participants and the virtual narrative that occurs during conference sessions.

Results: A total of 243 tweets matched the #macmla2013 hashtag for the MACMLA 2013 conference, and 675 viewed WordPress blog posts regarding conference content. In-person conference attendance was 174 people. Comparatively, 19 people tweeted during the conference. While the Twitter-ers were significantly smaller in number, their combined followers list indicates a possible impact network of approximately 6,900. Ten items were re-tweeted, and 8 items were favorited. Among the tweets, 34 different Twitter accounts were specifically identified or connected through @ identification. Fifteen other hashtags were also used to bridge content to other conversations. Common themes identified in the tweets were social interactions, keynotes, continuing education courses, MAC Business Meeting, and conference commentary.

Conclusions: Hashtag usage, apart from specific conference hashtag, was less used to effectively bridge communication on a topic; instead, it was misused to highlight commentary on an event. Instead, @name inclusion better identified other key constituencies. Most items re-tweeted were re-tweeted by other participants already at the meeting, while those who favorited tweets were mostly not in attendance. Comparing Twitter content and blog post views, both had content-specific items such as posters, paper presentations, and keynotes as

most viewed and commented. Based on these behaviors, future annual meeting groups can understand the larger reach of scholarship beyond the conference center.

Poster Number: 95
Time: Monday, May 19, 3:30 PM – 4:25 PM

Essential Nursing Resources: Premier Product of the Interagency Council on Information Resources in Nursing (ICIRN)

Janet G. Schnall, AHIP, Information Management Librarian, Health Sciences Library, University of Washington–Seattle; **Susan A. Fowler**, Medical Librarian, Bernard Becker Medical Library, Washington University in St. Louis, St. Louis, MO

Objectives: Describe web publication of the 27th edition of the Essential Nursing Resources (ENR), an annotated list of print and e-resources to support evidence-based nursing practice, education, administration, and research activities, and a collaborative effort of the Interagency Council on Information Resources in Nursing (ICIRN) representatives. Report results of use survey from 2010 to the present.
Methods: ICIRN is a nonprofit, voluntary group of organizations concerned with providing and improving access to library and information resources and services for all nurses. Member organizations include: MLA, the National Library of Medicine (NLM), American Nurses Association (ANA), National League for Nursing (NLN), American Association of Critical Care Nurses (AACN), and many more. MLA appoints two allied representatives to ICIRN to serve three-year terms. One of the premier products of ICIRN is the ENR, a foundational resource that can be used by nurses and librarians for clinical information seeking, evidence-based nursing practice, professional/academic research, nursing collection development, and as a teaching tool. The use survey was implemented in 2010. A link to the survey is provided on the same page as a link to the web version of the ENR. The survey is created and data collected via Google Docs.
Results: The latest edition of the ENR is now available on the ICIRN website (www.icirn.org/Homepage/Essential-Nursing-Resources/default.aspx). There is a key next to each resource indicating when a fee is required and the availability of the resource as mobile, online, or in print. The ENR poster is available to be exhibited at many health sciences library and nursing conferences. Librarians, nurse faculty, clinical nurses, and nursing students have answered the survey and responses have been generally positive.
Conclusions: The ENR is an excellent example of nurses and librarians collaborating to promote information literacy for nurses.

Poster Number: 96

Time: Monday, May 19, 3:30 PM – 4:25 PM

Building Information Sharing Platforms for a National Network of Medical Experts

Nathalie Reid, Manager, Information and Resources, and Manager, Continuing Education Program, National Child Traumatic Stress Network, University of California–Los Angeles; **Cathryn W. Chiesa**, Resource Librarian, National Child Traumatic Stress Network, Duke University, Durham, NC

Objectives: Over the past year, the network has built an online infrastructure that supports information sharing of expert knowledge leading to an increase of best practices among our network's professionals in the field of child trauma. We firmly believe that the use of social enterprise platforms is the future of the mental health field.

Methods: Working with Etienne Wenger's concept of Community of Practice, the network has begun engaging in collective learning to facilitate knowledge sharing, the pursuit of mutual interests, activities and discussions about a targeted subject, relationship building, and so forth. The intention of this research is to evaluate the adoption of our online platform tools in relation to the Wenger's concepts. This will be accomplished through collecting qualitative and quantitative data, examining traffic and downloads, and analyzing the participation, transmission of knowledge, and interaction between users. Five hundred of our geographically dispersed network members composed primarily of psychiatrists, psychologists, primary health physicians, social workers, child welfare works, juvenile justice workers, and other professionals who interact with children and families who have been affected by trauma will be studied.

Poster Number: 99

Time: Monday, May 19, 3:30 PM – 4:25 PM

Expanding Global Reach: Standardizing Self-Paced Nursing Learning Courses

Nancy I. Henry, Health Sciences Librarian, Life Sciences Library, Pennsylvania State University, University Park, PA; **Elaine H. Dean**, Reference and Instruction Librarian, George T. Harrell Health Sciences Library, Penn State University, Hershey, PA; **Valerie Lynn**, Head Librarian, Hazleton Campus Library, Penn State University, Hazleton, PA; **Tierney Lyons**, Reference Librarian, Library, Penn State University-Worthington Scranton, Dunmore, PA; **Jane E. Sutterlin**, Instructional Designer II, Nursing, Penn State University, University Park, PA; **Claudia C. Peterson**, Reference and Instruction Librarian, Fayette Campus, Pennsylvania State University, Greensburg, PA

Objectives: The explosion of online degree programs challenges librarians to create research skill development tools that address the needs of all nursing students and faculty, both on-site and remote. The authors' purpose was to deliver self-paced learning courses to promote consistent nursing library instruction across their large research institution's twenty-four campuses and to their students enrolled in the World Campus program.

Methods: The geographically distributed nature and expansion of the university nursing programs motivated the authors to establish a nursing instruction module task force. The task force consisted of four health sciences librarians and an instructional designer. Communicating through video conferencing software and a wiki, the group coordinated their effort to create standardized library instruction that students at any location could access. In consultation with nursing faculty, the group identified core competencies for inclusion and then determined the appropriate mediums and structure for online content delivery. They presented the content to the broader university library and College of Nursing community for review and adoption. Since the courses can be used in a flipped classroom format, librarians can devote more class time to applying the concepts presented in the courses.

Results: Several librarians and nursing faculty responded to an initial survey indicating a need for the standardization of nursing library instruction content that could be effective in multiple learning environments. The task force researched nursing literacy standards and core competencies to utilize as a foundation for the development of the course content. The instructional designer on the task force proved invaluable in discussions about content, course design, and delivery methods. It was decided to provide student access to the courses through the university ANGEL course management system. Five self-paced library courses were designed with an optional printable certificate after successful completion of each course module quiz. Task force discussions culminated in a decision to

employ a two-tiered review cycle of the course. A content review form was developed allowing nursing faculty and librarians recruited from multiple campus locations to critique the course. A spring roll-out of the courses is scheduled. **Conclusions:** A standardized nursing library information course based on core competencies is increasingly essential to reach students enrolled in geographically distributed nursing education programs. Also students who are struggling to complete coursework and are in need of supplementary research and library skills may find these courses beneficial. Collaboration with instructional designers and College of Nursing faculty proved integral to this creative process.

Poster Number: 100

Time: Monday, May 19, 3:30 PM – 4:25 PM

Exploring Roles for Librarians in a Problem-Based Learning Curriculum

Katherine A. Rickett, Liaison Librarian, Brody School of Medicine, Laupus Library , East Carolina University, Greenville, NC

Objectives: The Brody School of Medicine at East Carolina University wanted to develop a problem-based learning (PBL) curriculum for its first and second year medical students. The goal was to help prepare them to use critical thinking in their third year clerkships as they worked through the differential diagnosis of their patients. Library liaisons were invited to participate in the development of that curriculum.

Methods: We met with the senior associate dean for academic affairs to discuss ways in which we could participate. Prior to the meeting, we had searched the literature for examples of librarian roles and shared key articles with her. Those roles varied from librarians serving as facilitators, to librarians attending some sessions as information resource people, and/or preparing LibGuides or other resource lists. The school had chosen to use a basic scientist and a clinician as co-facilitators. The groups often met simultaneously, making librarian attendance as a resource person unfeasible. It was therefore decided that the development of a LibGuide for PBL would be the best contribution this year. The guide would include librarian contact information on each page, and suggested resources for differential diagnosis, disease information, etc.

Results: In the initial session (February-April, 2013), there were 902 hits for the LibGuide, with an average of 6.4 hits per user. In the interim between sessions, there were 91 hits. In the second session (August-December, 2013), there were 443 hits, an average of 3.2 hits per user.

Conclusions: We were not involved in the orientation for the second session. We believe that the number of uses would have been higher if we had been. We will be asking to be included in the orientations for the third session. In addition we are preparing a one-page flyer regarding the LibGuide, which we plan to distribute to the students and facilitators. We will be reporting the third session results at MLA '14.

Poster Number: 101

Time: Monday, May 19, 3:30 PM – 4:25 PM

Exploring the Possibility of More Active Use of Medical Articles by Laypeople: How and What Would They Read?

Yukiko Sakai, AHIP, Associate Professor, School of Library and Information Science, Keio University, Tokyo, Japan; **Chihiro Kunimoto**, Assistant Professor, Faculty of Media and Information Resources, Surugadai University, Hanno, Japan

Objectives: A previous survey revealed the willingness of Japanese laypeople to read academic or professional medical articles for health information; however, this actual practice has not been reported other than among a few specific patient groups. Thus, to identify potential factors promoting and/or discouraging actual use of Japanese medical articles as health information sources, this exploratory study has been carried out.

Methods: To gather data, sixty-to-ninety-minute in depth semi-structured interviews were conducted among laypeople who might actually or potentially read academic and professional medical articles to help them address their own or their families' health problems. Participants were invited using snowball sampling. A set of medical articles of different types (e.g., case reports, clinical articles, systematic review articles, educational review articles) was prepared to suit each participant's specific disease and conditions. During the interview, participants were asked what kinds of medical articles they had read or wished to read and why (that is, what their reasons were for reading articles of that type or wanting to). The sets of articles were tailored to participants' experience and preferences. Additional information such as participant profiles and overall health history was also collected during the interviews and additional email communication.

Results: The pilot interviews with two informants revealed that they read articles using a skimming technique: skipping numerical values and mathematical expressions, going from enriched medical keyword to keyword, for example. They also focus on the interpretation of results rather than data. When selecting articles to read, one of the informants showed her dependence on clinical guidelines as the standard of health information and a tendency to avoid case studies, while another, to decide on a therapy, showed a preference for clinical studies covering a wide range of current research.

Conclusions: Laypeople have implicit but specific standards for selecting medical articles and ways of reading them. These standards are different from those of medical researchers and are not always related to the article type (genre) or ease of understanding the articles.

Poster Number: 102

Time: Monday, May 19, 3:30 PM – 4:25 PM

Finding Plant-Based Foods in PubMed: A Problem for Our Foodie Future

Eric Rumsey, Web Services Librarian, Hardin Library for the Health Sciences, University of Iowa–Iowa City; **Janna Lawrence, AHIP**, Deputy Director, Hardin Library for the Health Sciences, University of Iowa–Iowa City; **Jennifer DeBerg**, Clinical Education Librarian, Hardin Library for the Health Sciences, University of Iowa–Iowa City

Objectives: Plant-based foods are foods of the future. With Millennials being called "the foodie generation" and foodie guru Michael Pollan saying, "Eat food. Not too much. Mostly plants," it is clear that plant-based foods will have surging popularity in the near future. In this poster, we will examine how well PubMed works for finding research articles on plant-based foods.

Methods: The indexing of Food-Diet-Nutrition subjects in Medical Subject Headings (MeSH) is complicated and inconsistent. Relevant terms tend to be scattered in different parts of the "tree structure," making it hard to know what categories to include in searching. This is especially a problem for plant-based foods: a large proportion of these are not in the "Food" explosion, but are only in "Plants," and not in "Food." These, of course, will not be retrieved by searching for "Food." Adding to the complexity is that the three main categories of plant-based foods in MeSH--fruit, vegetables, and spices--are treated differently in MeSH. We will examine these groups carefully, to determine patterns of how different plant-based foods are treated.

Results: Treatment of major plant-based foods in MeSH:

- "Fruit" is a single unexploded MeSH term; specific types of fruits occur only as botanical MeSH terms in the "Plants" explosion. "Fruit" is occasionally added as a category term for articles that are about specific types of fruit.
- "Vegetables" is an exploded term, with about twenty-five common-name MeSH terms indented under it; as with "Fruit," specific types of vegetables that are not in the "Vegetables" explosion are in the "Plants" explosion. Unlike "Fruit, " the term "Vegetables" is rarely added as a category term.

Conclusions: Food is by its nature a complicated subject because food can be approached from a variety of viewpoints. Is it a chemical, a drug, a social experience? Plant-based foods are even more complicated, because of the sheer number of them, because of their deep cultural ties, and because medicinal uses of plants is so common.

Poster Number: 103

Time: Monday, May 19, 3:30 PM – 4:25 PM

Fitting a Successful Health Literacy Initiative into Patient Engagement and Accountable Care: The Evidence

Catherine M. Boss, AHIP, Coordinator, Library Services; **Darlene Robertelli**, Librarian; **Chunwei Ma**, Systems Librarian; Booker Health Sciences Library, Jersey Shore University Medical Center, Neptune, NJ

Objectives: In 2003, the library launched a health literacy initiative. A previous study was done to determine whether the initiative had a positive impact on patient satisfaction scores without statistically significant results. The library launched a second study in 2013 to determine if the initiative helped the recipient make informed decisions about their health.

Methods: Grant funding was obtained for the second study and an institutional review board (IRB) review done. In February 2013, the library staff began sending out a questionnaire to the recipient of every mailed consumer health packet of personalized health information. The questionnaire that was sent out involved eight questions for the subject to answer as well as an area for comments and suggestions. The questionnaire was structured in the same format as the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAPHS) or Press Ganey survey and developed with the assistance of a biostatistician. A self-addressed, stamped envelope was included with the survey to facilitate returns. Data collection continued through early 2014 to capture all 2013 data.

Results: A total of 361 questionnaires were mailed out, with 216 completed and sent back for a 60% return rate. Close to 60% of respondents learned about the service through Meridian Health's Healthviews with another 18% through attendance at a health fair. Most asked between 1-3 questions and were always treated with courtesy and respect by library staff. An overwhelming 66% found the information received extremely helpful, with another 28% very helpful. Respondents used the information to increase understanding of a medical issue, talk with their doctors about a medical issue, and/or share the information with family and friends. An overwhelming 94% would recommend the service to family and friends and would use the service again. The anecdotal comments received echoed the data.

Conclusions: Evidence from the project has shown that the Booker Health Sciences Library's librarian-initiated, patient-centric consumer health home delivery service is a successful health literacy initiative, helping to facilitate patient engagement in health care decision making. In a future that is leading

away from sick care to a future of health care, this low-tech home service led by medical librarians will continue to deliver value and results.

Poster Number: 104
Time: Monday, May 19, 3:30 PM – 4:25 PM

Focus Group Study to Determine Information-Seeking Habits of Doctor of Physical Therapy Students

Rachel K. Stark, Health Sciences Librarian; **Preeti Oza**, Assistant Professor; University of the Pacific, Stockton, CA

Objectives: This focus group study was undertaken to determine the information seeking habits of second-year doctor of physical therapy (DPT) students. The information collected will be used to determine steps required to enhance information literacy in the DPT curriculum. Additionally, the results will help develop a hypothesis-driven research study regarding the effectiveness of the process to enhance information literacy in the DPT curriculum.
Hypotheses: Students with prior instruction from a librarian will have better information-seeking habits.
Methods: Setting: Health sciences library serving graduate allied health programs. Population: Thirty-four DPT students from graduating class. Process: Answers to specific questions related to information seeking, gathering, and assessing habits were collected via a questionnaire. The questionnaire for this study was developed in-house and used Likert-type scale response anchors to assess students' knowledge of information literacy and utilization of that knowledge. Content validity of the questionnaire was tested by the authors and a senior librarian mentor not connected with the university. Questionnaires were completed anonymously. Answers to the questionnaire had no bearing on course performance and course grade. Analysis is planned to determine specific themes from the data. Additionally, the model of collaborative efforts to incorporate information literacy in the curriculum, based on the themes determined from this focus group study will be determined.
Results: One hundred percent return rate of questionnaire, 93% of returned questionnaires had valid answers. Considering the entire sample, students used virtual library resources more than physical resources. Students used both free web-based resources and university library-provided resources but tended to use free resources more often. Students put moderate value on citing information and were neutral toward evaluating information. When the sample was separated based on prior librarian led instruction, the group with prior instruction used the library resources, both virtual and physical, more frequently.
Conclusions: Second-year DTP students tended to use free web-based resources more and students with prior instruction from a librarian tended to use library resources more. Students with prior instruction were also more likely to consult a librarian when beginning their research than students without prior librarian-led instruction. We believe that formal libraria- led instruction should be

incorporated in the DPT classes in order to improve information literacy. Additional research into ways to improve DPT student information literacy habits is required.

Poster Number: 105

Time: Monday, May 19, 3:30 PM – 4:25 PM

For the Mouths of Babes: Nutrition Literacy Outreach to a Child Care Center

Darra Ballance, AHIP, Director, Retention Programming and Technology, Statewide Area Health Education Center Network; **Nancy Webb**, Director, Child Care Center; Georgia Regents University, Augusta, GA

Objectives: (1)To improve nutrition and health literacy among child care workers, an underserved population. (2) To improve understanding for children, as well as the children's families, of how to establish healthy eating and physical activity habits.

Methods: A librarian designed a nutrition literacy training plan, featuring National Library of Medicine (NLM) websites and information, in cooperation with a child care center director and a dietician. Five sessions will be offered to all full-time employees of the center. Training will occur after regular work hours; workers receive a stipend for attending. Workers will be assessed on their level of understanding of nutrition literacy before and after the training. Sessions are conducted at the child care center, using iPads funded by a National Network of Libraries of Medicine (NN/LM) Health Literacy grant. The librarian and the dietician present information and lead activities designed to increase the workers' nutrition literacy. Workers will be asked to identify ways to incorporate nutrition literacy in the classroom, at levels appropriate for small children (infant to pre-K) and their families, who represent a diverse group of nationalities and ethnicities.

Results: The project began in October 2013 and will conclude in March 2014. Project outcomes, complete session descriptions and pre- and post-test comparisons will be completed in April 2014.

Poster Number: 106

Time: Monday, May 19, 3:30 PM – 4:25 PM

Forging an Alliance with Faith-Based Clinics

Nakia Woodward, AHIP, Senior Clinical Reference Librarian; **Rick Wallace, AHIP**, Assistant Director; Quillen College of Medicine Library, East Tennessee State University, Johnson City, TN

Objectives: To provide faith-based clinics with a iPad mini for providers with a drug database, disease database, and a screening tool and to provide the clinics with a desktop to provide patient education information to their patients using MedlinePlus and to register patients for the Affordable Care Act.
Methods: Each organization received two iPad minis and one desktop computer. The providers who received the iPads minis were given two hours of training on the databases provided and on MedlinePlus. The librarians will conduct a focus group three months post training to determine the utility of the devices to the clinics and to discover future avenues of collaboration.
Results: Interviews were conducted at all faith-based clinics that received the iPad minis and desktops. Preliminary evaluation shows the clinics appreciated the devices, training, and support.
Conclusions: Data are still being analyzed, but the program appears to be a success and will hopefully be replicated in the future.

From Listening to Experiencing: Changing Evidence-Based Pharmacy Library Instruction

Barbara A. Wright, AHIP, Research and Education Librarian; **Jennifer A. McDaniel, AHIP**, Research and Education Librarian; Tompkins-McCaw Library for the Health Sciences, Virginia Commonwealth University, Richmond, VA

Objectives: Adapt bibliographic instruction from a traditional fifty-minute lecture format to a hands-on, small group approach to more closely align with a team-based assignment.

Methods: First-year students in the School of Pharmacy's PharmD program are assigned to teams and work together on projects for lecture-based courses. In the second year, they are introduced to team-based learning (TBL). To improve library instruction for first-year students, two librarians used a team-based approach with hands-on examination of pharmacy resources to provide a better student learning experience than the traditional fifty-minute lecture. Librarians led ninety-minute interactive sessions for two teams for a total of twenty teams. Individual team members investigated and assessed a variety of print and online pharmacy resources to complete their team assignment. Librarians designed an appraisal checklist that students used to evaluate the resources. The teams reconvened to discuss the strengths and weaknesses of the resources and appropriateness for the assignment with librarians acting as facilitators.

Poster Number: 108

Time: Monday, May 19, 3:30 PM – 4:25 PM

From the Ground up: Building a Successful Systematic Review Service

Emilie Ludeman, Research, Education, and Outreach Librarian, Health Sciences and Human Services Library, University of Maryland–Baltimore; **Katherine Downton**, Research, Education, and Outreach Librarian, Health Sciences and Human Services Library, University of Maryland–Baltimore; **Yunting Fu**, Assistant Professor, Librarian, Laupus Library, East Carolina University, Greenville, NC; **Andrea Goldstein Shipper**, Research, Education, and Outreach Librarian, Health Sciences and Human Services Library, University of Maryland–Baltimore

Objectives: Campus researchers regularly conduct systematic reviews, but librarian involvement has been infrequent. In order to increase collaboration with researchers and to enhance the quality of reviews being conducted, librarians set out to develop a formal and marketable systematic review service. This poster provides an overview of the process of developing this service.

Methods: To increase librarian collaboration in systematic reviews on campus, a task force was formed in 2012 to develop a formal systematic review service. The process involved developing vision and mission statements for the program, building guidelines to assist in processing and assigning systematic review requests, identifying multiple strategies for promoting the service throughout campus, adapting guidelines for the initial consultation with investigators, and making recommendations for librarian training needs and resource acquisition. A web-based guide and systematic review consult request form were developed. With this infrastructure in place, the service was launched in March 2013.

Results: Within the first week of the service's official launch, four consultation requests were received. Investigators from the Schools of Medicine, Nursing, Social Work, and Pharmacy, as well as from the university-affiliated hospital have used the service. By February 2014, librarians had collaborated on seventeen systematic reviews.

Conclusions: Response to the service has been positive. The initial marketing push was successful in garnering interest. The second phase in our marketing strategy consisted of targeted promotion to university departments and campus research centers and remains a priority. Processes and procedures have been revised, as needed, to meet the needs of our users and to address unforeseen challenges. An unexpected abundance of student requests prompted changes to the online request form and the service's web page. Each review poses unique challenges, and librarians have realized that setting forth clear objectives and expectations during the initial consultation is imperative.

Poster Number: 109

Time: Monday, May 19, 3:30 PM – 4:25 PM

From the Ground up: Building a Digital Archives Program

Timothy Ream, Emerging Technology Librarian, CDU Health Sciences Library, Charles R. Drew University of Medicine and Science, Los Angeles, CA

Objectives: The university library recently responded to increased interest in its archival materials by launching a pilot digitization program. This poster will discuss the tools, strategies, and outcomes involved with the project from the perspective of a small, academic health sciences library. Efforts to promote the archival project at the university using digital and print materials will also be discussed.

Methods: After gaining approval from the university, the library director hired a new emerging technology librarian to assist with the project. Photographs of significant figures from the university's history were selected for digitization. Photographs were scanned and organized using a combination of Adobe Photoshop and Google's Picassa. Once scanned, photos were assigned appropriate metadata and incorporated into a digital archive using OCLC's CONTENTdm. In order to gather further interest from the university community, digital displays of archival materials were routinely presented outside the library using a HD monitor running Microsoft PowerPoint. Large-scale versions of archival photographs were likewise printed and posted around the library to draw further attention to the project. User feedback was gathered through strategically placed quick response (QR) codes next to archival presentations. These QR codes would take users to an online survey used by the library to gain feedback.

Results: As of February of 2014, over 30 respondents had completed our online survey regarding the Charles R. Drew University of Medicine and Science (CDU) Library archives and its new digital presence. The survey consisted of 6 brief questions gauging whether or not participants had noticed the CDU Library's efforts to promote the digitization of the archives, if it increased their awareness of university history and our collection, and if they would like to see more archival materials on display in the future.

- 62.1 % of our respondents had noticed the digital display on rotation at the front entrance to the library.
- 48.3% percent of survey participants noted that this display had increased their knowledge of university history and the library's efforts to preserve it.
- 75.9% of respondents had also noticed the posters and enlarged photographs we displayed on campus promoting the CDU Library Archives and the digitization project.

- 72.4% of survey participants replied that the posters and enlarged photographs had increased their awareness of university history and the library's efforts to preserve it.
- 75.9% of respondents had an overall positive response regarding our efforts.
- 100% of the respondents would like to see more of what the archives has to offer.

Conclusions: Although these results are preliminary (full results will be posted in May of 2104), they do suggest that the efforts made by the library to promote the CDU Library Archives and its ongoing digitization have been successful. As the survey continues to gather results, more definitive conclusions can be drawn regarding the efficacy of the above efforts.

Poster Number: 110

Time: Monday, May 19, 3:30 PM – 4:25 PM

Displaying Health Care Services Using a Geographic Information System

Joan L. Colburn, Director, Library and Knowledge Services, Mountain Area Health Education Center, Asheville, NC

Objectives:

- Show potential funders and decision-makers the ways that Mountain Area Health Education Center (AHEC) services positively impact North Carolina
- Help researchers and administrators see the needs for health care services

Methods: We expanded library services to include Geographic Information Systems (GIS) for presentation and analysis. Since the majority of the process of creating maps is in searching for, collecting and organizing data, librarian skillsets are extremely valuable for this application. This new service line required a steep learning curve for new software and systems. Complicated software such as Esri's ArcMap offers a multitude of options for data display. After extensive searching and data collection, we used Excel to manage organizational, regional, and statewide data for input to ArcMap and created maps for demonstration, promotion and analysis, including:

- Health Professional Shortage Areas and practice locations of MAHEC residency graduates in North Carolina
- The Healthcare Safety Net System in North Carolina

Results: How the MAHEC residency program helps to alleviate the shortage of healthcare providers in North Carolina:
The map on the left displayed the practice locations of MAHEC residency graduates in North Carolina, and the healthcare provider level challenges yet to be met. One clear example this map illustrated was the impact of MAHEC residency graduates in Madison County, the only county in Western North Carolina without a full or partial Healthcare Professional Shortage Area (HPSA) designation. The six MAHEC residency graduates at the innovative, community-based Hot Springs Health Program in Madison County contributed significantly to this outcome.
How the healthcare needs of the uninsured and underinsured are being met

in North Carolina:
The map on the right showed the Safety Net system across this large state. This map illustrated that the seven most western counties in North Carolina have no Federally Qualified Health Center (FQHC). In the western part of the state, hospitals and private clinical practices are relied upon to provide healthcare services for all patients, whereas FQHCs offer considerable services to the underinsured and uninsured in other areas of the state. This emphasizes the value of the North Carolina AHEC program's mission of improving the distribution and retention of healthcare providers, and the need for MAHEC's services and graduates in Western North Carolina.

Conclusions: Maps can be powerful tools for communicating information. These maps are examples of how librarians can contribute to clarifying knowledge gaps regarding services and needs.

Poster Number: 111

Time: Monday, May 19, 3:30 PM – 4:25 PM

Health Literacy and Provider Communication with Older Adults

Gabriel Rios, Director, Ruth Lilly Medical Library, Indiana University School of Medicine, Indianapolis, IN; **Channing R. Ford**, Education Program Director, Department of Medicine, University of Alabama–Birmingham

Objectives: Research question: Is there a relationship between older adults' health literacy scores and their satisfaction with their provider's communication skills?

Methods: Population: Older adult (65+) English-speaking participants. Setting: Assisted living facility and public libraries. Measures:

- Assessed participants' health literacy skills using Newest Vital Sign English language measurement tool.
- Surveyed participants' satisfaction with provider/staff communication skills using the Interpersonal Processes of Care (IPC) survey.

Barriers: Recruiting sites were added throughout the project in order to obtain a viable sample of participants. For example, there were difficulties recruiting more than a handful of participants at one site. Some public libraries provided more recruits than others.

Results: Fifty older adults were recruited to participate in the study and completed the twin assessments. No demographic information from the study participants other than age was collected. However, researchers observed that most subjects were female, and there seemed to be a diverse representation of socioeconomic levels. We were unable to prove any correlation between the 2 measures. There were other interesting results, including the fact that almost 40% of the participants exhibited limited health literacy skills. Almost all IPC responses were positive about their health care communication experiences.

Conclusions: This study supports others in the literature reporting substantial deficits in health literacy skills among older adults. Further study with larger samples is needed to decide the question of whether or not any correlation between health literacy skills and provider communication satisfaction exists.

Poster Number: 113

Time: Monday, May 19, 3:30 PM – 4:25 PM

Helping Friends and Family Find Health information: A Photovoice Evaluation of Teens Promoting MedlinePlus

Cynthia Olney, External Evaluation Consultant, STISD Libraries, South Texas Independent School District, Roswell, GA; **Debra Warner, AHIP**, External Library Consultant, STISD Libraries, South Texas Independent School District, Harlingen , TX; **Sara Reibman**, Librarian/Webmaster, STISD Libraries, South Texas Independent School District, Mercedes, TX; **Ann M. Vickman**, Librarian, Biblioteca Las Américas, South Texas Independent School District, Mercedes, TX; **Lucille Hansen**, Lead Librarian, STISD Libraries, South Texas Independent School District, Mercedes, TX

Objectives: Students engaged in a high school-based health information outreach initiative called the Vital Information for a Virtual Age (¡VIVA!) Project conducted a photovoice assessment to document how they used MedlinePlus to help family, friends, and other community members find information about their health issues.

Methods: Thirty-four ¡VIVA! peer tutors, all high school students from South Texas Independent School District magnet high schools, participated in the photovoice evaluation project. Photovoice is a participatory action research strategy in which individuals take and discuss photos as a way to reflect on and communicate about their experiences. It is a particularly effective way to engage youth in evaluation. Peer tutors submitted forty-four photographs with narratives (photo stories) demonstrating their efforts to promote health information resources. The photo-stories described how their families and friends used the information they found in MedlinePlus. With guidance from the project evaluator, a diverse group of stakeholders participated in analysis of the photo stories. Reviewers included peer tutors, project team librarians, faculty advisors, and school administrators.

Results: The adult stakeholders valued the peer tutors' ability to help family members with health concerns. They were particularly moved by the ability of students to find information in MedlinePlus en español for family members who spoke Spanish as their first language. All stakeholders valued that peer tutors introduced an authoritative information source to those living in medically underserved communities where visits to the doctor are often too short. For example, one mother received a diagnosis of high blood pressure, but no health management recommendations, from her doctor. Her child helped her get disease management information on MedlinePlus. The peer tutors appreciated that their parents and grandparents who tended to resist doctors' advice became

more open to recommendations that were corroborated in MedlinePlus. The librarians liked that peer tutors taught very young relatives, as young as age six, to use MedlinePlus to research their own health questions. All found it important that the peer tutors explained the value of MedlinePlus as a learning aid to their fellow students and introduced their family members in the health professions to a good patient information resource.

Conclusions: The photovoice method provided rich documentation about the positive outcomes of the ¡VIVA! project. The stories themselves inspired the different stakeholder groups to think deeply about the impact of the project on peer tutors, families, and friends.

High Noon at Miner Library Speaker Series: Library Talks on Topics Not Related to the Library

Linda Hasman, CTSI Liaison Librarian; **Lorraine Porcello**, Branch Librarian; University of Rochester Medical Center, Rochester, NY

Objectives: To attract a large and varied audience from around the medical center to the library and showcase the interests and talents of library staff.
Methods: Edward G. Miner Library launched a speaker series. This speaker series strays away from typical library workshops and focuses on a wide variety of topics. The speaker series typically features librarians and other library staff presenting on topics that may not necessarily be library related, though there are some variations. Past topics have included: Roller Derby in Rochester, Clinical and Productivity Apps for Mobile Devices, How to Watch Television without a Television, Travel Logs, Massive Open Online Course (MOOCs), Home Roasting Coffee, Securing and Maintaining Privacy on the Internet, and Haunted Medicine (for Halloween).
Results: This wide-ranging field of presentations has, as hoped, brought in faculty, staff, and students from departments all across the University of Rochester Medical Center, from parking to surgery, and even from the other campuses in the university system. Attendance at each session continues to trend higher (finding a large enough space is even becoming an issue); we are developing a web presence for the talks that will include speaker slides and a mechanism to ask questions; and departments have made requests to repeat the presentations at later dates for staff and faculty in their offices.
Conclusions: By focusing on topics not traditionally associated with libraries, we continue to see an upward trend in our audience base, which has yet to level off. Further, we see many repeat attendees from various disciplines each month, and we have recently had an attendee request to participate as a speaker. The series provides opportunities for interaction between liaison librarians and faculty and staff in their departments. Perhaps the most enjoyable outcome is an increased sense of collegiality between library staff who copresent and learn from one another.

Poster Number: 115

Time: Monday, May 19, 3:30 PM – 4:25 PM

Identifying Barriers to Break Technological Boundaries: A Needs Assessment of Regional Medical Librarians

Andrew Youngkin, AHIP, Emerging Technologies/Evaluation Coordinator, National Network of Libraries of Medicine, Southeastern/Atlantic Region, Health Sciences and Human Services Library, University of Maryland–Baltimore; **Megan von Isenburg, AHIP**, Associate Director, Public Services, Medical Center Library & Archives, Duke University, Durham, NC; **Kimberley R. Barker**, Emerging Technologies and Systems Manager, Claude Moore Health Sciences Library, University of Virginia–Charlottesville; **Alisha Miles, AHIP**, Assistant Professor, Assistant Director, Public Services, Medical Library and Learning Resources Center, Mercer University School of Medicine, Macon, GA; **Amanda Chiplock**, Emerging Technologies Librarian, Health Professions Division (HPD) Library, Nova Southeastern University, Davie, FL; **Mary Mauldin**, Executive Director, Professor, Office of Instructional Technology and Faculty Resources, Medical University of South Carolina, Charleston, SC; **Andrea Wright**, Technology and Information Resources Librarian, Baugh Biomedical Library, University of South Alabama, Mobile, AL

Objectives: To investigate interests, continuing education needs, and barriers to implementation of emerging technologies for librarians in the Southeast/Atlantic Region

Methods: A committee conducted an online survey of librarians in the region in an effort to gather information that could inform the design and delivery of continuing education opportunities on technology topics. The survey was authored and disseminated in fall 2012.

Results: Respondents included academic health sciences librarians (58%), hospital librarians (28%), nonprofit representatives (7%) and others, and represented states in both the Mid-Atlantic and Southern Chapter regions. Information about the effectiveness of learning environments was collected: 75% of participants respond well to synchronous online environments, 60% to asynchronous online environments, and 70% to on-site workshops. Respondents also rated what they felt would be the most important technologies to their users in the next 5 years. Respondents also rated their interest in 23 specific technologies. Survey respondents reported that the main barriers to exploring and implementing technologies.

Conclusions: Survey results have helped identify emerging technologies that could serve as appropriate topics for future technology instruction. Survey responses also provide insight into challenges that librarians may face when learning about or trying to use emerging technologies in their organizations. This

information will also guide the development of relevant funding opportunities and other support mechanisms.

Poster Number: 116

Time: Monday, May 19, 3:30 PM – 4:25 PM

Improving Data Management in Academic Research: Assessment Results for a Pilot Lab

Heather Coates, Digital Scholarship and Data Management Librarian, University Library, Indiana University-Purdue University, Indianapolis, IN

Objectives: This poster reports the assessment outcomes for a data management lab pilot offered during the 2013 fall semester.

Methods: A small cohort of research staff and data managers were recruited to provide feedback on the content and delivery of this pilot lab. The lab addresses the lack of formal data management training, outside of a few discipline-specific courses, available on our campus. Common practices for data collection, storage, organization, documentation, sharing, reuse, and preservation are often suboptimal. The issues often arising from inadequate data management include data loss, corruption, and an inability to demonstrate data integrity. This results in data unusable for reuse and reanalysis. Proven data management practices exist that support data integrity, interoperability, and reuse. Such practices maximize the value and potential impact of any particular dataset. In light of the gap between common practice and known effective strategies, we developed an intensive lab curriculum to train students and staff in implementing these strategies. The lab targets key processes and phases in the data life cycle, promoting strategies that facilitate data integrity, interoperability, and reuse.

Results: Evaluations were positive overall, though there is much room for improvement. All participants indicated that a single eight-hour session was too overwhelming. Additionally, the case study was too vague to complete the data management plan and exercises successfully in the time provided. Positive responses suggest that the majority of the topics and exercises were relevant, though this varied by their role. The participants enjoyed and recognized the value of discussions with other participants from other disciplines and settings.

Conclusions: The curriculum provided valuable information for pilot participants. Several aspects of the instructional delivery will be modified in subsequent trainings to improve the experience. First, the lab will be offered as a series of modular sessions, rather than as an all-day event. Second, the case study will be further developed to reduce uncertainty and focus the associated exercises on prioritized topics. Third, the number of exercises will be reduced to allow participants to engage more deeply with fewer strategies.

Poster Number: 118
Time: Monday, May 19, 3:30 PM – 4:25 PM

Inappropriate Use of Standard Error of the Mean (SEM) When Reporting Variability of Study Samples: A Critical Evaluation of Four Selected Journals of Obstetrics and Gynecology

Wen-Ru Ko, Student/Doctor, Institute of Medicine/Department of Anesthesiology, Chung Shan Medical University/Chung Shan Medical University Hospital, Taichung, Taiwan; **Tzu-heng Chiu**, Professor/Director, Center of General Education/International Cooperation Division, National Central Library, Taipei Medical University, Taipei, Taiwan; **Wei-Te Hung**, Associate Professor/Doctor, School of Medicine/Department of Anesthesiology, Chung Shan Medical University/Chung Shan Medical University Hospital, Taichung, Taiwan; **Long-Yau Lin**, Professor/Doctor, School of Medicine/Department of Obstetrics and Gynecology, Chung Shan Medical University/Chung Shan Medical University Hospital, Taichung, Taiwan; **Hui-Chin Chang**, Lecture/Director, School of Public Health/Library and Evidence-Based Medicine Center, Chung Shan Medical University/Chung Shan Medical University Hospital, Taichung, Taiwan

Objectives: The study is designed to investigate the impact of inappropriate use of standard error of the mean (SEM) in place of standard deviation (SD) in four selected journals.
Methods: The difference in citation counts of four selected commonly used obstetrics and gynecology journals between the SD group and SEM group was tested by the Mann-Whitney U test. The relationship between the misuse rate and impact factor, immediacy index, or cited half-life was also evaluated.
Results: The frequency of inappropriate reporting of SEM was 13.60% for all 4 journals. The misuse rate was 22.68% in the *American Journal of Obstetrics & Gynecology;* 9.27% in *BJOG: An International Journal of Obstetrics & Gynaecology;* 7.44% in *Obstetrics & Gynecology;* and 2.9% in *Acta Obstetricia et Gynecologica Scandinavica,* in order of decreasing percentage of misusing SEM.
Conclusions: Inappropriate reporting of SEM is common in medical journals. The frequency of inappropriate reporting of SEM in the 4 obstetrics and gynecology journals exceeded 13%. An appropriate understanding and use of statistics is the most important part of using scientific articles particularly in the evidence-based medicine (EBM) context.

Poster Number: 120

Time: Monday, May 19, 3:30 PM – 4:25 PM

Information Future: Partnering with Medical Therapeutic Device and Applications Innovations

Jean P. Shipman, AHIP, FMLA, Director; **John T. Langell**, Director, Center for Medical Innovation; **Roger Altizer**, Adjunct Assistant Professor; **Tallie Casucci**, Innovation and Research Associate; University of Utah–Salt Lake City

Objectives: To help shape the future, a health sciences library, working with its health system and innovation center, houses students that develop medical therapeutic devices (MTDs), gaming and products, and health applications to build the inclusion of evidence-based knowledge into these devices. Such MTDs are a fairly new, yet vital, source of financial income with health care reform.
Methods: A needs assessment was conducted to determine how to build a creative, yet functional space, to enhance such MTD developments. Meetings with various stakeholders (students, faculty, librarians, physical plant staff, and architects) identified what types of space, equipment, and furniture were desired. A fundraising effort, working in partnership with development, is raising not only monetary support, but industry interest in the concept, which has led to industry mentors being identified for the students. A master plan is underway to create a workable and collaborative space for the students, industry leaders, faculty, and library staff.
Results: Stakeholders have benefited from this new partnership. The university located a receptive home for one of its newer departments; industry has a means of connecting with fresh ideas and student ingenuity; students have a familiar center and are able to access the expertise of industry mentors, faculty advisers, their fellow students, and librarians; and the health system has been able to benefit financially from the deliverables. Health sciences librarians have pushed their professional boundaries, through training and practice, to be relevant to an even broader constituency of users and have learned new subject areas as a result.
Conclusions: Rebuilding a public library space proved to be a little challenging, especially considering the original facility design. Transforming a public space into a public/private one required many changes and funding. Librarians can expand their scope of influence through supporting innovation and via inviting unique partners into their transformed physical space. MTD innovation and information is a natural duo, and through such combinations, not only has the health system benefited, but so have local industry and the community. Economic gains were realized with the library being an integral part of this new business model for health systems.

Poster Number: 121

Time: Monday, May 19, 3:30 PM – 4:25 PM

Information-Seeking Behaviour of Internationally Educated Registered Nurses in Saskatchewan

Maha Kumaran, Nursing and Biomedical Sciences Liaison Librarian, Leslie and Irene Dube Health Sciences Library, University of Saskatchewan, Saskatoon, SA, Canada; **Mary Chipanshi, AHIP**, Liaison Librarian, Library, University of Regina, Regina, SA, Canada

Objectives: Once internationally educated registered nurses (IERNs) are employed in Saskatchewan, they have access to library services resources through their own health regions and the province-wide online library called SHIRP. This study was undertaken to gain an understanding of the issues IERNs may face in accessing these libraries' resources to support their practice. Results of phase I indicated that most IERNs were not only unaware of the library resources but that there were barriers in accessing resources.
Methods: In phase I of the study, a qualitative survey questionnaire using Fluid Survey was developed and distributed to three health regions as a pilot study (Saskatoon, Regina, and Sunrise). Researchers are currently working on phase 2, where IERNs in all thirteen the Saskatchewan Health Region, excluding those who already participated in phase 1, will be interviewed using the same questionnaire used in phase 1. After ethics approval from each health region, flyers will be sent to health regions' administrators and nurse educators to forward to IERNs. IERNs who express an interest in participating will contact one of the researchers. To maintain consistency with respondent data a research assistant will conduct in-person or phone interviews and analyse the data.
Results: Results of phase 2, along with a comparison chart of phase 1, will be presented at MLA '14.

Poster Number: 122

Time: Monday, May 19, 3:30 PM – 4:25 PM

Information-Seeking and End-of-Life Decision Making: Future Directions for Medical Librarian Involvement

PJ Grier, Outreach and Access Coordinator, National Network of Libraries of Medicine, Southeastern/Atlantic Region, Health Sciences and Human Services Library, University of Maryland–Baltimore; **Susan LaValley**, PhD Student, Department of Community Health and Health Behavior, School of Public Health and Health Professions, State University of New York, Buffalo, NY

Objectives: Terminally ill patients and their caregivers face complicated choices about palliative services and end-of-life care, and desire authoritative information to assist with decision making. Self-directed attempts to procure and synthesize information into the decision-making process are increasingly important and relevant to future librarian outreach efforts. What choices are individuals making about end-of-life care, and are they using authoritative information resources?
Methods: To determine prevalence and types of end-of-life decisions, secondary analyses were conducted using the 2007 National Home and Hospice Care Survey (n=9,416). Descriptive statistics identified patient demographics and characteristics associated with the existence of living wills, advanced directives, health care proxies, and "do not resuscitate" orders (DNRs). To determine information seeking related to these same concepts, analysis of selected MedlinePlus pages about end-of-life topics was conducted to determine trends in usage.
Results: National survey data indicate approximately 59% of respondents had any kind advanced directive, 44% had a DNR order, 23% had a living will, and 9.5% had a health care proxy. Topic pages in MedlinePlus in related subjects (end-of-life issues, hospice, and advanced directives) saw an increase in page views every year from 2011 to 2013. Views of hospice and advanced directive topic pages increased 6-fold in that period, and views of end-of-life topic pages doubled.
Conclusions: Usage of informational resources about end-of-life topics has increased in the segment of the population utilizing this particular online resource, suggesting that these topics are of increasing interest and importance to a particular user population. Additionally, national data show that while some respondents have made decisions pertaining to end-of-life care (completing an advanced direction and/or DNR), there are still areas for increased engagement (completing a living will, naming a health care proxy). Medical librarians, particularly those who work with consumer/patient populations, can attempt to incorporate more informational interventions (displays, brochures, programs) that

highlight the existence of high-quality end-of-life informational resources that can assist caregivers and patients with end-of-life decision making.

Poster Number: 123

Time: Monday, May 19, 3:30 PM – 4:25 PM

Instruction Construction: Meeting the Unique Information Literacy Needs of Graduate Behavioral Health Students

Shanalee Tamares, Reference Librarian and School of Behavioral Health Liaison, Del E. Webb Memorial Library, Loma Linda University, Loma Linda, CA

Objectives: Supporting literature for the information literacy instruction of health sciences students often focuses on undergraduate medical and nursing students. Graduate behavioral health students present unique challenges, requiring a nuanced approach. This investigation explores whether visual, interactive controlled vocabulary exercises added to lecture can increase confidence and understanding of the topic, and engage doctoral marriage and family therapy students.

Methods: Beyond common instruction barriers such as lack of time within the curriculum and students' overestimation of their skills, graduate behavioral health students are frequently nontraditional students with widely varied ages and technical savvy. Their research topics can be quite disparate, benefiting from research in varied databases using different controlled vocabularies. Pre-instruction, first-year doctoral marriage and family therapy students were surveyed regarding their confidence using controlled vocabulary in searching. Visual and interactive exercises were integrated into instruction; students tagged an image, and suggested tags were visually displayed in a word cloud. Results and relation to controlled vocabulary concepts were discussed. A post-instruction survey documented student confidence of controlled vocabulary as well as students' reflections on the activity.

Results: Out of a class of 8, 7 pre-instruction surveys were filled out (1 incomplete). The pre-instruction survey indicated: 1 student felt very confident about using controlled vocabulary; 2 students were somewhat confident; 2 students scored themselves as not at all confident; and 1 scored that they did not know what controlled vocabulary is. Post-instruction, 7 out of 8 students completed the survey; 2 students felt very confident about using controlled vocabulary; and 5 felt somewhat confident. Post-instruction, no students scored themselves as not at all confident or unknowledgeable about controlled vocabulary.

Conclusions: Students' written reflections indicated that the activity helped them understand the concept of using controlled vocabulary. Further, many stated it elucidated the pros and cons of searching using text words. Future use of the activity will include more students from different programs in the School of Behavioral Health.

Poster Number: 124

Time: Monday, May 19, 3:30 PM – 4:25 PM

Integrating Library Resources into an Online Animal Research Protocol

Ben Harnke, Education/Reference Librarian; **Lilian Hoffecker**, Research Librarian; Health Sciences Library, University of Colorado Anschutz Medical Campus, Aurora, CO

Objectives: This poster will demonstrate how health sciences librarians were able to modify their institution's new online Institutional Animal Care and Use Committee (IACUC) protocol form to include resources for literature searching and provide external links to library guides.

Methods: Researchers proposing to use animals in the course of scientific investigation are required to complete an online protocol as part of their research review process. A major component of this protocol is to document the literature search used to verify that animal alternatives and welfare have been considered. Through an ongoing liaison with the IACUC administrative staff we learned that a new online protocol form was being developed. We asked to be involved in modifying this new form to better reflect library resources and to fulfill the more stringent literature search requirements now required by the US Department of Agriculture. Modifying the search section of the protocol allows us to better support researchers in their literature reviews and may create further opportunities for partnering with librarians.

Poster Number: 125

Time: Monday, May 19, 3:30 PM – 4:25 PM

Integrating Live Point-of-Care Searches into an Evidence-Based Medicine Curriculum

Rebecca Birr, AHIP, Library Manager, Health Sciences Library, Maricopa Integrated Health System, Phoenix, AZ; **Kathy Zeblisky, AHIP**, Medical Library Manager, Medical Library, Phoenix Children's Hospital, Phoenix, AZ; **Katherine McDonnell**, Chief Resident/Junior Faculty Hospitalist, Maricopa Medical Center Pediatric Residency Program, Phoenix Children's Hospital, Phoenix, AZ

Objectives: Integrating evidence-based medicine (EBM) into daily practice is an essential skill residents must attain. This poster examines librarian involvement with revising the EBM curriculum at a joint pediatric residency program. The existing EBM pediatric curriculum included monthly, resident-led, large group sessions with didactics on key EBM topics and application via patient/problem, intervention, comparison, outcome (PICO) question analysis.

Methods: The annual program review and conference evaluations revealed a gap between the intended outcome of the EBM curriculum and the residents' perceived abilities to integrate this knowledge into meaningful literature searches. Residents were surveyed at the beginning of the academic year to identify the barriers they face answering real-time clinical questions and the web-based resources they most commonly use. The Curriculum Committee, a resident-driven quality improvement task force, addressed this issue by revising the format of our EBM conferences to include small group, technology-driven, point-of-care clinical searches framed by the existing curriculum. One of the librarians sat on the Curriculum Committee during this process improvement. A second survey will be conducted toward the end of the academic year to assess the impact of curriculum changes and on residents' perceived abilities to integrate this knowledge into meaningful literature searches.

Results: For the initial survey, residents identified lack of time during patient care and accessibility to online resources through wireless devices as the most prominent barriers to point-of-care EBM searches. UpToDate and Google were the most commonly used online resources. The results of the second survey will be presented in this poster.

Conclusions: The task-force used information from the first survey to restructure EBM conferences. A technology session was offered to residents where librarians highlighted resources available on wireless devices that could be used for point-of-care searches. EBM conferences were reformatted to include: (1) resident-led didactic session on a key EBM concept and introduction of a PICO question, (2) small-group real-time searches on the PICO question, (3) discussion of the live search results with librarians, and (4) review of the quality and clinical relevance of selected article. Results of the second survey analyzing the residents' feedback on the curriculum changes indicated positive

improvements. Overall, residents saw librarian involvement as a positive experience. As a result of the curriculum modifications, the residents reported they were able to complete more meaningful searches, their knowledge and comfort level increased on the resources available, and resources used changed and expanded from just UpToDate and Google.

Poster Number: 126

Time: Monday, May 19, 3:30 PM – 4:25 PM

Internal Engineering: Erecting a New Media Infrastructure from the Ground up

Siobhan Champ-Blackwell, Health Sciences Librarian; **Andrew Plumer**, Outreach Librarian; **Stephanie Publicker**, Technical Information Specialist; **Katherine Chan**, Contractor; **Jamie E. Peacock**, Outreach Librarian; National Library of Medicine, Bethesda, MD

Objectives: Our objective was the development of a unified and streamlined new media workflow process that minimizes staff time and maximizes efficiency and return on investment. This poster explores the steps followed in establishing a division-wide new media outreach infrastructure to support our library's expanding online outreach endeavors.

Methods: In order to meet this objective, cross-divisional staff of a federal library formed an ad hoc social media team. The team developed a triad approach: breaking down new media tasks into operational, training, and creative processes. This approach led to the development of technical support tools, editorial policies, and internal best practices. The creation of this infrastructure allowed the formation of a unified approach to new media outreach that incorporated the unique goals of each branch in the division and addressed the distinct information needs of the diverse audiences served.

Results: The development of a social media infrastructure has yielded several key benefits. As a result of the process of documenting work flow and holding social media team meetings, knowledge flow between staff and information retention has greatly improved. Our knowledge audit of available resources provided a fresh perspective of available content at our library. In addition, the use of dashboard management system enhances our ability to discover new online resources for addition to web pages and databases. Our instructional guides aid in training of new interns and staff on the division's approach to new media. Lastly, reuse of evergreen tweets archived in an Access database saves staff time and allows staff to highlight resources evenly by tracking when they were last promoted.

Conclusions: We have developed a dynamic and scalable approach to social media using unique tools and strategies for managing accounts with 150 to 15,000 followers. Automation of messaging and process documentation saves staff time and energy to focus on engaging with followers.

Poster Number: 127
Time: Monday, May 19, 3:30 PM – 4:25 PM

International Health Research Sources: Citation Pattern Analysis Including the Use, Citation, and Sources for Data Sets

Young-Joo Lee, Nursing Librarian, Louis Stokes Health Sciences Library, Howard University, Washington, DC; **Virginia Pannabecker**, Health Sciences Librarian, Downtown Phoenix Campus Library, Arizona State University, Phoenix, AZ

Objectives: This pilot study analyzes citation patterns of international health (IH) research. The authors hypothesize that researchers use journal articles more than other resources as other public health literature mapping projects have shown. This study's objective is to identify key journals in IH and unique or common citation patterns in IH in comparison to areas like infectious disease or environmental health.
Methods: The authors selected research articles published in January 2013 issues of four IH journals: *Bulletin of the World Health Organization (BWHO), Health Policy and Planning (HPP), Lancet Infectious Diseases (LID),* and the *Journal of Health, Population and Nutrition (JHPN).* The criteria for journal selection were based on Core Public Health Journals Project version 2.0, Journal Citation Reports (JCR), and Scopus. Data were collected by compiling all citations used by research articles. In addition to journals, books, and other published sources, this study identifies cited sources of gray literature in IH and the extent to which Internet sources are used in formal IH research. With open data trends in mind, this study looks for the citation of data sets.
Results: Out of 1,246 total citations, 817 (66%) were journal articles, 210 (17%) were miscellaneous, 205 (16%) were books/monographs, and 14 (1%) were government documents. The most highly cited journal titles were *Lancet* (86 citations) and *BWHO* (33 citations). Two journals that the authors expected to have high citations, but did not, were *Lancet: Infectious Disease* and *American Journal of Public Health.* The poster will also include: (1) cited journals by subject, (2) publication date of citations, and (3) examination of the miscellaneous category for data set citations.
Conclusions: Journal articles remain the most highly cited source type for public health research, seconded by gray literature and web resources; then monographs and United States government documents. Gray literature and web resources include information provided by governments throughout the world. Compared to previous public health journal studies with journal article citation close to 90%, this study shows a lower percentage of journal articles (66%) relative to other source types. This study also showed lower citations of typically highly cited public health journal titles. Citation of data sets does not seem

common yet, but this is something to monitor regarding public health data sources. Future studies could look at whether availability of global online government sources and online translation tools may be resulting in greater use of multiple language sources.

Investigating the Feasibility and Interest in a Physical Therapy Humanities Journal

Anne Beschnett, Outreach Librarian; **Jonathan Koffel**, Clinical Information Librarian; Bio-Medical Library, University of Minnesota–Minneapolis

Objectives: To describe the authors' involvement in a physical therapy task force planning a new physical therapy humanities journal. This will include a discussion of questions asked and the help librarians were able to offer.

Methods: The authors were first approached by a physical therapy faculty member who was interested in creating a new journal dedicated to humanistic essays on physical therapy topics. They explained open access and university-based options and, shortly thereafter, were invited to join a task force of the American Council of Academic Physical Therapy formerly charged with investigating the interest, feasibility, and potential impact for such a journal. The authors' role was to provide information and expertise on how to create and manage an open access journal, identify similar journals that were already in publication, determine if and where similar articles were being published, and answer other questions as needed. The task force will present a final report to the council in mid-2014.

Poster Number: 129

Time: Monday, May 19, 3:30 PM – 4:25 PM

Is Their Foundation Solid Enough to Build on: An Investigation into the Information-Seeking Skills and Self-Efficacy Levels of New Nursing Students

Kimberly J. Whalen, Assistant Professor, Library Services; **Patricia J. Mileham**, Associate Professor, Library Service; Christopher Center Library Services, Valparaiso University, Valparaiso, IN

Objectives: To compare the information seeking skills and self-efficacy levels of new nursing students to their information-seeking skills and self-efficacy levels at the end of their first semester of coursework.

Methods: Researchers at a mid-sized, Midwest, faith-based university used a quasi-experimental non-equivalent control group pretest/posttest design to gather data from newly enrolled nursing students in a baccalaureate, masters, and doctorate in nursing practice program. Literature regarding confidence levels, self-efficacy, and information literacy skills was reviewed. Specific tools to assess confidence and self-efficacy of information literacy skills were explored. The 28-item Information Literacy Self-Efficacy Scale (ILSES) developed in 2006 by Serap Kurbanoglu was used in fall 2012, summer 2013, and fall 2013 to gather data from newly enrolled nursing students. Students (n=230) completed the ILSES at the start of their first semester enrolled in a nursing course and students (n=106) completed the scale again at the end of their first semester.

Results: Findings indicate newly enrolled nursing students have a positive perceived self-efficacy for information literacy. Responses to the question that rated students' overall confidence in the ability to locate information appropriate for assignments, projects, research, and papers using a range of sources was a mean of 2.815 (on a 4.0 scale) on the pretest and a mean of 3.27 on the posttest. Findings show little difference in students' self-efficacy for information literacy between baccalaureate (pretest mean 2.815; posttest mean 3.275), masters (pretest mean 2.83; posttest mean 3.32), and doctorate in nursing practice students (pretest mean 2.8; posttest mean 3.21). Scores show increased differences in self-efficacy for information literacy between traditional baccalaureate nursing students (pretest mean 2.87; posttest mean 3.445) and accelerated baccalaureate nursing students (pretest mean 2.66; posttest mean 3.67). Additional statistical analysis will be presented within the final poster.

Conclusions: Information literacy interventions throughout the first semester of coursework including conversations with a librarian, attending an information literacy class at the library, and being helped by a professor resulted in an increase in perceived information literacy self-efficacy at the end of the semester. The sample size of specific student population responses does limit the

generalizability of all findings. Additional research is planned to correlate self-efficacy for information literacy to actual information literacy skills.

Knowledge Is Power: Health Sciences Librarian and Advanced Practice Nurse Collaboration to Strengthen Nurses' Evidence-Based Practice

Lorraine Porcello, Branch Librarian, Basil G. Bibby Dental Library and John R. Williams Health Sciences Library, University of Rochester Medical Center, Rochester, NY; **Joanne Layton**, Nurse Educator, Department of Education, Highland Hospital, Rochester, NY; **Bonita Archer**, Branch Library Assistant, Basil G. Bibby Dental Library and John R. Williams Health Sciences Library, University of Rochester Medical Center, Rochester, NY

Objectives: Present education program, "Knowledge Is Power," developed collaboratively by health sciences librarian (HSL) and advanced practice nurse (APN) to increase nurses' use of evidence-based practice (EBP) resources and processes.
Methods: Implementation: An EBP education program was developed collaboratively by the HSL and APN to increase nurses' knowledge and ability to search, access, critically appraise evidence, and apply that evidence to practice. Nurses provide current clinical practice scenarios and questions. The HSL provides expertise conducting searches, retrieving literature, and identifying EBP resources that are readily accessible to nurses. The APN provides knowledge and expertise in research processes and translating evidence to practice. The HSL and APN lead interactive discussions with nurses and critically appraising the evidence.
Results: Evaluation: HSL experienced an increased number of nurses requesting literature searches and appraisal of evidence consults to assist with research projects. The APN noted an increase in implementation and evaluation of practice change, and unit-based interactive education sessions.
Conclusions: The collaborative education offering by the HSL and APN in a Magnet community hospital has increased nurses' knowledge, exposure, access, and use of EBP processes and resources. The integral partnership between HSL and APN addresses and removes some barriers to implementing EBP. Partnerships between HSL and nurses are integral to validating or changing practice that is evidence based. Community hospitals seeking Magnet status or renewal can develop or use this education program to educate staff about EBP.

Poster Number: 131

Time: Monday, May 19, 3:30 PM – 4:25 PM

Leading the Way to Building a Foundation for College-Wide Workplace Wellness Programs: A Model for Health Sciences Libraries

Shalu Gillum, AHIP, Public Services Librarian; **Michael Garner, AHIP**, Medical Informatics Librarian; **Deedra J. Walton, AHIP**, Electronic Resources Librarian; **Nadine Dexter, AHIP**, Director, Medical Informatics, and Director; **Pamela R. Herring, AHIP**, Electronic Resources Librarian; **Kerry McKee**, Instructional Medical Librarian; Harriet F. Ginsburg Health Sciences Library, University of Central Florida College of Medicine, Orlando, FL

Objectives: To investigate the use of personal wearable devices in health awareness and workplace wellness.

Methods: The library is conducting a study on the use of personal wearable devices to promote workplace wellness. The library applied for and received a $3,000 award from the National Network of Libraries of Medicine (NN/LM), Southeastern/Atlantic Region (SEA), to purchase 30 Fitbit activity trackers. The study runs from August 2013 to April 2014. Study participants were selected from all departments from within the college. Each participant was provided with a Fitbit. Participants were divided into teams and instructed to track their daily step counts and report weekly totals to their captains. Participants attend monthly lunch-and-learn sessions, which include guest speakers discussing various health topics, and an introduction to the library's LibGuides on consumer health information and workplace wellness. The library will use these monthly sessions to introduce study participants to the tools and skills to find reliable consumer health information, including using MedlinePlus and evaluating health websites.

Results: The study is currently under way and final results will be analyzed and reported by the end of April 2014.

Conclusions: Health sciences libraries can be leaders for introducing new technologies to their users. Through this study, our library hopes to disseminate authoritative health information, while at the same time promoting workplace wellness through the use of innovative technology.

Poster Number: 132
Time: Monday, May 19, 3:30 PM – 4:25 PM

Leisure Reading: Validating Selection Decisions and Identifying Reader Preferences

Emma Cryer, Associate Director, Collection Services; **Elizabeth Berney**, Service Desk Manager; **Barbara Dietsch**, Serials/Acquisitions Manager; **Patricia L. Thibodeau, AHIP, FMLA**, Associate Dean, Library Services and Archives; Medical Center Library & Archives, Duke University, Durham, NC

Objectives: Leisure reading collections are often part of a health sciences library. Ensuring that the materials selected for readers are relevant to the audience is critical due to limited collection budgets and the cost of maintaining a print collection. The objective of this study was to determine if the selection of materials matched user interests based on circulation statistics.
Methods: The leisure reading collection focuses on nonfiction works about societal, medical, and research issues, with very few light-reading titles. Circulation statistics were collected back to 2004. It quickly became evident that while some titles were heavily used, others never circulated. In order align selection decisions with readers' preferences, the circulation data were analyzed by genres and topics in a number of ways: titles with high or zero loans, all acquisitions over the past three full years, and much older titles that had recently circulated. After a brief initial review of books within the broad categories, the team compiled a standardized list of genres and subject categories using standard lists of terms and headings to ensure the analysis would be consistent across the collection.
Results: The selection of genres has dropped to seven from fifteen for titles prior to 2010. One new genre was not popular. Narrative or creative nonfiction has remained popular over the years along with histories and autobiographies, and align with high use. Most discontinued genres had low loans except for fiction. The collection represented fifty-six topics; forty-eight topics were selected prior to 2010; recent purchases reflected thirty-one topics including ten new ones. Twenty-five topics have not been selected recently. Twelve topics have high usage over time. Other topic usage varied greatly.
Conclusions: There appears to be preferences for genres, but topics seem more variable. One hypothesis is that best sellers or those with strong reviews reflect the highest use, but that was beyond the scope of this study. While the genres being selected align with high usage, a question arises as to whether some of the older highly used topics should be reconsidered.

Poster Number: 133

Time: Monday, May 19, 3:30 PM – 4:25 PM

Library as Place: Why Our Users Still Come!

Donna S. Gibson, Director, Library Services, Library, Memorial Sloan Kettering Cancer Center, New York, NY; **Amy Draemel**, Supervisor, Document Delivery Services, Library, Memorial Sloan-Kettering Cancer Center, New York, NY; **Marisol Hernandez**, Senior Reference Librarian, Library, Memorial Sloan-Kettering Cancer Center, New York, NY

Objectives: With the increased use of mobile devices and the availability of information anywhere, anytime, what activities or tasks does our user community engage in while at the library?

Methods: (1) Interviews with on-site clients conducted randomly 3 times a day for 2 defined periods of 8 weeks each (May/June and September/October). (2) Four times a day physical count of client-workstations: availability/usage (same periods of time as above). (3) Documented observations by library staff, specifically the reference team. Their workspace is situated in the front of the library and provides them with a clear view of client workstations and soft seating areas. They are in a unique position to observe and note users' experience not collected in survey interview. Setting: A medical and research library that serves a 469-bed hospital and 146 laboratories. The library also supports the information needs of a graduate program. Population: All users who use the library's physical space including physicians, administrative support, researchers, nurses, patients and their caregivers, students, and other health care professionals.

Results: Our on-site interviews were conducted randomly three times a day based on specific questions. Respondents' answers were noted using SurveyMonkey. Data collection from May/June and September/October 2013 reflects similar outputs, and we are in the process of collecting data from January/February 2014. The counts of client workstations (usage/availability) will end February 28, 2014, and library staff observations will be completed shortly after this date.

Conclusions: At the time of updating this abstract, we are unable to share our conclusion since we are still gathering data.

Poster Number: 134

Time: Monday, May 19, 3:30 PM – 4:25 PM

Library Website Rx: A Case Report Using Responsive Design

Amy E. Donahue, AHIP, User Education/Reference Librarian; **Linda LeMahieu**, Web Services Librarian; MCW Libraries, Medical College of Wisconsin, Milwaukee, WI

Objectives: The use of mobile devices to access the Internet has seen incredible growth, but it is clear the future will still include larger screens. Users expect similar web experiences regardless of the device they are using. As an academic health sciences library serving users from medical students to basic science researchers to clinicians, all of whom depend on our electronic resources, it is imperative that our website be accessible regardless of the device used. This poster will describe the redesign of our library's website through responsive web design (RWD), an approach that allows the creation of one site that optimizes itself when viewed on different screens.

Methods: This case study includes an RWD overview, library content migration plans, design decision justifications, and the development of a plan for future evaluation and improvement. The migration plans are overseen by our organization's web services department, and include a timeline and a standardized process that is also being used by other public websites within our organization. Usage data (from Google Analytics) and the results of a card-sorting exercise with library staff provide base information for the reorganization of current content, and design decisions are further supported through library staff discussion and literature searches identifying best practices for RWD. Evaluation of the site's new design will continue through monitoring Google Analytics data, along with feedback collected from all users using methods that may include surveys, comment forms, and/or focus groups.

Results: As the library's website is one of 16 sites within the organization that generate 50% of all web traffic, it will be in the first migration group for 2014. Usage data and the card-sorting exercise have identified pages that can be deleted and areas where our current website can be streamlined for more efficient access on different devices. Staff discussion and the results of the literature searches are being used to finalize details such as content and layout of the home page as well as the architecture of the rest of the site.

Conclusions: RWD is an efficient way to develop a website that is accessible on a variety of devices without the need for separate mobile sites or apps. For this health sciences library, the integration of RWD into a complete website redesign provided an opportunity to take an in-depth look at usage, identify key areas for reorganization, and put evaluation channels into place for collecting ongoing feedback.

Poster Number: 135
Time: Monday, May 19, 3:30 PM – 4:25 PM

Library-Sponsored, Synchronous Online Instruction: Meeting the Educational Needs of Users Near and Far

Susan Smith, AHIP, Reference Librarian/School of Health Professions Liaison; **Lee A. Vucovich, AHIP**, Assistant Director, Reference Services, and Assistant Professor; **Emma O'Hagan**, Reference Librarian/School of Nursing Co-Liaison; Lister Hill Library of the Health Sciences, University of Alabama–Birmingham

Objectives: To report patrons' usage and experiences using an academic health sciences library's synchronous online library instruction service through class evaluation feedback and follow-up survey responses to help guide future online instruction, reference, and outreach services

Methods: Lister Hill Library of the Health Sciences (LHL) serves a diverse population of students (on-/off-campus and distance), faculty, staff, researchers, and clinicians in 7 professional schools as well as biomedical researchers, university-wide centers, and the university hospital and affiliated clinics. The academic units served saw a 27% increase in the number of students enrolled exclusively in online courses between fall 2010 and fall 2013 semesters. For several years, LHL has offered weekly in-person "Express Training" classes on various topics. In fall 2011, the library began exploring options for expanding these classes into the online environment and licensed the mid-tier FuzeBox package. A class registration system and workflow were established, librarians were trained, and a class evaluation survey was created. In spring 2013, LHL added video conferencing to its online classes. Results of class evaluations and a follow-up survey will be presented.

Results: Approximately 300 individuals representing a wide range of campus units and geographic locations have registered for the library's online classes. Results of the class evaluation survey (n=77) indicate attendees greatly appreciate the online classes. Nearly 100% of attendees found the classes useful. Most participants attended the online classes because they preferred the online environment or because the format worked well with their schedules. Ninety percent had a positive technical experience. Several attendees offered helpful suggestions for improvement. Responses to a follow-up survey of registrants revealed additional data percentage of repeat attendees, reasons for non-attendance, how attendees applied what they learned, and usage of support materials provided after classes including class recordings. Lessons learned since starting this new service include audio/connection, scheduling, cost-savings, attendee engagement, and statistics tracking issues, and adapting instruction to an online format.

Conclusions: Libraries considering adding synchronous online instruction as a

service should be encouraged by the success of LHL's online classes. Future service possibilities utilizing web conference software could include online reference consultations or virtual office hours.

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Time: Monday, May 19, 3:30 PM – 4:25 PM

Literature Analysis as Medical Education: Librarians Facilitate Book Discussion Elective

Deidra Woodson, Metadata and Digitization Librarian; **Donna F. Timm, AHIP**, Head, User Education; **Dee Jones, AHIP**, Head, Cataloging; Health Sciences Library, Louisiana State University Health, Shreveport, LA

Objectives: Medical librarians wanted to explore a different approach for teaching medical students. They recognized that literature analysis is an important educational method that helps to develop critical thinking and reasoning skills. Since both abilities are essential for physicians, the librarians decided to implement a book discussion elective for first-year medical students.
Methods: The librarians submitted a class proposal to the curriculum committee. Upon approval, they selected two books for the course, based on reviews, subject matter, and format. One book was a collection of essays written by third-year Harvard medical students about their initial experiences with patient care, and the other was a collection of essays about health care professionals in rural medical practice. In the first class meeting, the instructors explained the goals and objectives, described the books, and interacted with the students informally to create a comfortable atmosphere. During the next two class sessions, each student randomly selected questions and led discussions based on the selected topic. For the first book, the librarians drafted the questions, and, for the second one, both the instructors and the students submitted discussion topics.
Results: The librarians limited the class size to ten students to foster a nonthreatening environment for in-depth group discussions. Eight students registered, and all provided insightful comments and opinions about the topics addressed. Even the more reserved students enthusiastically participated in the dialogue. The format of the books proved to be ideal for this type of discussion because the collections of essays and stories provided a variety of clinical experiences and ethical dilemmas for the students to contemplate. The students' evaluations were overwhelmingly positive, and some even suggested book titles for future classes.
Conclusions: This literature analysis course encouraged students to consider practice challenges that are not normally addressed in the standard curriculum. The students were interested in the unique content of this elective, as evidenced by their animated participation and level of preparation. Based on the favorable evaluations, the librarians will continue to offer this elective for future first-year medical students.

Poster Number: 137

Time: Monday, May 19, 3:30 PM – 4:25 PM

Local Research Resource Discovery and Sharing: How Will eagle-i Fly?

Karen L. Hanson, Knowledge Systems Librarian, NYU Health Sciences Library, New York University Langone Medical Center, New York, NY; **Alisa Surkis**, Translational Science Librarian, NYU Health Sciences Library, New York University Langone Medical Center, New York, NY; **Sidney C. Bailin**, President, Knowledge Evolution, Washington, DC; **Daniela Bourges-Waldegg**, Director, Informatics Technology and Architecture, Harvard Catalyst, Harvard Catalyst | The Harvard Clinical and Translational Science Center, Harvard University Medical School, Boston, MA; **Sophia K. Cheng**, Technical Lead, eagle-i Project, Harvard Catalyst ' The Harvard Clinical and Translational Science Center, Harvard University Medical School, Boston, MA; **Marc Ciriello**, Project Manager, Harvard Catalyst ' The Harvard Clinical and Translational Science Center, Harvard University Medical School, Boston, MA; **Theodora A. Bakker**, Associate Director, Knowledge Informatics; Associate Director, Systems and Technology, NYU Health Sciences Library, New York University Langone Medical Center, New York, NY

Objectives: eagle-i was developed to facilitate cross-institutional discovery of research resources that, when shared, could result in researchers saving time and money. There are, however, many resources meant only for researchers within an institution or that would make little sense to share beyond an institution. Modifications of eagle-i were undertaken to accommodate an additional use case of sharing resources only intra-institutionally.
Methods: The New York University (NYU) Health Sciences Library worked with the eagle-i development team and an external contractor to facilitate local sharing of research resources. The library identified two features that would make this internal use case viable. First, a "publish locally" option was added to the software workflow, restricting visibility of that resource to authenticated local researchers. This additional state allows resources to be published locally only or both locally and externally, in which case they are made available for harvesting by the national eagle-i search tool. Second, the system would need to automatically authenticate anyone in the institution's community to ensure that locally published resources would only be visible to authenticated, local researchers while avoiding the additional barrier of users having to create a distinct institutional eagle-i login.
Results: The modifications introduced to support local sharing were included in a full release of the eagle-i code. The library was the first institution outside of Harvard to contribute code to the main eagle-i codebase. The modifications allowed the system to broaden its use cases, and potentially facilitate intra-institutional sharing and collaboration.

Conclusions: Custom modifications to the eagle-i system allowed the NYU Health Sciences Library to gain internal support for the implementation of the tool. The library was able to share these changes and make a useful contribution to the core eagle-i system.

Poster Number: 139

Time: Monday, May 19, 3:30 PM – 4:25 PM

Making It Easy: Green and Sustainable Library Event Planning

Christy Jarvis, AHIP, Information Resources Librarian; **Joan Marcotte Gregory, AHIP**, Associate Director, Resources and Facilities; **Jeanne M. LeBer, AHIP**, Associate Director, Education and Research; Spencer S. Eccles Health Sciences Library, University of Utah–Salt Lake City

Objectives: Our libraries host numerous events and conferences each year. These events and conferences can have a significant impact on the environment in terms of energy, waste, and transportation. By making smarter choices when planning events, we can help build a greener, more sustainable future and influence others to do the same.

Methods: Using tools made available by our campus sustainability office, this academic health sciences library successfully planned and hosted a green MLA chapter conference using environmentally-friendly practices in the following areas: food, waste, transportation, marketing, energy, and innovation. Notable green practices employed at the conference included offering a carbon offset program, distributing reusable water bottles, having a digital-only poster session, supplying public transit passes to attendees, offering virtual attendance to out of town members, and handling registration, announcements, and conference guides electronically. Conference registrants were invited to participate in green efforts by recycling paper and aluminum, utilizing mass transit, minimizing laundering of hotel linens, bringing tote bags from home, and donating funds to plant trees to offset travel-related carbon emissions.

Results: The host library achieved a gold certification from the campus sustainability office for achieving benchmarks in key areas of environmental concern. The conference promoted awareness of environmental issues and empowered participants to minimize their impact on the planet. Registrant donations allowed the planting of 100 trees, sequestering up to 9,000 pounds of carbon dioxide pollution, and offsetting over 18,000 air miles associated with travel to the conference.

Conclusions: Tools, steps, and strategies for successfully greening events and professional meetings provided guidance throughout the planning process. Creative and innovative ideas were implemented when "business as usual" threatened to derail greening efforts. Educating attendees and encouraging participation contributed to a successful green conference. The process is easy, achievable, and replicable in many different settings.

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Time: Monday, May 19, 3:30 PM – 4:25 PM

Measuring Nursing Faculty Impact: Web of Science versus Scopus

Kimberly R. Powell, Life Sciences Informationist; **Shenita Peterson**, Life Sciences Informationist; Woodruff Health Sciences Center Library, Emory University, Atlanta, GA

Objectives: To compare Web of Science™ and Scopus™ databases for tracking faculty productivity and reported impact. Our library currently offers a Web of Science-based service to track faculty impact. However, certain fields may be under-reported due to inadequate publication coverage. As a competitor database, Scopus was identified to provide comparison for title coverage and reported impact.
Methods: The 2012 School of Nursing faculty was used as a case study for comparing faculty impact metrics available from each database. Using full names, name variations, and available curricula vitae, career publication searches were conducted by two independent searchers in both Web of Science and Scopus. In each database, collected results were limited to original research as designated by the provided labels of article, conference proceedings or proceedings paper, and review. Individual faculty impact such as publication count, citation counts, and H-index were recorded from each database. Journal coverage was also analyzed and compared for quality and impact measures such as referred status, MEDLINE inclusion, impact factor, and SCImago journal rank.
Results: Our analysis showed Scopus provides a 20% increase in coverage for faculty publications with an accompanying increase in citation counts. This wider coverage resulted in an equivalent or higher faculty impact for 95% of the included faculty, as measured by the H-index. However, this increased coverage resulted in 13% lower journal impact as measured by SCImago journal rank. This trend persisted across the majority of faculty ranks and position titles.
Conclusions: In comparison to Web of Science, Scopus provided wider coverage for School of Nursing publications and a subsequently reported higher individual faculty impact. However, increased coverage also resulted in lower overall journal impact of faculty publications. When presented to key administrators, a decision was made to continue with the Web of Science-based service, rather than re-align the service with Scopus-based data. Differences in the journal impact metrics available between the two databases and the compatibility of such metrics across the academic campus heavily influenced decision making.

Poster Number: 141

Time: Monday, May 19, 3:30 PM – 4:25 PM

Medication Safety: A Librarian's Expanding Role for the Future

Mary E. White, Directory, Library Services, Drug Information Services, Kaiser Permanente Medical Offices, Downey, CA

Objectives: The number of medication safety issues has exploded over the past five years. In 2012, hundreds of prescription drugs were recalled due to safety issues or became unavailable as a result of shortages due to lack of raw materials. This poster will examine the role of the drug information librarian in the organization's shortage/recall management process.

Methods: Medication safety is an important issue for the Kaiser Permanente providers. When prescription drugs are recalled or in short supply, it is important to locate and supply providers with the accurate and timely information they require to make critical decisions on new treatment options. Often there are very few alternative drugs that that can be substituted for patients with multiple disease states. The librarian must first understand the patient's clinical status and then search the literature for possible drug alternatives. The librarian searches multiple clinical databases to ensure comprehensive results are documented. These databases include: PubMed; EMBASE, International Pharmaceutical Abstracts (IPA), and Reactions, in addition to internal databases.

Results: In 2013, there were over 240 medication safety issues distributed by the US Food and Drug Administration (FDA). The Kaiser Permanente MedSafety Alert Team consists of pharmacists, data quality coordinators, pharmacy analysts, and the drug information librarian. The team reviews each FDA MedWatch Alert for a number of issues. The team summarizes each MedWatch Alert and determines which clinical specialties might be affected. The MedSafety Alert team assesses the current knowledge regarding the identified drug. The team reviews the drug package inserts, analyzes the literature searches the librarian has completed, as well as identifies the formulary status of the drug. The drug information librarian works with the data quality analysts to identify any potentially helpful information from the gray literature that might be used to complete the MedWatch Alert worksheet. In addition, the team contacts the drug manufacturer to obtain any additional information. Finally, the MedSafety Alert Team determines if the drug is a high- or low-value drug by identifying the potential number of patients involved or the severity of the safety issue.

Conclusions: The Kaiser Permanente Drug Information Services now provides a systematic approach in dealing with medication safety issues. Collaboration between Kaiser Permanente pharmacists, data quality coordinators, pharmacy analysts, and the drug information librarian allow a thorough review of medication safety issues and potential resolutions. Kaiser Permanente physicians are presented with a comprehensive review of the clinical literature that is

assimilated into a concise package to allow for timely, accurate, accessible information in order to make effective clinical decisions based on each patient population.

Poster Number: 142

Time: Monday, May 19, 3:30 PM – 4:25 PM

Rebar: Reinforce Your Career with Self-Mentoring

Xan Goodman, AHIP, Health and Life Sciences Librarian, University Libraries, University of Nevada–Henderson

Objectives: This research is interested in discovering the array of self-mentorship strategies librarians use to reinforce their careers, in the same way that rebar helps to reinforce steel. Librarians who may or may not have received formal mentoring in health sciences or medical librarianship will be compared to self-mentorship strategies these librarians use to build their careers.

Methods: Descriptive statistics will be collected from survey responses. A survey will be sent to MEDLIB-L and other regional medical library group email discussion lists to gather responses. MLA assigns mentors to new conference attendees and to those going through the Academy of Health Information Professionals process. This research is curious about the effectiveness of those mentor relationship and how librarians supplement the formal structures of mentorship with self-mentoring strategies. Mentorship is widely seen as an essential tool in any career tool box. New librarians find guidance through mentorship on how to construct their career. However, beyond formal mentorship relationships, librarians are ultimately responsible for their own career development, this research seeks to uncover the informal self-mentoring strategies developed by librarians support their career advancement.

Results: A survey was sent to the MEDLIB-L list and several other lists for health sciences and medical librarians between December and January 2013. A total of forty-four respondents began the survey, and forty-three respondents completed the survey. Preliminary data indicate that few are take advantage of the formal structures of mentor services offered at the MLA national level for both the academy and the meeting mentor program, and few librarians are engaged in mentor services offered at the chapter level of affiliate groups. The numbers for the survey however were too small to gather any real statistical significance. Logic was used to guide respondents who answered "yes" to having had either: an academy mentor, MLA meeting mentor, or an affiliated chapter mentor to a question about effectiveness of their mentor. Response totals were for each of the effectiveness categories was statistically low enough to indicate no statistical significance.

Conclusions: Self-mentoring strategies were described in terms of professional development activities and in terms of self-mentoring activities that go beyond professional development to create a toolbox of success for librarians. Responses to the question, "What types of self-mentoring strategies do you participate in?," uncovered a need for the researcher to better define "self-mentoring" in a manner that distinguishes these types of activities from standard professional development.

Poster Number: 143

Time: Monday, May 19, 3:30 PM – 4:25 PM

Rip and Renew: Renovating Our Brand from the Ground up

Beverly Murphy, AHIP, Assistant Director, Communications and Web Content Management; **Elizabeth Berney**, Service Desk Manager; **Jolie Braun**, Assistant Director; **Virginia R. M. Carden, AHIP**, Administrative Research Librarian; **Emma Cryer**, Associate Director, Collection Services; **Adrianne Leonardelli**, Research and Education Librarian and Liaison, Duke School of Nursing; **Patricia L. Thibodeau, AHIP, FMLA**, Associate Dean, Library Services and Archives; Medical Center Library & Archives, Duke University, Durham, NC

Objectives: The objective of this poster is to chronicle the process the library undertook in revamping its marketing and branding strategies to strengthen its presence within the medical center community.

Methods: After extensively updating the website architecture and design, the library decided to replicate the website branding across other materials with a standard color palette and consistent look and feel. A marketing strategies plan was developed identifying the following areas that needed attention: standardization and scalability of certain design elements, choice of photographs and images, writing style and professional presentation, process for editing/reviewing content, revision of publication and web guidelines, and marketing distribution. The library will explore opportunities to connect this plan to the institution's missions and strategic plan.

Poster Number: 144

Time: Monday, May 19, 3:30 PM – 4:25 PM

The Matas Library, School-Based Health Center (SBHC) Youth Advisory Committees, and Health Information-Seeking Behavior

Elaine R. Hicks, Education/Health Literacy Librarian, Rudolph Matas Library of the Health Sciences, Tulane University, New Orleans, LA; **Allyson Mackay**, Research Assistant, Inter-university Consortium for Political and Social Research (ICPSR), University of Michigan–Ann Arbor

Objectives: To explore the information-seeking behaviors and needs of youth needs in a school based health center setting in order to develop a training program that will increase the likelihood that youth will search for authoritative health information.

Methods: An institutional review board (IRB)-approved formative evaluation process using focus groups was designed to elicit information seeking behaviors and needs among members of youth advisory committees (YAC) linked to five school-based health centers in Orleans Parish. A literature search of information-seeking behaviors of youth was conducted by a master's of public health student. The IRB approval process included obtaining letters of support from both medical directors and school administrators, developing a recruitment process and documents, and a process to obtain parental consent.

Results: Award products included an IRB-approved research protocol, a literature review, and relationships with school-based health center and school administrators. Meeting the ethical and methodological requirements to obtain IRB approval expended all of project time to the exclusion of being able to conduct the research. A positive result is that co-leaders are well versed in research terminology and IRB standards and have current Collaborative Institutional Training Initiative (CITI) certifications. An effective strategy to reach youth was working with a social worker (direct gatekeeper) who regularly convened a TAC. A negative result is that focus groups were not conducted during the project period.

Conclusions: Ethical considerations and requirements of working in a school setting created unanticipated barriers to project implementation. The project required full-time outreach staff and mature relationships with administrators within partner organizations. It may be easier to ethically interact with youth in a young adult group affiliated with a public library. The Matas Library will seek to continue the project as a practicum-partnership with the Tulane University School of Public Health, which is involved in training students to conduct social/behavioral research.

Poster Number: 145

Time: Monday, May 19, 3:30 PM – 4:25 PM

The Writers BLOC: A Fun Writing Development Group to Help Nurses and Other Health Professionals Write for Publication

Susan Keller, Medical Librarian, Medical Library, Children's National Medical Center, Washington, DC; **Eileen P. Engh**, Manager, Nursing Research & Development Programs, Nursing Research and Quality Outcomes, Children's National Medical Center, Washington , DC

Objectives: To determine if providing a writer development group to novice authors using both traditional and novel methods will increase the number of manuscripts nurses and other health professionals submit for publication. The overall success of the approach will be evaluated at the six-month and one-year time points.

Methods: Nurses and other health professionals who wish to write for publication have been identified and invited by the medical librarian to join the writer development group. The librarian facilitates the program, the Writers BLOC, and adjusts the program content based on the interests and needs of the members. Methods, traditional:

- Didactic session were offered and topics included: "ethics of authorship," "deciding on your message," "finding/making time to write," "plagiarism," "creating the outline," "choosing a target journal," "searching the literature," "submitting the manuscript," and "making revisions."
- Writers discuss progress and barriers on their individual projects during the group sessions.

Methods, novel:

- Story cubes to encourage creative associations.
- Art therapy techniques to create a "writing ritual."
- Music therapy techniques to stimulate creativity
- Group members are encouraged use the website "StickK" (www.stickk.com) to help them "stick" to their commitment to write.

Results: Preliminary results: Attendance has varied between 22 to 8 with a mean of 10. After 6 months, an interim evaluation survey was sent to 27 unique individuals who had attended at least one Writers BLOC meeting. Most members (14/17) have decided on authorship. A minority (6/18) has finished crafting a

main message. A significant majority, however, has either decided on a target journal or has a list of potential target journals in mind (17/19). One-third of the respondents (6/18) have started working on a rough draft. Most respondents (6/17) have not used the StickK website.

Poster Number: 146

Time: Monday, May 19, 3:30 PM – 4:25 PM

Library: A Bridge Connecting Biomedical Science, Education, Clinical Practice, and Community

Lyubov L. Tmanova, Translational Science Librarian, Samuel J. Wood Library and C.V. Starr Biomedical Information Center, Weill Cornell Medical College, New York, NY; **Paul Albert**, Assistant Director, Research and Digital Services, Weill Cornell Medical Library, Weill Cornell Medical College, New York, NY; **Drew Wright**, Research Librarian, Weill Cornell Medical Library, Weill Cornell Medical College, New York City, NY

Objectives: To develop research support to clinical and translational scientists as well as contribute to the establishment of collaborative research partnerships among medical researchers, clinicians, and the community.

Methods: An environmental scan and assessment survey were performed to determine the research needs of the translational scientific community. Data obtained from the previous studies and university-specific resources were used to identify key constituencies, develop a catalog of potential services, and create marketing plans for research support services to the translational science researchers. Research support entities, services, and informational resources were established to support the translational science researchers. The translational science librarian serves in the role of ambassador for the communication and translation of scientific biomedical informatics information resources to translational science researchers and contributes in the development of collaborative research partnerships among diverse scientific, industrial, and administrative entities. Thus, a model for providing research support to the translational science researchers, clinicians, and community was developed.

Results: Analysis of data from the environmental scan and assessment survey has shown challenges in finding subject-specific, research and laboratory, and training resources; research collaborators; funding opportunities; and pathways for communicating of scientific findings. Most of the survey respondents were engaged in oncology, cell and molecular biology, developmental biology, and neuroscience research. The translational and clinical science research enterprise, clinical and translational educational program, administration, and community were defined as entities for information translation, knowledge transfer, information, and data management support. The translational research librarian and research and scholarly communication support team are vital elements in channeling information, knowledge, resources, and services to the translational and clinical scientific community.

Conclusion: Biomedical literature informatics, biotechnology information, translational research and development, publishing, research enterprise, and

clinical and translational educational program are platforms for the provision of research support services to translational scientists and students. The translational science librarian mediates the integration of biomedical informatics resources into the educational curriculum and contributes to the development of biomedical informatics core competencies for translational investigators. The translational science librarian is an instrumental link in the communication channel among basic science researchers, clinicians, and community members, which facilitates development of cross-disciplinary cooperation and collaboration. In addition, the translational science librarian mediates regulatory information (institutional review board, biomedical data policy, intellectual property agreements, and National Institutes of Health open access policy) to scientists. Thus, the translational science librarian and the research and scholarly communication support team provide targeted support for the clinical and translational scientific community and advancement in translational research.

Poster Number: 147

Time: Monday, May 19, 3:30 PM – 4:25 PM

Wait. A Millennial Said What about Technology?

Jenny Pierce, AHIP, Public Services Librarian; **Kevin R. Block**, Information Management Librarian; **Micki McIntyre**, Information Management Librarian; **Lisa M. Price**, Librarian/Computer Lab Manager; **Janice K. Skica**, Campus Library Director; Health Sciences Library, Rowan University School of Osteopathic Medicine, Stratford, NJ

Objectives: Library staff is interested in how incoming students view and understand what is commonly called "technology" and its relation to the library. For this research question, technology would include devices students use (laptops, smartphones, e-readers), how they use those devices for social interaction and learning (Facebook, Foursquare, Twitter), and how they feel about connecting with the library through technology.

Methods: An online survey was created using SurveyGizmo. The survey ran for the month of October. Basic demographic information was collected. Participants were broken down into incoming medical students and biomedical graduate students. Biomedical graduates were further categorized by degree. Questions were designed to find information on types of devices owned by students; how those devices are used; what level of knowledge students have about their device; what types of social media students use; what is the level of e-reader use; at what point does the respondent adopt new technology; what the students overall comfort using technology is; and what services they would like the library to provide around technology. The survey was marketed to students via email, Blackboard posting and Blackboard email, and onsite posters.

Results: The survey ran from 10/01/13-01/11/13. There were 71 respondents (34%) out of a potential 210; 162 are from the School of Osteopathic Medicine (SOM) and 48 from the Graduate School of Biomedical Sciences (GSBS). By affiliation, the largest group was Rowan SOM medical students (73.2%), followed by GSBS master's students (18.3%), then GSBS PhD students (7.0 %.). Some highlights of our results: they use IOS twice as much as Android for smartphones and tablets, but they use PCs more than Macs. Twenty-eight percent (20) own e-readers, and another 21% (15) have e-reader apps (15) on their tablets. They use them for both leisure reading and for textbooks.

Conclusions: Technology is a fuzzy term. For this research, technology included the devices students use and how they feel about connecting with the library through those devices. The students are split when asked how they adopt technology: 32% (23) answered they usually take a while, another 36% (26) feel they are early adapters. The top 3 library services they would be likely to use are: using medical apps, reading e-books, and checking the library hours. This was our first survey of this kind. Going forward, we plan to use the information to evaluate library services.

Poster Number: 148
Time: Monday, May 19, 3:30 PM – 4:25 PM

When Flipping Flops: Piloting a New Method for Evidence-Based Practice Instruction

Heather L. Brown, AHIP, Head, Access Services, McGoogan Library of Medicine, University of Nebraska Medical Center, Omaha, NE

Objectives: With a considerable amount of information to teach in a limited amount of time and a desire to engage students in new ways, many librarians have started to utilize the flipped model of classroom instruction. This poster will describe the experience of a flipped class that failed, detail lessons learned, and plans for future flipping.

Methods: In-class instruction to undergraduate nursing students on evidence-based practice resources is provided at four campus locations across the state. These sessions include lecture and hands-on search practice, which utilizes the students' assigned patient/problem, intervention, comparison, outcome (PICO) question. One of the campus locations was chosen to pilot a flipped session. Posted within the students' weekly class materials in Blackboard, the flipped materials included two brief YouTube videos, which consisted of the core of this author's lecture and an interactive searching tutorial, which assessed the students' comprehension of the video content. The in-class session included an abbreviated lecture and review of the concepts covered in the video and tutorial. After the lecture and hands-on practice session, students were asked to complete an evaluation of the instructional methods.

Results: Nine of the seventy participating students completed the pre-class interactive tutorial. The videos received twenty and thirty-four34 views, respectively. The abbreviated lecture was given in its prepared state, though embellished with key points from the videos. The post-class survey was completed by seven students. Three of these students acknowledged that they had watched the pre-class videos, and two completed the pre-class tutorial. Two students agreed that the pre-class material was helpful; though two felt that the librarian should not have assigned the activities.

Conclusions: Despite low participation in the pre-class activities and lack of significant evidence in the post-class survey, an additional attempt of a flipped class will be executed next year. Observed search practices by the students in this study and in past sessions have illustrated that current instruction has not been effective. A strong emphasis on participation and possible assigned points will be requested of the class instructors for the pre-class activity, which will be reworked to include the entire lecture and an interactive quiz. The in-class session will be redesigned to include a guided search to reinforce the instruction.

Poster Number: 149

Time: Monday, May 19, 3:30 PM – 4:25 PM

Mobile Outreach: An App a Day Keeps the Doctor Away

Laura C. Davison, Assistant Director, Access Delivery and Outreach, Medical Center Library, University of Kentucky–Lexington

Objectives: To enhance the medical library's outreach services by developing a hands-on, consumer health-oriented training session on mobile health apps and mobile-friendly resources available from the National Library of Medicine (NLM) and other authoritative organizations.

Methods: To increase meaningful training opportunities for consumers, a one-hour, hands-on class on mobile health apps was developed. The library purchased iPads for class participants' use and an Apple TV device to project the instructor's iPad screen, creating an easily transported outreach training lab. Mobile health apps from NLM and other authoritative organizations were selected and preloaded on the devices. The medical library partnered with the local public library to better reach the target audience of consumers. It is expected that these training opportunities will increase consumer knowledge of health apps' quality and reliability, as well as increase the medical library's outreach sessions. Librarians will document qualitative outcomes through observations made with class participants.

Results: Two classes have been taught thus far with the opportunity to schedule more, thus completing the objective of enhanced outreach services. Participants expressed surprise at the sheer number of available health apps and appreciation for the hands-on opportunity to try them out.

Conclusions: Although the classes were successful, the attendance was low; marketing should be increased for future classes. Additionally, the majority of attendees had not used an iPad or tablet device before and were concerned with basic operations such as locating and installing apps. Future outreach sessions using the mobile iPad lab, should consider adding a "basic skills" component at the beginning of the class.

Poster Number: 150
Time: Monday, May 19, 3:30 PM – 4:25 PM

Model of Cooperation: Health Sciences Librarians Working with Institutional Stakeholders to Support Researchers Writing Data Management Plans

Regina Raboin, Librarian, Tisch Library, Tufts University, Medford, MA; **Andrew Creamer**, Project Coordinator, Lamar Soutter Library, University of Massachusetts Medical School, Worcester, MA; **Donna Kafel**, Librarian and eScience Project Coordinator, Lamar Soutter Library, University of Massachusetts Medical School, Worcester, MA

Objectives: A new role for health sciences librarians is data management planning and assisting faculty with sponsor-mandated data management plans (DMPs). This poster exhibits how one university's model can be adapted for use by health sciences librarians to become involved in the development of an institutional-wide collaboration to support their institutions' researchers writing DMPs.
Methods: After the National Science Foundation (NSF) began mandating DMPs, a group of librarians organized an institutional approach to assist researchers writing DMPs. The US Office of Science and Technology (OSTP) directive, instructing certain federal sponsors to make plans to make publicly funded data publicly available, will make DMPs relevant beyond the NSF, such as National Institutes of Health (NIH). Health sciences librarians can apply this university's model to assist their researcher communities with writing such DMPs. This poster outlines the institutional stakeholders health sciences librarians need to seek out and a description of a workflow for writing DMPs. From the moment the researcher initiates a proposal with the research office to its submission, this model shows how the institutional community--including the library, research office, information technology (IT), and administration--can offer input to support researchers writing DMPs.

Tuesday, May 20

Poster Session 3

Poster Number: 151

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

New Librarians: Who Is Providing the Foundation for

Brenda F. Green, Associate Professor; **Takeyra Wagner**, Educational Technology Specialist; University of Tennessee Health Science Center, Memphis, TN

Objectives: For too many years, "Baby Librarians" had to compete for a few paid internships and fellowships that ostensibly lead to careers in health sciences librarianship. Currently, several forward-thinking libraries, schools of library and information science, and grantors are providing foundations to assist aspiring librarians in their job search. This poster identifies these emerging training opportunities and library positions.

Methods: A convenience sample of training opportunities and entry-level position descriptions were collected to identify compensation rates, prerequisites, geographical distribution, job duties and titles, and source of funding. The data were analyzed to identify correlations and trends.

Results: During the 6-month study period, 64 position announcements were reviewed along with an additional 10 emerging training opportunities. Thirty-four percent of these positions and opportunities required 1 year or less experience. From this subset, more positions were in reference/information services and of 50 states, only 32% provided entry-level opportunities. Salaries ranged from $31,204 to over $63,000; and health sciences libraries provided more training and employment opportunities for aspiring librarians.

Conclusions: Based on this limited study sample, the outlook for "Baby Librarians" seeking training opportunities and employment remains daunting. Training opportunities exist at library associations, a few forward-thinking health sciences libraries, the National Library of Medicine, and some library science and iSchools, but they are sparse.

Poster Number: 152

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

New Measures of Success: Altmetrics and the Changing Face of Scholarly Impact

Kimberley R. Barker, Emerging Technologies and Systems Manager, Claude Moore Health Sciences Library, University of Virginia–Charlottesville

Objectives: While of interest to librarians and advocates of open access for some time, the real-world application of altmetrics is a more recent occurrence. Well-known scholarly publishers are now providing article-level metrics in their online publications, including those in biomedical disciplines. In order to gauge patrons' knowledge and awareness of this topic, a continuing education class on altmetrics was created at the University of Virginia Health System Claude Moore Health Sciences Library.

Methods: The current status of altmetrics was reviewed through several methods. A review of library-related and broader academic literature was conducted. Realizing that vendors were currently providing altmetrics services to publishers, institutions, and individual researchers, an environmental scan of those providers was performed. The intertwined relationship of altmetrics, the socialization of research and scholarship, online identity, and open access were also explored. Reviews of altmetrics' inclusion in relevant scholarly publications and the measurement tools marketed to individual researchers were conducted. Class content was developed and peer-reviewed, resulting in a one-hour class conducted for health system faculty. Though the class was designed and marketed solely to raise awareness, the content was regarded as endorsement of practices that are not yet recognized by promotion and tenure criteria. Instructors are collaborating with administrators to establish a mutually agreeable approach to this topic.

Results: After the initial class, the course title and content were revised to better reflect the informational nature of the class and the difference between course content and current School of Medicine's promotion and tenure (P&T) practice at the university. The heads of the P&T Committee were contacted via email with the revised title and objectives for their awareness and approval. They expressed thanks for making them aware of the class and reiterated that altmetrics was not considered in current P&T practices.

Conclusions: The field of altmetrics is very new, particularly in its ability to measure attention versus impact in biomedical disciplines. The class will be offered again, albeit with an even more thorough labeling of it as an awareness tool.

Poster Number: 153

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

New Metrics for Old Records: Quantifying the Value of Archives in Medical Schools

Jordan Bass, Medical Archivist, Neil John Maclean Health Sciences Library, University of Manitoba, Winnipeg, MB, Canada; **Ada Ducas**, Head, Health Sciences Libraries, Neil John Maclean Health Sciences Library, University of Manitoba, Winnipeg , MB, Canada

Objectives: The archives performs a number of essential services for the faculty of medicine. Robust statistical information about these services has been recorded in a newly developed database since January 2013. The purpose of this project is to analyze these data to develop a reporting structure that accurately reflects departmental workload and better articulates the faculty of medicine's return on investment.

Methods: Highly granular statistical data about archival services have been compiled in a database since January 2013 and have been recorded in four distinct areas: internal/external special projects, records management, private acquisitions, and clients. The analysis of data in these four areas will include: (1) calculating the number of archival resources used to complete research questions and special projects; (2) measuring the time required to complete research questions, special projects, and records management calls; (3) calculating all activity that goes into the acquisition of and provision of access to private archival materials; (4) identifying clients within the faculty who frequently request archival service.

Results: Data describing the legitimate value of archives to health sciences faculties will be available at MLA '14.

Conclusions: This project and its analysis will demonstrate a method of recording and reporting the value of archives heretofore unprecedented in North American medical schools. This analysis has yielded actionable data on which further refinement and subsequent improvement of archival work can be made. Future work on this project involves further attestation of archival value in its relation to the goals and mandates of both the faculty of medicine and this university health library.

Poster Number: 154

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

The National Institutes of Health (NIH) Public Access Policy: A Learning Opportunity

Emily Mazure, AHIP, Biomedical Research Liaison Librarian; **Adrianne Leonardelli**, Research and Education Librarian and Liaison, Duke School of Nursing; **Beverly Murphy, AHIP**, Assistant Director, Communications and Web Content Management; **Patricia L. Thibodeau, AHIP, FMLA**, Associate Dean, Library Services and Archives; **Emma Cryer**, Associate Director, Collection Services; **Richard A. Peterson, AHIP**, Deputy Director; **Virginia R. M. Carden, AHIP**, Administrative Research Librarian; Medical Center Library & Archives, Duke University, Durham, NC

Objectives: To assist university faculty in achieving compliance with the National Institutes of Health (NIH) public access policy, the library accepted the leadership role of ensuring institutional compliance campus-wide.

Methods: After consulting the research administrative offices, the library took on the responsibility of managing the university's compliance with the NIH public access policy in February 2013. This provided a unique opportunity to connect with the research faculty and staff. Due to the interdisciplinary nature of NIH funding, the policy impacts faculty across the entire campus, crossing the boundaries of schools, departments, and centers. We will share our experiences in working with faculty to address compliance issues, including our understanding of the policy, the systems involved in managing compliance, and common pitfalls that evolved as we worked with grantees. We will describe common misconceptions and obstacles we encountered in working with grantees and their staff as well as strategies we used to overcome these issues and for communicating with principal investigators and authors about noncompliant publications.

Results: Our response to the policy has increased our visibility as partners with the research community and leveraged our skills as professional librarians, educators, and expert users of PubMed, PMC, and the National Center for Biotechnology Information (NCBI). The research deans and administrative offices view librarians as experts in this area and an essential part of the research compliance team and process. As we have worked with faculty and staff at our institution to manage compliance, we have developed a more thorough understanding of the policy as well as our faculty and their research environment.

Poster Number: 155

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Nurse Practitioners' Responses to Patient Online Health Information Seeking: Preliminary Data

Susan LaValley, PhD Student, Department of Community Health and Health Behavior, School of Public Health and Health Professions, State University of New York, Buffalo, NY; **Elizabeth Gage-Bouchard**, Assistant Professor, Community Health and Health Behavior, University at Buffalo, Buffalo, NY

Objectives: Patients who engage in online health information seeking do not always disclose this behavior to providers. Are cancer patients discussing this online activity with providers during the clinical encounter, what resources do they report using, and how are providers responding? What are providers' communication strategies when patients bring questionable health information to their medical appointments?

Methods: Semi-structured, in-depth interviews were conducted with nurse practitioners (n=4) at a cancer center. An interview guide was developed containing questions about provider experiences with patients who disclose online health information-seeking behavior, as well as questions about provider attitudes towards this behavior. Interviews were conducted by a researcher trained in qualitative methods. Transcripts were coded in order to identify themes in online information seeking and provider responses/attitudes. Demographic information about provider was examined (including age, gender, education, specialty, years in occupation) for associations with strategies and techniques for communicating ideal ways for patients select and evaluate online resources.

Results: Providers reported that, on average, approximately 5%-20% of their weekly patients explicitly identified as engaging in health information-seeking activities from a host of sources (Internet, magazines, and television). Perceived patient characteristics associated with this behavior included: age, education, anxiety level, social networks, and digital literacy. Strategies for addressing patients with poor quality or inapplicable cancer information were: explaining the difference between empirical research and anecdote, emphasizing the risks of alternative treatments, coordinating with colleagues (attending physicians or pharmacists) to address patient questions, and suggesting provider-approved cancer-specific websites and brochures for future use. Providers expressed the importance of remaining open to the practice of patient information seeking, as it can enhance relationships and build trust. Providers also acknowledged the difficulty of educating patients about identifying and selecting appropriate resources given time constraints of clinical practice, and the risks of patients who use poor quality information to make decisions about treatment or compliance.

Conclusions: Cancer patients engage in health information-seeking practices from several sources, including online resources, and have conversations with their providers about these practices. Providers who use this opportunity to

correct or explain health information procured by their patients allow for trust-building and/or enhanced treatment compliance. Future research can investigate what provider-initiated informational interventions in the clinical setting will best assist patients with the acquisition of improved health information literacy skills.

Poster Number: 156
Time: Tuesday, May 20, 1:00 PM – 1:55 PM

One Book: A Case Study of Community Reading to Explore Ethical Issues in a Health Sciences Setting

Rajia Tobia, AHIP, Executive Director, Libraries, University of Texas Health Science Center-San Antonio Libraries, University of Texas Health Science Center, San Antonio, TX; **Susan C. Hunnicutt**, Librarian, Briscoe Library, University of Texas Health Science Center, Arlington, TX

Objectives: Librarians worked with faculty and staff from the Center for Medical Humanities & Ethics and other academic departments, to develop a One Community/One Book program that supports the academic health sciences center's objective to build its strengths in professionalism, ethics, and the humanities.

Methods: In 2008, librarians collaborated with the faculty of the Center for Medical Humanities & Ethics to offer the first one community/one book program. The program has been repeated in 2009, 2010, 2012, and 2013, with steadily increasing participation and an expanding group of partners from across the health sciences center. Each year, a loosely formed committee of faculty and librarians met to select a book that appeals to the interests and experiences of an interdisciplinary community of students, faculty, and practicing health professionals. To encourage engagement with the topic, authors were invited to visit campus; to meet in small groups with students, faculty, staff, and community members; and to give a keynote presentation. The library has offered workshops to train book discussion leaders and has promoted book discussion opportunities through the library newsletter and website.

Results: One Community/One Book selections reflected topics of interest to a wide variety of health professionals and students. Books selected included *Mountains Beyond Mountains: The Quest of Dr. Paul Farmer: A Man Who Would Cure the World, Final Exam: A Surgeon's Reflections on Mortality, The Immortal Life of Henrietta Lacks, Barefoot Heart: Stories of a Migrant Child,* and *A History of the Present Illness.* Book discussions focused on topics and questions raised by the theme of each book and included global health, compassion in medicine, ethical conduct of human subjects research, diversity, and cultural competence. Since the first program in 2008, 106 book discussion leaders were trained, 75 book discussion groups were held, and over 2,800 people attended author presentations held in conjunction with One Community/One Book. Librarians partnered with the Center for Medical Humanities & Ethics; Humanities Texas, the Texas Affiliate of the National Endowment for the Humanities; the San Antonio Public Library; community agencies; deans; faculty; and students to promote book discussions and conversations about the theme of each book and

to encourage attendance at author presentations.

Conclusions: A community reading program can be a successful method for librarians to use humanities to foster discussions about ethical issues in health care and to develop partnerships within institutions and in the wider community.

Poster Number: 157

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Out of the Library and on to the Floors: Participating in Nursing Rounds and Morning Report

Pamela Hargwood, AHIP, Information and Education Librarian, Robert Wood Johnson Library of the Health Sciences, Rutgers University, New Brunswick, NJ; **Kathleen Evanovich Zavotsky**, Director, Center for Nursing Research and Advanced Clinical Practice and Education, Robert Wood Johnson University Hospital, New Brunswick, NJ; **Patricia James**, Clinical Nurse Educator, Cardiac Surgery, Robert Wood Johnson University Hospital, New Brunswick, NJ; **Indira Amato**, Program Director/Assistant Professor, Pediatric Residency Program, Rutgers-Robert Wood Johnson Medical School, New Brunswick, NJ

Objectives: Physicians, nurses, residents, pharmacists, and social workers are commonly thought to be part of the health care team. This poster will show how incorporating a medical librarian as part of this team is beneficial not only to the patrons the library serves, but the library as well.

Methods: Two new initiatives were implemented at our institution. Beginning in January 2013, the medical librarian was invited to attend nursing rounds on the cardiothoracic surgery unit of our teaching hospital. One day per week, the librarian attends rounds utilizing an iPad to answer any clinical questions that arise. If a question is more involved, the librarian will email the patron upon returning to the library after rounds. The second initiative started October 2013. The pediatric residency program director approached the library about having a librarian attend morning report once per month to assist the pediatric residents with their understanding of evidence-based medicine and using the library resources. A laptop computer and projection screen are provided for the librarian to use during report.

Results: There have been several beneficial outcomes after implementing these initiatives. By having the librarian participate in nursing rounds, the librarian is able to publicize library services to a patron population that did not always utilize the library. The librarian has seen an increase in the number of searches requested from nurses. In 2012, the librarian had thirty-six requests for searches and for 2013, the number of searches requested was ninety-nine. Other units in the teaching hospital are now interested in having the librarian round on their floors. The librarian has become an advocate for the culture of inquiry that the teaching hospital wants to instill in their nurses. The feedback has been positive for having the librarian be part of pediatric morning report. After the librarian's first session at morning report, she was booked through to the end of the academic year.

Conclusions: Working with both of these user groups has been an enjoyable

experience, and the librarian looks forward to continuing these programs and hopefully expanding to other groups as well.

Poster Number: 158

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Outreach to Vulnerable and Underserved Populations to Enhance Medical Students' Service Learning

Misa Mi, AHIP, Associate Professor/Medical Librarian, Medical Library, Oakland University William Beaumont School of Medicine, Rochester, MI; **Jill Stefaniak**, Assistant Professor, Instructional Design and Technology, Old Dominion University, Norfolk, VA; **Nelia Afonso**, Associate Professor and Assistant Dean, Community Integration and Outreach, Oakland University William Beaumont School of Medicine, Sterling Heights, MI

Objectives: A community-based participatory research project was conducted prior to the development of service learning projects. It assisted in identifying health information needs of homeless people at South Oakland Shelter (SOS) and their barriers to accessing quality consumer health information resources. The needs and challenges of the stakeholders, SOS staff and medical students, in accessing health information were also assessed.

Methods: The Oakland University William Beaumont School of Medicine (OUWB), a new medical school in Rochester, MI, has established a partnership with SOS to develop service-learning experiences that engage medical students with homeless people and inspire students to work in partnership with the community. These experiences not only help students develop an awareness of healthcare needs of a more vulnerable patient population, but also provide them with an opportunity to integrate their knowledge and skills with real-life experiences early in their medical training. An online needs assessment survey was administered to SOS staff and medical students. The survey with SOS clients was conducted as a structured interview in consideration of varying health literacy levels. A total of twenty-two clients were recruited to participate in the survey during a five-week period in 2013.

Results: Two-third of SOS staff and 33% of medical students completed their individual surveys. More than half of SOS clients had unmet information needs and ranked "health care provider" as the most useful resource, while "the Internet" was the easiest to access. The resources deemed to be most helpful to SOS staff in assisting and serving their clients were information regarding free or low-cost care and prescriptions and information about common clinical problems that SOS clients experienced. Medical students perceived a number of challenges in serving the vulnerable population and indicated a need for resources to help educate the specific population.

Conclusions: The community needs assessment yielded valuable information, which is not only assisting the school in developing targeted service learning projects, but also shaping the library's efforts in educating medical students about

quality consumer health information resources as well as library's outreach programs for vulnerable and underserved populations in the community. Medical librarians can be an integral part of educational endeavors in helping medical students becoming "holistic physicians," who are caring, socially engaged, and compassionate.

Poster Number: 159

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Parkinson's Disease Consumer Health Learning Service

Jeanne Strausman, AHIP, Chief Medical Librarian; **Gerri Flanzraich**, Coordinator, Medical Library Services; **Mahnaz Tehrani, AHIP**, Instructional Technology Librarian; Medical Library, New York Institute of Technology/College of Osteopathic Medicine, Old Westbury, NY

Objectives: The goal for this project was to improve the ability of Parkinson's patients and their caregivers in finding reliable health information on the Internet related to Parkinson's disease and living with a neurological disorder. This project addressed the needs of Parkinson's patients and their caregivers for health information literacy and gave them the skills to become better educated patients.
Methods: To accomplish our objective, the medical librarians set up a Parkinson's Disease Consumer Health Learning Center, where librarians would meet with patients and/or caregivers and provide one-to-one training sessions. In addition, the medical librarians created a LibGuide, a web-based resource, listing websites and links on Parkinson's disease, treatments, drugs, support, life style, and assistance for caregivers. An office was setup outside the clinic where Parkinson's patient are treated. The office was established with three laptops, mice, large-type keyboards, laptop storage cabinet, wireless printer, desk, and chairs. This office was used for one-to-one, hour-long, training sessions with the patients/caregivers. Promotional materials were developed, including flyers and a brochure, to advertise the health information literacy services to all the patients/caregivers. If a patient/caregiver was interested in a training session, an appointment was scheduled with the medical librarian.
Results: Patients/caregivers increased their awareness of Internet-based resources on Parkinson's disease. Patients/caregivers benefited from individualized patient-centered sessions, increasing their confidence in finding online health information. At least one patient also learned how to use a computer. The Parkinson's Disease LibGuide, created by the medical librarians, served as both a jumping off point for the training sessions and provided a website that patients/caregivers could return to on their own in order to review what was learned and to continue to explore reliable websites relevant to their needs. There were over 450 hits on the Parkinson's Disease LibGuide.
Conclusions: Although there were fewer patients/caregivers involved in our project than we had hoped, those who participated have indicated that they learned something. One male patient, who lives by himself, attended two of the one-to-one sessions. The librarians have laid the ground work, and now the staff and health professionals at the Parkinson's Disease Treatment Center view the medical librarians as partners and as a resource. Prior to this grant, the medical librarians served mostly students and faculty at the academic institution.

Following this project, the medical library has expanded its role to consumer health information.

Poster Number: 160
Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Partnerships for Health Information and Mentoring Health Careers for a High School and Middle School Population

Debra Rand, AHIP, Associate Dean, Library Services; **Saori Wendy Herman, AHIP**, Education and Liaison Librarian; **Nikia Lubin**, Assistant Director; Hofstra North Shore-LIJ School of Medicine, Hempstead, NY

Objectives: The Hofstra North Shore-LIJ School of Medicine health sciences library staff partnered with the medical school students in the Healthy Habits Project community service club and the Plainview-OldBethpage Central School District on multiple activities to facilitate improved health literacy, the understanding of where to find reliable health and health careers information, and the benefits of collaborating among the participants.
Methods: A series of activities were held throughout the 2013/2014 school year including a Health Education Fair, workshops by the Hofstra North Shore-LIJ School of Medicine health sciences library staff for the school nurses, librarians, and health educators, informational visits to the health system for high school students, and service learning health education sessions by medical students augmented with resources provided by health sciences library staff. Online post-event surveys were distributed to participants of the activities. Partial funding for this project was provided by the National Network of Libraries of Medicine.

Results: The Health Education Fair took place with over 18 information tables, planned collaboratively by the library staff, medical students and school district staff. The medical students created activities and distributed information about a broad spectrum of health and wellness topics. Librarians demonstrated MedlinePlus and other National Library of Medicine electronic resources. Workshops on using MedlinePlus, Genetics Home Reference, ToxTown, and PubMed were targeted as appropriate for the participants. Workshops resulted in an increased awareness of online health resources and generated interest in using the LibGuide that was created as a companion piece to the workshops. Informal feedback from the Health Education Fair attendees, workshop participants, and medical school students indicated a positive and valuable learning experience. Survey data for the Health Education Fair and the workshops were inconclusive due to the minimal response rate. Additional health education sessions by the medical students are still in process.
Conclusions: Although informal feedback was positive overall, the number of attendees for the Health Education Fair and the response rate to the evaluation surveys was lower than anticipated. The content provided during the activities was good, but there were some problems identified in the logistics. Lessons

learned from this experience include: selecting the date and time for activities taking into account potential conflicts by all participants, expansion of marketing activities throughout the local community, and the timing and method for distribution of surveys.

Poster Number: 161

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Patient Education and Critical Pedagogy

Andrea Wright, Technology and Information Resources Librarian, Baugh Biomedical Library, University of South Alabama, Mobile, AL

Objectives: Advocates of critical pedagogy and patient-centered education share goals of recognizing learners' values and learner-created knowledge while uprooting historical power structures by addressing them as part of the educational process, empowering the learner. The objective of this poster is to evaluate the appropriateness of critical pedagogy methods in a patient education setting.

Methods: A comparative analysis of the goals and objectives associated with critical pedagogy and patient-centered education is performed to assess their compatibility. A review of similar uses for critical pedagogy methods is conducted to address the unique nature of patient education as a setting. The role of librarians addressing the challenge of incorporating critical pedagogy into brief bibliographic instruction meetings that are similar to sporadic patient education opportunities is included.

Results: The aims of critical pedagogy and patient-centered education are complementary, and critical pedagogical methods could be of use to patient educators. However, the limited time and scope of most patient education interactions pose serious challenges to implementing many practices common to critical pedagogy, which often happen in a group setting over an extended period of time. Traditional librarian educators face similar challenges to those of patient educators: they have short, often one-shot, interactions to convey complex ideas that promote broad-based literacy and autonomy in a given population. Librarians have developed some strategies to incorporate critical pedagogical ideals into brief instruction sections to promote information literacy that could be of some use to patient educators interested in promoting patient empowerment through education.

Conclusions: While implementing traditional critical pedagogical strategies in a common patient education setting could be challenging, certain principles of critical pedagogy, such as recognizing learner-created knowledge, addressing historical power imbalances, and prioritizing learner's values are central to patient-centered education. Using available methods such as problem-based learning and open-ended questioning, as well as keeping critical pedagogical conventions in mind while planning patient education sessions can support patient-centered educators' goal of promoting patient autonomy.

Poster Number: 162

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Patron-Driven Acquisitions: Cost-Effective Strategies in Uncertain Economic Times

Susan J. Arnold, AHIP, Director; **Thea M. Browne**, Library Associate; **Anna K. Crawford**, Reference Coordinator; **Lori A. Hostuttler**, Assistant Director/Access Services Coordinator; **Jean L. Siebert, AHIP**, Collection Manager/Reference Librarian; Health Sciences Library, West Virginia University, Morgantown, WV

Objectives: In an era of increasing budget constraints and decreasing circulation, our library sought cost-effective options to meet our patrons' needs for instant access. We no longer can purchase books they might want "just in case," nor can we add a subscription to every journal that specialists request. This poster will illustrate a variety of patron-driven acquisition (PDA) methods implemented.

Methods: Our first attempt at PDA involved our "Fast-Acq" program, where book titles requested through interlibrary loan (ILL) were purchased immediately with a procurement card. Spurred by the success of this program, our library system implemented a demand-driven approach to e-book purchasing in the spring of 2013. E-book records are placed in the library catalog but are not purchased until they are accessed five times. The first few accesses are considered short-term loans. Librarians track titles that they would have ordered that are already available in the PDA system to see if these titles are purchased or even accessed. To fully analyze patron requests for new e-journals, a system has been put into place whereby past ILL requests are tracked and costs of a subscription versus future ILL transactions, including "Get It Now," are determined.

Results: Preliminary results indicate that in its first few years, the Fast-Acq program has resulted in the purchase of 35 books, 69% of which have been checked out between 1-10 times. In its first several months, the demand-driven e-book program has resulted in only a few page views of books that formerly would have been automatically purchased due to recommendations in highly regarded lists. This has resulted in modest cost savings in the library's collections budget. Our system of analysis of e-journal requests has resulted in the most significant savings for the library. Of the 12 journal titles requested in 2013, none were requested enough during the previous 5 years through ILL to justify a subscription. Their total cost would have been approximately $20,000/year; because of reciprocal borrowing agreements and use of "Get It Now," the library only spent $2,500 on interlibrary loan costs for these titles in 2013, and in many cases, obtained the needed articles within hours.

Conclusions: Patron-driven acquisitions can successfully meet the needs of researchers, faculty, and students. Their advantages include quick accessibility

to a wide range of information resources, increased user satisfaction, and cost savings for the library.

Poster Number: 163

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Perfidy and Continuous Duplicity: The Story of Streptomycin and the Correction of the Historical Record

Melissa L. Rethlefsen, AHIP, Education Technology Librarian; **Andrew P. Norgan**, Resident; Mayo Clinic, Rochester, MN

Objectives: To outline the ways Dr. William Feldman and Dr. Corwin Hinshaw, the medical scientists who conducted the first in vivo trials of streptomycin against tuberculosis, used the scholarly communication system to correct historical inaccuracies in the streptomycin story, and to highlight their views of the controversy surrounding the drug's origin.

Methods: In 1952, Dr. Selman Waksman received the Nobel Prize for streptomycin, the first antibiotic effective against tuberculosis. Controversy surrounded this award, stemming from the fact that Waksman neither discovered streptomycin nor proved that it was effective against tuberculosis. Feldman and Hinshaw, the researchers who conducted the first animal and human trials of streptomycin against tuberculosis, undertook a decades-long effort to correct the historical record. This poster uses materials from Feldman's personal archives, particularly his correspondence with Hinshaw, to understand how these researchers worked within the scholarly communications system of their time. Their correspondence and Feldman's personal notes on Waksman and others' manuscripts give insight into contemporary views of the streptomycin controversy from the researchers closest to it and present a fascinating record of how scholarly communication functioned prior to the digital era.

Results: Feldman and Hinshaw performed the first animal and human trials of streptomycin after receiving small amounts of it from Waksman's lab for this purpose. Though the researchers' correspondence was with Waksman, Waksman's graduate student, Dr. Albert Schatz, was the actual discoverer of streptomycin. Upon realizing this years later and seeing their own contributions to the discovery of streptomycin's therapeutic potential diminished, Feldman and Hinshaw published journal articles describing the history of their contributions and contacted authors and editors to attempt to correct errors Waksman introduced into the historical record.

Conclusions: Feldman desired to "keep the record accurate." As he said to Hinshaw in 1965, "This is history, and the first essential of history is that the facts must be accurate." Though Waksman's self-promotion and subsequent Nobel Prize may have rendered him history's winner in the streptomycin race, the work of Feldman, Hinshaw and Schatz lives on today.

Poster Number: 164

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Point-of-Care and Patient Education Resources in Electronic Health Records for Urology and Nephrology Departments

Cynthia Heathfield Avallone, AHIP, Medical Librarian II, Cleveland Clinic Alumni Library, Cleveland Clinic, Cleveland, OH

Objectives: A multidisciplinary committee for the urology and nephrology departments was established to identify point-of-care and patient education resources; organize them; and make them available in the electronic health record (EHR). Our goal is to have the ability to seamlessly access these resources to increase efficiency, improve patient outcomes and meet meaningful use and Joint Commission requirements.

Methods: The urology and nephrology departments established a multidisciplinary committee to plan how to include point-of-care and patient education e-resources within the EHR. The committee created an inventory of available e-resources by searching the intranet and Internet. To identify subject gaps, the e-resources were compared to the most common diagnostic categories, procedures, and tests. Two complementary methods were chosen to provide this information in the EHR. The first provides patient education materials by linking to in-house documents written by consumer health specialists and external websites. The second method includes links to the urology and nephrology LibGuides including patient education. These guides contain subject-specific core materials, guidelines, and calculators. Training will be provided for clinical staff and statistics will be gathered on utilization. Increased efficiency, improved patient satisfaction, and clinical outcomes are expected.

Results: The initial results for our project are very encouraging. The proposal for linking local documents in the EHR was reviewed by nursing informatics, and this was implemented on October 1, 2013. This option is only available for nursing at this time. We have requested access for all clinicians in the urology and nephrology departments. The second method is now also operational. There are links in the Epic Toolbar that have been revised to accommodate both the Alumni Library LibGuide and the urology and nephrology guides. MedlinePlus Connect is also active in the patient portal, MyChart. We also identified two other processes to communicate with patients. We have used "staff messages" for patient education consults. Materials are distributed to patients if they visit the library: they are mailed, or they are sent as links in the patient portal. We are also developing "smart phrases" that link to specific information. When a clinician starts to type these "dot" phrases, the links are dropped into the patient instructions or patient portal. Because these methods have been established only recently, we have only educated the top administrators. Orientation will be

scheduled for the staff, and the program will be evaluated after full implementation.

Conclusions: Access to point-of-care and patient education resources has been achieved. After implementation, we will evaluate outcomes.

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Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Poster Retrieval in the Information Age

Keydi Boss O'Hagan, AHIP, Medical Librarian, Medical Staff Library, Holy Name Medical Center, Teaneck, NJ

Objectives: To figure out what is the most popular way of electronically retrieving information from an annual meeting poster after it has been presented. **Methods:** Went to each poster that was presented at MLA's annual meeting in Boston, MA, evaluated each poster that was up determining how to retrieve the information electronically, whether it was through PDF, quick response (QR) code or other means.
Results: At the annual meeting, 310 posters were registered. Only 230 posters were uploaded to the meeting website to be viewed after the meeting. Of the 230 posters available online, 20 posters included QR codes with 2 linking to their online card catalog. However, at the physical poster presentations, there were 18 posters that had QR codes along with 8 codes that were displayed on the side of the poster. Several posters had QR code advertisements for positions at their institutions.
Conclusions: The most popular way to retrieve the information after the meeting is to viewing the poster electronically on the annual meeting's website. QR codes are slowly making their way onto the posters. The downside to both these retrieval methods is that they are hard to utilize and take notes when the poster is displayed at the meeting. Further studies are needed to determine a better method of taking notes when the posters are presented.

Poster Number: 166

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Preparing for Future Publications: An Interactive Activity for Applying Citation Style

Karen S. Lamson, Reference and Instruction Librarian and Assistant Professor, Library and Learning Resources, Massachusetts College of Pharmacy and Health Sciences University, Worcester, MA

Objectives: Learning and correctly using specific citation styles is essential to the success of all students. The good habits they learn now will allow them to excel when writing future research articles for publication. But let's face it; learning citation styles can be very dry. Here is an interactive activity that allows students to practice using citation style without being bored.

Methods: An interactive in-class group activity was created to help students put in practice the rules of American Medical Association (AMA) citation style. The class was divided up into four groups. Each group was given a packet that included a resource (electronic journal, print journal, print book, website) and several laminated strips of paper with citation information on them. Each group was asked to review their resource and choose the correct strips so the citation was in proper AMA style format. The lines were brought up to the front of the class and taped to the wall representing a reference page. The class was encouraged to review it and respond to any errors they might see. As the errors were found, the instructor rearranged/removed the citation strips so the final product was in the correct AMA citation format.

Results: The in-class activity went well, and the students were engaged in the process. Students were observed working in their small groups. Everyone participated and seemed to enjoy the process. Citations were chosen that highlighted common mistakes to encourage discussion. The large group discussion at the end of the activity had many of the students realizing where their mistakes were and nodding with acknowledgement. Discussions were informative and added to the benefit of the activity.

Conclusions: This interactive in-class activity enabled students to work in small groups and then share their citations with the whole class. Although AMA citation style was the focus in this class, the activity can be adapted to any of the citation styles. It is a unique way to spark some interest in learning and properly using citation styles!

Poster Number: 167

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Preserving Osteopathic History: The Challenge of Converting Media Formats to Digital

Jean L. Sidwell, Library Director, Missouri Branch, A.T. Still Memorial Library , A.T. Still University, Kirksville, MO; **David Owens**, Public Services Manager, A.T. Still Memorial Library, A.T. Still University, Kirksville, MO; **Daryl D. Shafer**, Acquisitions, A.T. Still Memorial Library, A.T. Still University, Kirksville, MO; **Mary E. Sims**, Technical Services Librarian, A.T. Still Memorial Library, A.T. Still University , Kirksville, MO; **Heather Rudy**, Museum Registrar, Museum of Osteopathic Medicine, A.T. Still University, Kirksville, MO

Objectives: The library and museum staff determined that U-Matic and VHS tapes of historical content were in formats that are no longer supported. These historical media would soon be lost if not converted to a digital format. Our goal was to develop a preservation plan and execute in time to save tapes of historical content.

Methods: In order to initiate a U-Matic and VHS tape preservation plan, departments were contacted to determine their interest and support. Departments consisting of the Library, Museum, Academic Technology, Information Technology Services (ITS), and Osteopathic Manipulative Medicine (OMM) met multiple times to determine parameters for a preservation plan. The setting is an academic health sciences library serving the school of medicine, dental school, and school of health management.

Results: A shared Google document, the digital file, and original tape was saved for the museum. The museum's staff attached metadata to the file, for their "Past Perfect" database. The library created a brief record for its online catalog. The digital files are available on the museum's web page. A pay per view format may be chosen. One option is to store the digital content in a Cloud format to conserve network space, but the museum plans to use the network, pointing out issues with Cloud storage, such as upload/download time and cost.

Conclusions: Historical tapes converted from analog to digital format are more accessible for patrons and securely preserved for future osteopathic research.

Problem Solved: Creation of a Data Blog and Specialized Software Lab for Public Health

Shenita Peterson, Life Sciences Informationist, Woodruff Health Sciences Center Library, Emory University, Atlanta, GA; **Nicole Luisi**, Data Analyst, Epidemiology, Emory University, Decatur, GA

Objectives: To enhance library and information services support for the School of Public Health, informationists created a data blog, with a tagging system, to locate publicly available health data sets. Informationists analyzed options for quantitative, qualitative, and geospatial data analysis software, and the library established a high performance computer lab.

Methods: To address the growing needs of a top 10 School of Public Health, the authors conducted a series of meetings with various faculty, students, and staff to create a list of priorities. One major theme that emerged from the meetings was the need to access publicly available data sets. A decision was made to establish a Wordpress account to create a data blog that would provide a searchable interface to access data sets and data-related information. Tags and a tag glossary were created to provide the metadata needed to find relevant information. Usage statistics provided by Wordpress.com are used to monitor the usage of the data blog. In addition to the data blog, the library launched a specialized software lab that includes data analysis software.

Results: Since launching the data blog in October 2012, the site has received approximately 4,000 views, 836 views in 2012 (October-December), 3,042 views in 2013 (January-December), and 170 views in January 2014. In 2013, the site averaged 8 views per day. A 45-minute workshop was developed to teach researchers how to use the data blog to search and discover data sets, as well as how to find information related to quantitative and qualitative software. The workshop is traditionally taught at the beginning of the fall and spring semester. In addition to the finding data sets workshop, courses were developed for the software packages SPSS and Epi Info. The classes are offered multiple times per semester with a participation rate of ten students per session.

Conclusions: The data blog has proved to be a useful and efficient way to feature publicly available data sets and software packages used in data analysis and visualization. The blog has provided the framework for the expansion of the libraries services related to data analysis that provide a solution to the concerns of the School of Public Health constituents.

Poster Number: 169

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Providing the Foundational Evidence for the Incorporation of Integrative Medicine into the VA Hospital System

Christopher Hooper-Lane, Clinical and Medical Education Librarian; **Ann M. Combs**, Basic and Applied Science Librarian; **Lia Vellardita**, Health Sciences Librarian; **Heidi Marleau**, Associate Director; **Allan R. Barclay, AHIP**, Information Architecture Librarian; Ebling Library, University of Wisconsin–Madison

Objectives: This poster describes a unique collaboration between a handful of librarians and a group of health care experts. Librarians were enlisted to find, organize, and deliver the supporting evidence needed by physician instructors to create evidence-based integrative medicine tutorials for the US Department of Veterans Health Administration (VHA) hospital system in an effort to improve the health of American veterans.

Methods: An integrative medicine program from an academic medical center recently received a $1.9 million grant to improve the health of military veterans by incorporating integrative approaches concurrently with conventional approaches. The heart of the project was to have physician experts develop instruction modules on integrative approaches to common conditions seen in the VHA system (e.g., cancer, post-traumatic stress disorder, diabetes). These modules were delivered and taught to health providers at 24 VHA hospitals throughout the country. In order for physician experts to create the most up-to-date, evidence-based modules, librarians were recruited to obtain and display the core scholarly research for each topic. To complete this task, the librarians created and employed a comprehensive search strategy utilizing quality literature/clinical databases, integrative medicine websites, texts, and other resources, then organized and displayed the selected evidence on a protected Springshare LibGuide platform.

Results: Librarians created a website containing over thirty custom guides displaying the best scientific evidence for integrative approaches to conditions commonly seen in the VHA system. These guides were successfully utilized by physician experts to create the most up-to-date, evidence-based modules for health personnel in the VHA system.

Conclusions: Librarians are often asked to find the evidence for clinical interventions but do not always know how the results of their work will be utilized or how successful they were in their work. In this collaboration, librarians took an active role in the entire process and not only saw how their work was being used, but also helped guide its usage. The long-term success of this project will ultimately hinge upon its sustainability, which is still being determined.

Poster Number: 170

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Public Health Nutrition Citation Patterns: Mapping the Literature 2010-2012

Helen Look, Collection Analyst, University Library, University of Michigan–Ann Arbor; **Mary K. Taylor, AHIP**, Natural Sciences Librarian, Morris Library, Southern Illinois University, Carbondale, IL

Objectives: To identify and analyze the public health nutrition literature as part of an overall research project to map the public health literature. The purpose of the study is to determine the core journals used in public health nutrition and the currency of cited references used in the literature.

Methods: This study used the methodology established by the Mapping the Literature of Public Health group. The selected public health nutrition journals were: *Journal of Nutrition, Journal of Nutrition Education and Behavior, Journal of the American Dietetic Association* (continued by *Journal of the Academy of Nutrition and Dietetics*), and *Public Health Nutrition.* All issues of these journals published from 2010-2012 were reviewed for the number of citing articles and cited items. A random sample of items drawn from the overall pool of cited items served as the data source used to identify the most frequently cited publication types and their age at time of citation. A second sample of items drawn from the cited articles was the source for identifying the most cited journal titles and the breadth of subject disciplines consulted. Bradford zones were used for further analysis.

Putting the I in Team: Informationists on the Inside

Linda Hasman, CTSI Liaison Librarian; **Scott McIntosh**, Associate Professor; University of Rochester Medical Center, Rochester, NY

Objectives: Many librarians would like to integrate with research teams, but how that is actually done has rarely been studied. This case study follows two librarians as they move from first contact with a research team to insider status on the team. What facilitates the integration of librarians into a research team? **Methods:** The opportunity to partner with a research team was initiated by a request for proposals for a grant. Librarians first needed to find a research team to partner with, and that search actually started the process of integration. From there, this case study will explore what conditions were present at the start of their contact with the team, what actions were taken by the librarians to facilitate integration, what actions were taken by the members of the research team, and whether or not the librarians were actually able to integrate with the team.

Poster Number: 172

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Rebuilding Our Collection: A Data- and Department-Driven Approach to Monograph Assessment

Julie Silverman, Associate Director, Collections and Access Services; **George Paul**, Print Collection Management; **Yvonne Lee**, Collections Specialist; **JoLinda Thompson, AHIP**, Technical Systems Coordinator; **Laura Abate**, Electronic Resources and Instructional Librarian; **Anne M. Linton, AHIP**, Director; Himmelfarb Health Sciences Library, George Washington University, Washington, DC

Objectives: To update the library's print monograph collection by performing a comprehensive collections analysis by subjects corresponding to the forty-seven departments served by the library. The focus of the review was to refresh heavily used areas of the collection, to ensure adequate overlap between the print and electronic monograph collections, and to augment newer subject areas.

Methods: This comprehensive monograph assessment project focused on the school's departmental areas in order to assess the existing collection and identify titles to add to the collection. To analyze current holdings, call number ranges served as the framework for data export from the library's integrated library system (ILS) and facilitated assigning departments for each title based on Library of Congress (LC) subclass headings. Due to limitations of the ILS, MS Access and Excel were used to reformat data and produce reports. Cost and usage data harvested from the ILS system and online holdings data were used to identify areas requiring new acquisitions. Doody's Core Titles lists were used to identify new titles for purchase. Historical and statistical summary reports were generated by department area and reviewed by the project team that made acquisition decisions.

Results: One thousand two hundred twenty-nine new titles and 122 Board Review titles were identified for purchase and added to the collection as a result of the project.

Conclusions: MS Access served as a tool to organize collections data and facilitate reporting. The project provided better knowledge of the collection and improved support to academic departments. Starting in December 2013, each departmental liaison librarian was asked to participate in an approval system for monographic acquisitions, and the MS Access database was used to assign appropriate subject areas for review of new materials.

Poster Number: 173

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Rehabbing Our Communications Infrastructure: Report of a Staff Survey on Communications Preferences

Melissa De Santis, AHIP, Deputy Director, Health Sciences Library, University of Colorado Anschutz Medical Campus, Aurora, CO

Objectives: Communication within the workplace is always challenging. People have different preferences for receiving information. In most work environments, employees are bombarded with information in a variety of formats. The library wanted to see if there were communication preferences within their staff.

Methods: As part of an assignment for a library school course, a graduate student shared information with the library about ways to improve communication within the workplace. Library staff reviewed the information and created a survey to administer to staff. Staff were not required to complete the survey, but they were strongly encouraged. The survey asked about a variety of communication methods employed by the library. Staff were asked to indicate the level of effectiveness of these various forms of communication, how well they liked each form of communication, and suggestions for improving communication within the library.

Results: Twenty-six staff (72%) completed the survey. Ninety-two percent of staff feels that communication within the library is good. The preferred method of communication was email, although the most effective form of communication was verbal communication, which included meetings with one's supervisor and meetings about a current project. No form of communication was hated.

Conclusions: A common theme that emerged is that there is no one perfect method for communication. The purpose of the communication should determine which communication method is utilized. Two-thirds of staff say that they have receiving conflicting or confusing information. The health sciences library is working to create guidelines for email to clear up confusion and help staff to manage large amounts of email. This was a quality improvement project. Application of findings is limited to the health sciences library.

Poster Number: 174

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Research and Evidence Literacy in Medicine (RELM): Exploring Online Gaming in Medical Library Instruction

Ann Whitney Gleason, Associate Director, Resources and Systems; **Sherry Dodson**, Clinical Medical Librarian; **Tania Bardyn, AHIP**, Director, Health Sciences Library, and Associate Dean, University Libraries; **Julianne McNalley**, Director, Curriculum, Academic Affairs; **Michael Campion**, Director, Academic and Learning Technology, Academic Affairs; University of Washington–Seattle

Objectives: Gaming as a means of delivering online education is gaining in popularity and should be explored for library instruction. Online games provide an engaging way of learning that traditional methods are lacking. Gaming is especially appropriate for case-based, experiential learning used to effectively teach evidence-based medicine (EBM) to clinical faculty, residents, and medical students interested in improving EBM skills.
Methods: With funding from the National Libraries of Medicine, an academic medical center library and school of medicine partnered to create on interactive, self-paced online game encouraging players to employ the four steps in practicing EBM. During the 2012/13 academic year, a student was hired to build a prototype game. A framework was created around the four steps of EBM: asking, acquiring, assessing, and applying. Example cases were gathered and a patient/problem, intervention, comparison, outcome (PICO) exercise was created. The prototype was presented at the 2013 Western Group on Educational Affairs meeting as a workshop. Participants played the game and provided feedback. In the next phase, a physician will be hired to provide more advanced clinical reasoning for the evidence-based cases for game expansion. With future funding, a programmer and designer will be hired to create a better game experience and expand the current prototype to a finished product.
Results: A successful collaboration with a physician consultant resulted in improved case design for the game.
Conclusions: Funding has been applied to build out the graphical interface of the game with cases designed by physician collaboration.

Poster Number: 175

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Renovating the Library to Improve Our Information Future

Joe Swanson, Jr., Director; **Roland Bernard Welmaker, Sr.**, Manager, Technical Services/Research Instructor; **Tara Douglas-Williams**, Manager, Information Services; **Xiomara Arango**, Manager, Technical Services; MSM Library, Morehouse School of Medicine, Atlanta, GA

Objectives: To refresh existing and provide more study space.

Methods: "We need study space," was the hue and cry from students. To ameliorate this problem in 2005, the library staff made available offices and a conference room as study rooms, and the administration made departmental conference rooms available. In 2011, students again needed and requested even more space. The decision was then made to renovate the library. In September of 2012, after working with faculty, staff, students, and architects, renovations began. The technical services staff was joined with all other staff members in being housed in the Technical Services area of the library. Patrons used the back door of the library for access to the reference collection, the reserve collection, and a collection that formed the popular collection (monographs only). A color copier with fax was available in this area as well.

Results: On February 8, 2013, the library reopened revealing more collaborative communal space with writable walls, five study rooms with SMART Boards, more natural lighting, updated finishes, and contemporary furniture.

Conclusions: The newly renovated library has experienced increased usage by faculty, staff, and students. The writable walls and SMART Boards have allowed greater expression of concepts and methodologies. The twenty-four-hour study area, with twelve rooms, is very popular, and students also take advantage of the refreshment center located in the area.

Poster Number: 176
Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Repurposing with Purpose: Creating a Collaborative Learning Space to Support Institutional Interprofessional Initiatives

Susan B. Clark, Associate Professor/Director, Rowland Medical Library, University of Mississippi Medical Center, Ridgeland, MS; **Connie K. Machado, AHIP**, Associate Professor/Associate Director, and Head, Technical Services, Rowland Medical Library, University of Mississippi Medical Center, Jackson, MS; **Lauren M. Young, AHIP**, Assistant Professor/Head, Serials and Electronic Resources, Rowland Medical Library, University of Mississippi Medical Center, Jackson, MS

Objectives: The University of Mississippi Medical Center has embraced patient-centered education by developing interprofessional learning teams in response to the partnership of the Association of American Medical Colleges (AAMC) with the Interprofessional Education Collaborative and Liaison Committee on Medical Education's (LCME's) 2013 accreditation standard ED-19-A, which requires curricular preparation of medical students to work collaboratively on health care teams. Institutional commitment is evidenced by the current quality enhancement plan [SACS COC CR 2.12]: professionalism across the curriculum. As one of few campus services supporting students of all schools and all institutional missions, Rowland Medical Library surveyed students and endeavored to repurpose space into a Collaborative Learning Center (CLC) designated for campus-wide utility.
Methods: The Office of Student Affairs (OSA) issued surveys on behalf of the library, pre-CLC and post-CLC, to identify student collaborative behaviors and needs. OSA administered the first survey in paper format to a focus group of students representing all schools who had received training on sample MediaScape products. Based on this feedback and in consultation with an architecture firm, a collaborative furnishings supplier, and other campus departments, the library worked to realize its vision of a collaborative work space for all. The CLC had a soft opening in December 2013, and campus-wide announcements were made regarding the space in February 2014. The second surveyed group (M1 and M2 students) responded to an email survey sent after the soft opening and marketing efforts. Both surveys were exempt from institutional review board approval as they were for institutional planning purposes.
Results: The 2 surveys asked the number of collaborative projects assigned each semester, with roughly half (50% pre, 47% post) indicating "5 or more" on both. Respondents were asked if they currently came to the library for such projects: 41% yes pre-CLC; 59% yes post-CLC. Using a Likert scale of 1-10, with

10 being highest, students were then asked in both surveys how often they would:

- Come to the library for group study? 7.8 pre/6.8 post
- Use the new CLC for group study? 8.5 pre/7.6 post
- Use MediaScape devices or other items in the CLC? 8.2 pre/7.1 post
- Use low-tech items, such as whiteboards? 9 pre/7.2 post
- Use tables with power supply for recharging? 9 pre/9.3 post

Conclusions: The library plans to incorporate training on use of the CLC equipment during remaining 2014 orientations and resurvey the M1-M2 population to see if the numbers rise with increased awareness and confidence.

Poster Number: 177

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Scholars Workshop: An Innovative Approach to Information Literacy

Susan K. Cavanaugh, Evidence-Based Medicine Librarian; **Nancy Calabretta**, Assistant Director; Library, Cooper Medical School of Rowan University, Camden, NJ

Objectives: Develop workshop course spanning four years of a curriculum in a new medical school. Covering eight domains, the course provides students with tools to develop the inquisitiveness and critical thinking needed for successful careers in contemporary medicine. Students attend workshops in years one and two, while years three and four are devoted to a long-term project of scholarly investigation.
Methods: Codirectors include experts in domains of history of medicine, evidence-based medicine (EBM), scientific method, data collection and analysis, epidemiology, health care delivery and financing, performance improvement/patient safety, and management and leadership. A librarian, as course codirector, develops sessions on information literacy and EBM and participates in development of sessions in other domains. Information literacy objectives include evaluating relative reliability and validity of various sources of information, searching relevant sources of literature and retrieving information to support scholarly inquiry. In EBM, students answer focused patient care questions, apply systematic appraisal of evidence, and explore evidence for the existence of disparities in health quality and health care access. This last objective matches the faculty commitment to diversity and decreasing health disparities in the community and surrounding region. Sample sessions include: "Why EBM? Asking Questions," "Using Guidelines in Clinical Practice," and "Disparities in Joint Replacement."

Selection and Implementation of a Customer Relationship Management (CRM) Program to Track Patron Interaction

Megan S. Nunemaker, Clinical Librarian; **Kimberley R. Barker**, Emerging Technologies and Systems Manager; **Ellen C. Ramsey**, Institutional Repository Librarian; University of Virginia–Charlottesville

Objectives: We sought to select a customer relationship management (CRM) tool in order to better track interactions with patrons and know where library connections in our clinical, research, and educational departments are strong or weak.

Methods: A requirements document was drafted, and several CRMs were identified as possible solutions. Four CRMs were tried by the authors of this paper, and the requirements matrix was updated after each trial. The authors reached a consensus, and a proposal was made to library management to beta-test Zoho CRM. The off-the-shelf product was then customized to meet the library's needs, and custom documentation was created to be used as a training aid for all librarians using the product.

Results: After beta-testing and a series of training sessions, the Zoho CRM was implemented in January 2014. Various reports were created to provide the necessary data to library administrators and outside organizations (Association of Academic Health Sciences Libraries/Association of Research Libraries). The database of information continues to grow on a daily basis. As it does, the ability to create richer interpretations of our data increases.

Conclusions: Throughout the process of selecting a CRM, we found that the commercially available systems were designed to track interactions and business processes in a much more thorough fashion than what our needs demand. The desire to have a perfect system was balanced with the desire to have something available quickly, and the Zoho CRM product has met the vast majority of our needs. However, as more libraries choose to track detailed information regarding patron interactions, there is room for a product tailored to libraries. Ideally, one library would create such a system and make it available in an open-source fashion.

Poster Number: 180
Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Several Hands Make Light(er) Work: A Collaborative Effort to Support the Deposit of Student Literature into a Digital Repository

Erin Foster, Graduate Research Assistant, User Services; **Mellanye Lackey**, Global Public Health Librarian, User Services; Health Sciences Library, University of North Carolina–Chapel Hill

Objectives: At the University of North Carolina-Chapel Hill (UNC-CH), students in the School of Public Health are required to submit their master's papers or capstone projects upon graduation to be preserved in the university's repository. The public health liaison librarian and a graduate research assistant at UNC-CH's Health Sciences Library took advantage of the opportunity by collaborating with the university's institutional repository, the Carolina Digital Repository (CDR), to improve the process of depositing student literature.
Methods: Collaboration between the public health liaison librarian, a graduate research assistant, and representatives from the CDR used software developed at UNC-CH to create deposit forms for public health students. Forms were produced for four departments in the School of Public Health. Individual forms were created for these departments in order to accommodate different metadata needs. The graduate research assistant took an active role in compiling the necessary information fields and constructing the forms herself. The deposit forms collect information related to the student (e.g., graduation date, concentration), the paper or project (e.g., abstract), and associated parties (e.g., faculty advisors, preceptors), and provide space for attachment of required files. These deposit forms are accessible to students beginning for those graduating in December 2013 and will continue to be accessible for the following graduating populations.
Results: Currently, all four department forms are available on the CDR's website for student use in depositing their master's papers or capstone projects. As of February 2014, thirty-six papers have been submitted using these forms. The number of papers and projects are expected to increase at the end of the spring semester, when the majority of students graduate.
Conclusions: Use of these forms ensures an expedited process for students in the deposit of their master's papers or capstone projects as well as an increased discoverability using the CDR website and publicly available search engines (e.g., Google). Further research could focus on students' perceptions of the process and evaluate their experience using the forms. Creating forms for additional types of student literature in the health sciences (e.g., posters, published papers) as well as for further programs might be considered as well.

Poster Number: 181

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Sink or Swim: Creating a Social Media Presence in an Academic Medical Center

Sallie Willcox, Patient Librarian, NYU Health Sciences Library, New York University Langone Medical Center, New York , NY; **Catherine Larson**, Web Services Librarian, NYU Health Sciences Library, New York University Langone Medical Center, New York, NY

Objectives: To connect with our users, the health sciences library and its patient branch embraced social media under the auspices of the parent institution. We reached out to identify user groups and tailor messages to them via evolving best practices. This process was accelerated due to natural disaster. The continuing challenge has been remaining relevant through providing engaging content for users.

Methods: The patient librarian, working with the institution' director of digital communications and the web editor, developed a Facebook campaign to stay connected with patients, families, and the larger consumer health community. Sources for patient-friendly content were identified, and a posting schedule was developed. At the same time, the web services librarian took over the library's Twitter feed and began using it for notification purposes. A natural disaster intensified the need for a branded institutional presence outside of our technological infrastructure as social media accounts were the only vehicles for information dissemination. In addition, the creation of the Patient Library Facebook presence allowed it to serve as a temporary library in the unplanned absence of a physical location. Thus, social media can function as a tool for crisis preparedness, a virtual library presence, and a vehicle for community outreach.

Results: Evolving best practices consist of the following program goals:

1. Consistently highlight in-house events to provide a bigger picture of patient education events for the public.
2. Promote and highlight our institutional experts' patient education tips on health issues.

Conclusions: An institution-wide editorial calendar was developed in conjunction with the social media council. Participating in social media life throughout the medical center ensures, we remain consistent and keeps the libraries relevant within our community.

Poster Number: 182

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Supporting National Institutes of Health (NIH) Public Access Compliance for Translational Science Researchers, a Collaboration with the Weill Cornell Clinical and Translational Science Center (CTSC)

Drew Wright, Research Librarian, Weill Cornell Medical Library, Weill Cornell Medical College, New York City, NY

Objectives: In 2008, the National Institutes of Health (NIH) began requiring all papers resulting from agency funding to be made publicly available in PubMed Central (PMC). Recently, there has been increased pressure to comply with the public access policy (PAP), with future funding hanging in the balance. Clinical and Translational Science Awards (CTSAs) are especially at risk due to the collaborative nature of publications, necessitating a need for specialized outreach.

Methods: We have established a workflow that combines grant information from the NIH with publication and author information from VIVO (via PubMed and Scopus) and, recently, an internal administrative program developed by the Weill Cornell Clinical and Translational Science Center (CTSC), identifies which publications are not in compliance, and notifies grant holders and authors of the steps that need to be taken to make their papers compliant with PAP. The process is semi-automated, with manual data collection followed by an automatically generated and customized notice. We compared the rate of compliance before and after CTSC involvement to determine what is most important when interacting with translational researchers.

Results: The workflow was implemented at Weill Cornell Medical College in March 2013. In the ten months that the program was active, compliance rates among researchers rose from 78% to 90%. The program was down for 3 months while VIVO underwent maintenance. During that time, compliance rate dipped to 87% and has begun to rise once again with the reintroduction of the notification system.

Conclusions: Implementing a VIVO-based notification system with data and feedback from the Weill Cornell CTSC has proved invaluable in bringing delinquent publications into compliance. There is still some work that needs to be done to address collaborative papers with no Weill Cornell-affiliated authors, but there is a workflow in place to address that issue. We plan on implementing a more streamlined and fully automated approach that we believe will increase the speed and ease of achieving compliance.

Poster Number: 183

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Surveying Information and Informatics Literacy of First-Year Medical Students

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Objectives: Medical librarians promote students' effective use of information for evidence-based practice. However, rapidly exchanging curricular requirements and health information technologies require better understanding of medical students' initial information capabilities and needs. We therefore sought to determine the levels of information literacy and health informatics familiarity in a cohort of incoming medical students.

Methods: Weill Cornell Medical Library (New York, NY) librarians developed and administered a survey to gauge students' familiarity with information, informatics, and bioinformatics tools including electronic health records (EHRs), personal health records (PHRs), and BLAST. The team generated and pilot tested twenty-seven questions of various formats: binary, Likert scale, and free text. The survey was administered via iPads in August 2013 to students who had just completed a library orientation. The Institutional Review Board at Weill Cornell Medical College approved this study.

Results: Of the 77 medical students who attended the library orientation, 72 (94%) completed the survey. An overwhelming majority of subjects (98%) envisioned themselves likely to use the library for research purposes, its study spaces (47%), and its online assets (40%). Furthermore, a majority (74%) reported being somewhat or very likely to use a "personal librarian" throughout their time at WCMC. Over half (53%) reported previous experience searching biomedical literature in PubMed in addition to others: Web of Science (18%), Ovid MEDLINE (15%), Scopus (10%), and BIOSIS (3%). Subjects listed laptops as the most preferred modality for accessing biomedical information (60%) and smartphones as the least preferred modality (67%). Over 2 out of 5 (44%)

subjects reported having seen an EHR, fewer had seen a PHR (29%), and only 46% of those who answered expressed more than moderate interest in learning more about each. A majority (72%) described themselves as novice or proficient in computer programming. Subjects widely ranged in their familiarity with bioinformatics tools, but most were unsure or did not know tools such as BLAST and DAVID existed (50%-89%). However, over half the subjects (60%) reported moderate to extreme interest in learning more about bioinformatics tools.

Conclusion: Incoming medical students had notable amounts of experience with online biomedical databases, yet expected to use many of the library's physical resources. Interestingly, more subjects had seen EHRs than PHRs, had computer-programming experience, and expressed moderate to strong interest in bioinformatics databases. The survey results inform the library's future education and outreach strategies by highlighting areas for improving students' information, informatics, and bioinformatics literacy.

Poster Number: 184

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Surveying the Landscape: A Bibliometric Analysis of Global Health Literature

Megan von Isenburg, AHIP, Associate Director, Public Services; **Jean Ferguson**, Head, Research and Instructional Services, and Librarian, Global Health; Duke University, Durham, NC

Objectives: To plan for future collection and instructional needs by determining the types of materials cited by faculty and students in global health.
Methods: Global health is an emerging, interdisciplinary field comprising medicine, public policy, environmental sciences, engineering, sociology, economics, and other areas. This bibliometric citation analysis will seek to provide insight into the types of resources cited by faculty, graduate students, and undergraduate students in global health at a research university with a large medical center. Using Web of Science cited reference data as well as the cited references of graduate master's theses and undergraduate capstone papers, citations will be analyzed for their publication type, age, count, and subject. The citation patterns of faculty, graduate students, and undergraduate students will be compared. This citation analysis should provide a better understanding of the discipline and its researchers' needs to librarians at any institution with teaching and research interests in global health.

Poster Number: 185

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Taking It to the Streets: The iTest iPad Community-Based Organization Project

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Objectives: Understand how mobile technology would enhance prevention and wellness services conducted by community-based organizations (CBOs) providing services to under-served, low-income, and ethnically diverse communities.

Methods: CBOs connect community members to prevention and wellness services, coordinate access to appropriate health care services, and link individuals to coverage. CBOs are especially effective in providing services to under-served, low-income, and ethnically diverse communities. In 2012-2013, a pilot project was launched with six CBOs to support access to relevant health information resources for their users. The sites were selected based on the populations serviced and the amount of outreach conducted outside of the organization's physical structure. Each organization was provided an Apple iPad and a cellular data plan, allowing CBO staff to have Internet access where they normally would not during their outreach activities. Additionally, participants received training on health information resources and on the use of the iPad, and agreed to quarterly reporting of their experiences with the device.

Results: CBO staff soon noticed how immediate access to health services and education tools enhanced their outreach efforts. The iPad allowed access to information in the field increasing the length and breadth of most interactions; enhanced impromptu education sessions for health information while the client was open to discussing the topic; lowered the digital barriers for clients unfamiliar with or with no access to the Internet; helped boost recruitment for testing and signing up for services, referrals, and exchange of health-related information; and increased workflow and efficiency of processing needed forms and documents.

Conclusions: The Internet-enabled iPad increased client awareness of programs and probability of actively participating in health services. It greatly expanded the outreach conducted by CBOs' staff as the technology could go with

them to community events, client homes, health fairs--anywhere that community members gathered.

The Aging of the Optometry Monographs in the Traditional Areas of Optometric Expertise in Schools and Colleges of Optometry

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Objectives: Training optometrists consistently across the profession is critical. The optometry profession has historically had its own unique books that were used concurrently at optometric institutions. An observation was made by members of Association of Vision Science Librarians (AVSL) that the number of optometry books, authored by optometrist was declining, and those being used were growing outdated. This study researched that observation.
Methods: A request was sent to seventeen schools and college of optometry, for a list of all books held on reserve; thirteen responded. We then looked at acquisition lists from the thirteen responding schools for 2012/13. Additionally, we looked at Doody's List of recommended titles in optometry. And finally, we looked at the Vision Science Librarian Opening Day Book Lists. In each of these sources we looked at titles of books representing areas of optometric expertise (i.e., contact lenses, binocular vision, visual optics, refraction, procedures, and low vision). This information collected gave enough data to analyze and produce results.
Results: Information was received from thirteen schools or colleges of optometry libraries. It was compared to the data collected from Doody's, the Opening Day Book Lists, and acquisition lists. The data collected shows that the books held on reserve are outdated or quickly becoming outdated, that more ophthalmology books are appearing in the Doody's Optometry list than optometry books, that may of the optometry books in the Opening Day Book List are out of print, and that the books being purchased by optometry libraries are not being authored by optometrists in their areas of expertise.
Conclusions: The number of optometry books authored by optometrists in their areas of professional expertise is declining. The books being used in optometry schools and colleges in these areas of expertise, as found on reserves shelves, are outdated and not being replaced. The question becomes, "What materials are optometry students using if the texts in areas where their profession held the expertise are outdated?"

Poster Number: 187

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

The Development of Institutional Repositories of Twelve Medical School Libraries in Taiwan

Shu-Yuan Siao, Head, Knowledge Services Section; **Hsiao-Fen Yu**, Librarian, Knowledge Services Section; **Tzu-heng Chiu**, Professor/Director; Taipei Medical University, Taipei, Taiwan

Objectives: There are 161 universities in Taiwan, and 131 of them (81.4%) have built institutional repository(IR) databases that have been integrated as the Taiwan Academic Institutional Repository (TAIR) system. This study explores the development of IR databases of Taiwan's 12 medical schools. The relationship between numbers of bibliographic data in IR and the ranking web of universities (Webometrics) will also be examined.

Methods: The Webometrics are "visibility" (50%) and "activity" (50%). The "activity" indicator includes items of "presence," "openness," and "excellence." The definition of "openness" here means the effort for a university to set up its institutional research repositories and make their documents (rich files, such as PDF, DOC, DOCX, PPT) freely accessed via the academic search engine Google Scholar. The researchers analyzed the content of websites of the Webometrics and TAIR system, trying to find out the relationship between numbers of bibliographic records in an IR database and its ranking in the Webometrics. Questionnaires were also sent to the librarian who is in charge of the IR management in Taiwan's 12 medical schools, surveying the purpose, budget, manpower, and the effectiveness of improving university ranking in Webometrics of their IR databases.

Results: Among Taiwan's 12 medical schools, 10 (83.33%) have built IR databases, and 9 were selected into Webometrics from 2010 to 2013. Data of this study were collected through online questionnaire, and we received responses from 9 medical schools that have built IRs. The result shows that most of them built their IR databases in the period of 2009-2011, with the purposes of preserving institutional publications and promoting academic visibility. In terms of system maintenance, only 1 school is maintained by an office of research and development, and others are maintained by the university library with 1-2 staffs. In terms of the content, faculty publications and master theses/doctoral dissertations are the mainstream. As to the system, only one school purchases commercial software and others utilize NTUR, a modified version based on DSpace. All respondents agree that the most difficult parts is to acquire the authorization of the full-texts, and the biggest benefits are increasing visibility of the university and the improvement of ranking in the Webometrics.

Conclusions: The National Taiwan University Library and other university libraries that already have IRs will provide the support for installing software and setting up system when Taiwan's medical schools want to establish an IR

database. Therefore, the set up rate of IR is high due to the low technical threshold. However, the following operation and maintenance often become the burden. By collecting the academic publications, theses, dissertations, medical schools did raising their Webometrics ranking successfully, but they also suffer in getting the authorization of the full-texts. The core value of an IR database is to preserve institutional publications in digital form and provide free access to them. However, the concept of open access is still in the initial stage in Taiwan, as a result, the proportion of authorized full texts is quite low in the IR database.

Poster Number: 188

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

The Effectiveness of an Evidence-Based Nursing Workshop in a Medical Center in Taiwan

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Objectives: Evidence-based nursing provides nurses with a method to use critically appraised and scientifically proven evidence for delivering quality health care. The purpose of this study was to investigate the effectiveness of designed evidence-based nursing workshop curriculum on enhancing nursing ability and skills.

Methods: The participants were randomly divided into two groups with eleven participants in each. The curriculum including a total of six hours of evidence-based nursing workshop was designed to teach the nurses about the knowledge and skills of asking clinical questions, information search, critical appraisal, and clinical applications. The differences in evidence-based nursing knowledge, skills, and attitudes before and after the courses were also explored. A self-designed demographic questionnaire and a self-assessment questionnaire developed by the evidence-based medical center of Wan Fang Hospital were answered by the participants before the curriculum and then analyzed using statistical software SPSS 17.0, version for Windows.

Results: A total of 22 nurses with an average of 35.1±1.23 years were included in this study. Those with a bachelor's degree were predominant, accounting for 82.6%, followed by those with graduate degree (17.4%). The nurses with N3 level were the majority accounting for 54.55% (n=12), followed by those with N4 level 45.45% (n=10). After they participated in evidence-based nursing workshops, the scores in asking clinical questions, information search, critical appraisal, and clinical applications were significantly higher than that of pretest (P<0.01).

Conclusions: There were significant differences in evidence-based nursing knowledge and skills before and after the curriculum among the participants. It is recommended that evidence-based nursing workshop approach can be used in

the future to promote the concept of evidence-based nursing and clinical care context, in order to enhance nursing care quality and patient satisfaction.

The Effectiveness of Bowel Training in Neurological Bowel Dysfunction of Spinal Cord Injury Patients

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Objectives: Neurological bowel dysfunction is one of the major complications of spinal cord injury (SCI); 75% of disturbance is local incontinence and/or constipation. Bowel management is a potential amelioration of such disturbance.
Methods: Referring to cardinal steps of evidence-based medicine (EBM) practice, we proceeded to step 1 by formulating the patients as those who suffer from bowel disturbance follow with spinal cord injury and generated intervention as bowel training. Step 2 was formulated the search strategy as using (SCI or spinal cord trauma) and (neurological bowel dysfunction or neurogenic bowel or NBD) and (bowel training or bowel management or BM). Step 3 was completed by the Critical Appraisal Skills Programme (CASP) appraisal tool to appraise a randomized controlled trial RCT paper (spinal cord, 48, 504-510, 2010).
Results: Based on the difference of basic characteristics of 2 groups, it is probable subject to selection bias and the low follow-up rate (51.43% vs. 78.79%) make the result unreliable.
Conclusions: There is no sufficient evidence of managing bowel of neurological bowel dysfunction patient. Thus, bowel training in neurological bowel dysfunction of spinal cord injury patient is still in quandary.

Poster Number: 190

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

The Future of Gray Literature Use: Analyzing Sources and Formats in Occupational and Environmental Health

Nancy Schaefer, AHIP, Associate University Lilbrarian, Health Science Center Libraries/Biomedical and Health Information Services, University of Florida–Gainesville

Objectives: A recent analysis of 1,046 citations in 4 occupational health journals from 2008-2010 characterized 5.9% as government documents and 7.3% as miscellaneous (non-book/journal-article/government-document items.) The current study analyzes the format and authorship of the government document and miscellaneous citations in one journal to alert librarians to potentially useful sources and the need for instruction on non-standard bibliographic formats.

Methods: Citations in the *Journal of Occupational and Environmental Medicine* that had been categorized as government documents or miscellaneous in the 2008-2010 corpus were further categorized as to authorship and/or level of government/organization (international, national, state, municipal) sponsorship, format, and purpose (web page, standards, software, manual, etc.). Citations in the same journal from 2011-2013 were analyzed in the same manner, and the results combined to identify general trends. These trends were compared with trends observed in the gray literature of other disciplines to explore possible universals and unique aspects of cited gray literature in occupational and environmental health. The poster concludes with suggestions of possible sources, methods of keeping current on gray literature and the most common formats to include in bibliographic citation instruction.

Results: National and state-level government sources were cited more frequently than those at the international, regional, and local levels. Government agencies and nonprofit organizations were the authors/sponsors most often cited. Narrative reports and web pages were more frequently cited than other formats. Although US and European nations dominated, other nations were represented.

Conclusions: Occupational and environmental health researchers draw largely from national and state narrative and statistical reports. Librarians should investigate these sources in addition to books and journals but always caution students that the former are rarely peer-reviewed in the traditional academic sense. In the six years of this study, this journal's articles tended to cite European and American sources. However, increasing emphasis on global health and awareness of publication bias may increase citations from other geographic areas in the future.

Poster Number: 191

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

The Golden Hour: A Library's Role in Connecting First Responders to Critical Disaster Medicine Information

Terry Henner, Library Director; **Kimothy Smith**, Professor; University of Nevada School of Medicine, Reno, NV

Objectives: This study investigates to what degree the creation of a consolidated, comprehensive collection of online resources including a cross-linked directory of subject medical experts will impact the ability of regional first responders to access critical information in the early stages of a public health disaster.

Methods: This project represents a collaboration between staff of an academic medical library and professionals drawing from county, state, and regional organizations with responsibility for health-related disaster preparedness, response, and recovery. Online surveys, focus groups, and key informant interviews were employed to determine the scope and depth of information needed by first responders, particularly in the critical first stage or "golden hour." Results drove construction of an online portal that provided ready access to resources. A primary component of the work was the design of a medical subject experts directory. After an extensive data-gathering phase, library staff designed and implemented a database linking keywords, disciplines, and disaster events to regional and national experts. The website and directory were ported to a native app for use on first responder mobile devices.

Poster Number: 192

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

The History of Traumatic Brain Injury in the Medical Literature since World War II

D. Garon Bailey, Chief Medical Librarian/Director, Franzello Aeromedical Library, US Air Force School of Aerospace Medicine, Wright Patterson Air Force Base, OH; **Beatrice F. Nichols**, Library Director, Medical Library, Landstuhl Regional Medical Center, APO; **Maureen Humphrey-Shelton, AHIP**, Medical Librarian, Medical Library, Robley Rex VA Medical Center, Louisville, KY

Objective: This project will map the literature on traumatic brain injury (TBI) clarifying the progression of the published literature and development of subject headings. This complex injury, often included in polytrauma diagnoses, poses challenges to librarians researching the topic.

Methods: Bibliometric techniques will be used to identify publications from World War II to the War on Terrorism pertaining to traumatic brain injury, related research to determine trends in publication, the Medical Subject Headings (MeSH) past and present, and proliferation of publication in relation to major military engagements of the United States.

Results: Utilizing tools such as PubMed, Excel, GoPubMed, and Ligercat, we found that from World War II to the present, the number of TBI-related citations grew unevenly, but with an upward trend, showing three distinct periods of increase coinciding with major US military engagements. Between 1950-1960 (Korean War 1950-1955), the number of TBI-related citations increased by 539%. Following the Persian Gulf War 1990-1991, citations increased by 87% through year 2000. From 2000-2010 (Operation Enduring Freedom, Operation Iraqi Freedom/Operation New Dawn), the citation count increased by almost 81%.The core journals for TBI research are the *Journal of Neurotrauma, Brain Injury,* and the *Journal of Head Trauma Rehabilitation.* Brain injuries, which cover more than just TBI, is clearly the most commonly used MeSH terms. Other commonly used MeSH terms are wounds, non-penetrating; blast injuries; and combat disorders. Prior to Old MEDLINE, Index Medicus used brain as the subject heading for TBI-related articles. Post-traumatic stress disorder (PTSD) and TBI are often interwoven in the research. Shell shock, while not a MeSH term, is a commonly used term throughout the history of TBI and PTSD research. The first use of the phrase "traumatic brain injury" was found in 1958 by a Russian researcher but did not commonly come into use until the Gulf War in the 1990s. The United States has led the way in TBI-related research publications. We found, prior to many of the main MeSH terms coming into use, that TBI was often lumped in with topics such as shell shock, post-concussional syndrome, post-trauma concussion state, war neuroses, gross stress reaction, and Vietnam syndrome.

Conclusion: By knowing the history of TBI in the medical literature, librarians

can better locate the needed research and provide reliable, comprehensive searching to researchers.

Poster Number: 193

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

The Hospital Library Standards: Supporting Your Librarianship Now and into the Future

Barbara B. Davis, AHIP, Librarian, Library Resource Center/Newport Hospital/Lifespan, Newport Hospital, Newport, RI; **Edward Poletti, AHIP**, Chief, Learning Resources, Library, Central Arkansas Veterns Healthcare System, Little Rock, AR; **Ellen Aaronson, AHIP**, Librarian, Medical Library, West Hills Hospital & Medical Center, West Hills, CA; **Sheila Hayes, AHIP**, Senior Librarian, Robinson Library, Hartford Hospital, Hartford, CT; **Joy C. Kennedy**, Librarian and Consultant, , Evanston, IL; **Susan Shelly**, Librarian, Grigg Medical Library, John C. Lincoln Health Network, Phoenix, AZ

Objectives: At MLA '13, the Standards Committee presented a poster on data mined from two surveys on the Hospital Library Standards (2004 and 2012). The surveys measured the usability of the standards for supporting library services in institutions. The conversations at this session provided the impetus for the committee to explore in 2013-2014 the need for changes in the standards.
Methods: The Hospital Library Standards Committee will meet monthly between now and MLA '14 to discuss changes to the standards. The first meeting laid the groundwork for each standard to be reviewed in the light of staffing issues, technology, consumer outreach, and continuing education. In the successive meetings, each standard will be reviewed. New wording will be proposed and presented on the MLA '14 poster. The conversations at MLA '14 will be the impetus to launch a 2014-2015 survey to measure the effectiveness of the proposed changes. At MLA '15, the proposed changes will be submitted to the Hospital Libraries Section Board and to the Board of MLA.

The MLA Research Agenda: What Do We Know? The Systematic Review Project: A Status Report

Marie T. Ascher, AHIP, Associate Director, User Services, Health Sciences Library, New York Medical College, Valhalla, NY; **Heather N. Holmes, AHIP**, Clinical Informationist, Medical Library, Summa Health System, Akron, OH; **Jonathan Eldredge, AHIP**, Associate Professor, Health Sciences Library and Informatics Center/Family & Community Medicine, University of New Mexico–Albuquerque

Objectives: The Research Agenda Committee of the MLA Research Section published the second MLA Research Agenda in 2012. The Research Agenda is a list of "the most important and answerable questions facing the profession." In 2013, the committee proposed teams of librarian researchers be deployed to conduct systematic reviews to determine the evidence relative to these questions.
Methods: The teams are currently in the process of conducting systematic reviews. Most teams aspire to complete their systematic reviews, each representing a question in the Research Agenda by summer 2014. Several of the systematic review teams are presenting at the MLA annual meeting on various aspects of their progress. This poster will present the status report of the project as a whole. It is a fascinating and important project with so many members involved. The results of the project will drive research directions in our field and provide a starting point and knowledgebase from whence to begin the next phase of our evidence-based practice.
Results: This poster will present the status report of the project as a whole. It is a fascinating and important project with so many health sciences librarians and MLA members involved. The results of the project will drive research directions in our field and provide a starting point and knowledgebase from whence to begin the next phase of our evidence-based practice.
Conclusions: Several teams are on target to complete their reviews by summer 2014, while others will not be completed until a later date. The Research Agenda Committee is coordinating the project and will assure the eventual completion of reviews for all fifteen questions.

Poster Number: 195

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

The Process and Effects of Closing a Branch Library

Sheila J. Bryant, AHIP, Science Librarian, Main Library, Michigan State University, East Lansing, MI

Objectives: The library staff was charged to measure how the library space was being utilized by students, staff, and faculty. After conducting a self-study and gathering statistics, it was decided to close the branch library. How does the staff plan and implement the closing of a branch? How does the librarian handle the challenges of servicing patrons without a physical library?

Methods: The staff performed a self-study of the library that included a survey, information from other veterinary medicine libraries, a suggestion box, and gathering of various statistics and compiled a report of the findings. Library resources and materials were reviewed. The librarian implemented a plan to communicate and deliver resources and services to patrons without a physical space.

Results: The library staff spent the spring 2012 semester in preparation to close during the summer when there are no classes, created various lists of books to be transferred or withdrawn, and implemented services for Veterinary medicine students to requests print books and journals. When the new semester began, the librarian continued to attend student group meetings; conduct veterinary medicine library committee meetings; and participate in student, resident, and intern orientations.

Conclusions: The key to success was keeping the college informed during each phase of the move and subsequent closure and marketing the resources and services available. The physical space continued to be used as a quiet study space and reading room. The library and the college experienced a smooth transition.

Poster Number: 196

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

The Role of a Medical Library in Facilitating International Collaboration: Building up the Research Portal of the National Taiwan University College of Medicine

Chun-Ching Liang, Head; **Eileen Chang**, Serial Librarian; National Taiwan University, Taipei, Taiwan

Objectives: To facilitate the collaboration among faculty of National Taiwan University College of Medicine (NTUCM) and to provide a communication platform for international researchers.

Methods: Instead of linking to the individual website of each faculty, the general public can easily find out the research achievements and details of faculty members of NTUCM through the research portal. By integrating Open Researcher and Contributor ID (ORCID) records to the portal, faculty members do not have to update their own publication lists manually, an automated mechanism applied for ongoing updates. The National Taiwan University Medical Library handles procedures such as creating ORCID records and profile clean up on behalf of NTUCM affiliates. All individuals need to authorize the portal to create, access, or modify their records. Some faculty members are unwilling to finish registration procedures due to busy schedules. The library designed a simple but effective interface to eliminate the inconvenience to faculty members to make this project successful. The poster shows the workflow as well as solutions for problems encountered.

Results: More than 90% of faculty members responded positively to this project. They appreciate that the library designed a convenient mechanism that facilitates in accomplishing their research profiles.

Conclusions: Faculty members have been suffering from being asked to update research profiles once a while. The project provides a solution and raises the visibility of the library. The preparation of liaison librarians such as collecting relevant information for faculty members beforehand is the primary factor for success.

Poster Number: 197

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

The Semantic Web Demystified

Bethany S. McGowan, Allied Health Sciences Librarian, Louis Stokes Health Sciences Library, Howard University, Washington, DC

Objectives: What exactly is the semantic web, and what direct impact does it have on health sciences librarians? This narrative overview seeks to answers that question by introducing the main concepts of the semantic web and illustrating its usefulness in information retrieval.

Methods: This narrative overview is the summarization of two systematic reviews: one on the semantic web its major concepts and another on the semantic web and information retrieval.

Results and Conclusion: Librarian expertise in organizing knowledge and structuring information--work with controlled vocabularies, taxonomies, classification systems, metadata, and knowledge management--is useful when dealing with many of the issues semantic web projects face. Combining these skills with semantic web techniques can greatly improve information retrieval by providing structure to the highly complex information found in medical research.

Poster Number: 198

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

The Unfunded Worksite Wellness Program

Cheryl Rowan, Consumer Health Coordinator; **Donna Evans**, Cataloging and Metadata Librarian; **Adela Justice**, Outreach Librarian; **Beatriz Varman, AHIP**, Search Services Librarian, Education and Research Services; Texas Medical Center, Houston, TX

Objectives: The Texas Medical Center Library established a worksite wellness program to help create a healthy workplace and to promote healthier choices by employees. This poster will describe planning and implementation of the unfunded program in the library.

Methods: The program was established in 2010 using strategies from the National Network of Libraries of Medicine, South Central Region, training course on cultivating wellness in the workplace. A wellness committee was formed and administered an anonymous, web-based survey to staff to establish program priorities and interests. Survey results were presented to library leadership, who approved a policy awarding employees thirty minutes during each workday to engage in wellness-related activities. Space in the building was designated as a wellness room, and it was equipped with donated fitness equipment. Daily "wellness minutes" facilitate participation in initiatives such as walking clubs, activity challenges, and presentations. Pay-as-you-go on-site massage therapy and yoga classes are offered. Donations and fundraising initiatives provide support for low-cost projects. Results from a follow-up survey help to direct ongoing program efforts. Social media tools are used to share information.

Results: The wellness program provides information and initiatives to increase awareness and enable participation in wellness-related activities. Not all staff participates, but those who do are enthusiastic about the program.

Conclusions: A worksite wellness program can be implemented without funding and can contribute to creation of a healthy workplace.

Poster Number: 199

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

The United States Breast Cancer Research Stamp

Robert A. Cagna, AHIP, Library Director, Charleston Health Sciences Library, West Virginia University, Charleston, WV

Objectives: This will be a historical analysis of the US breast cancer research stamp, which was issued by the US Postal Service. How has the stamp increased public awareness of breast cancer, and how has it helped raise funds to find a cure?

Methods: This historical analysis will examine the causes and effects of the forces that opposed the stamp and the forces that championed it.

Results: Awareness of breast cancer has increased, and much money has been raised.

Conclusions: The US breast cancer research stamp has had an immensely positive and powerful effect, raising awareness of breast cancer and raising many millions of dollars to find a cure.

Poster Number: 200
Time: Tuesday, May 20, 1:00 PM – 1:55 PM

The Library's Biggest Resource: Expanding Traditional Metrics to Better Measure the Value of the Librarian

Sally A. Gore, Embedded Research Librarian/Informationist, Lamar Soutter Library, University of Massachusetts Medical School, Worcester, MA

Objectives: Libraries use metrics to prove their value (e.g., gate counts, circulation, article downloads). Such numbers, however, rarely translate to the value of the librarian. Similarly, counting reference questions or classes taught yields an insufficient picture of a librarian's worth to the community. This study asks if a newer model for measuring research impact provides a better framework to measure the librarian's value.
Methods: The Becker Medical Library Model for Assessment of Research Impact was originally designed "for tracking diffusion of research outputs and activities to locate indicators that demonstrate evidence of biomedical research impact" (https://becker.wustl.edu/impact-assessment/model). This study will adapt and utilize the framework of the model to assess the reach of one embedded librarian's work over a twelve-month period, comparing the results with the more traditional means of evaluation to determine if it yields a more accurate depiction of the librarian's value. It is hypothesized that counting work products generated by a librarian over time (e.g., collaborations formed, training materials distributed, social media interactions, conference lectures and presentations, etc.) can combine with traditional metrics to provide a more effective demonstration of the value of librarians and thus also, the library they serve.
Results: Standard annual performance and evaluation materials include forms allowing comments on the previous year's goals and objectives, the quality and quantity of work performed, the individual's organization skills, job knowledge and skills, and effectiveness regarding interpersonal relationships and team work. The librarian added to these comments a number of complementary and/or alternative metrics including graphics illustrating networks developed and objectives met, data on blog posts and visitors, data on social media interactions, invitations to lecture and present on professional topics, publications, records of communications from faculty, researchers, and students, and other relevant materials. The result was a significantly more comprehensive picture of the impact of one librarian's work as it affects the university community and beyond.
Conclusion: Just as citations provide a limited view of the impact of research, traditional counts, measures, and a checklist of goals and objectives reported in a librarian's annual review also offer a less-than-complete picture of the full value and reach of the work done. Librarians need to expand their ways of tracking and

reporting accomplishments, including a wide range of both quantifiable and qualifiable measures, to better demonstrate their value to administrators both within and outside of the library.

Poster Number: 201

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Tools for Building Our Information Future: Emerging Technologies Vital to Medical Libraries

Patricia F. Anderson, Emerging Technologies Librarian, Taubman Health Sciences Library, University of Michigan–Ann Arbor; **Skye Bickett, AHIP**, Reference and Education Librarian, Library, Philadelphia College of Osteopathic Medicine, Suwanee, GA; **Joanne Doucette**, Associate Director, Knowledge Management, and Assistant Professor, Library and Learning Resources, Massachusetts College of Pharmacy and Health Sciences University, Boston, MA; **Pamela R. Herring, AHIP**, Electronic Resources Librarian, Harriet F. Ginsburg Health Sciences Library, University of Central Florida College of Medicine, Orlando, FL; **Judith Kammerer, AHIP**, Medical Librarian, Medical Library, University of California-San Francisco, Fresno, CA; **Andrea Kepsel, AHIP**, Health Sciences Educational Technology Librarian, MSU Libraries, Michigan State University, East Lansing, MI; **Tierney Lyons**, Reference Librarian, Library, Penn State University-Worthington Scranton, Dunmore, PA; **Scott McLachlan**, Information Officer, Library, Oxford, United Kingdom; **Ingrid Tonnison**, Electronic Services Librarian, Library, Central Coast Local Health District, Gosford, New South Wales, Australia; **Lin Wu, AHIP**, Reference Service Librarian, Health Science Center Library and Biocommunications Center, University of Tennessee–Memphis

Objectives: As health care professionals steadily incorporate emerging technologies into their practice and education, health sciences libraries need to investigate, adopt, and provide learning opportunities on relevant and forthcoming technologies. This study identifies emerging technologies central to medical librarianship and serves as an exploratory project for research on skills and information structures medical librarians need in this changing environment. **Methods:** To gather insight on the emerging technologies critical to medical librarianship, the authors identified forthcoming trends and newly adopted tools through an online survey and two focus group sessions. First the authors identified tools and technologies of interest to medical librarians and/or their communities, collaborating by using mind-mapping software to develop a flowchart that shows their relatedness. This map informed trends to explore in the survey and focus groups. The online survey and two Twitter-based focus groups, conducted in summer 2013, were distributed through a variety of media (Twitter, blogging, email), targeting medical librarians and health care leaders. **Results:** The data from the survey and focus groups enriched the flowchart with additional technologies, also identifying appropriate roles for medical librarians. The flowchart includes over eighty main groups of emerging technologies, some being broken down for more detail about the technologies. The main roles for librarians were identified as that of an organizer and provider of information, a

guide, and teacher. Collected data were analyzed to determine gaps, most significant technologies, and potential applications.

Conclusions: The top five emerging technologies for medical librarianship were identified by the authors. These technologies have the potential to be used for communication and education by librarians, on the human body, in health care delivery and public health, and in traditional librarianship. Further research should address barriers for adoption and concerns of librarians for these and other emerging technologies.

Tracking Informationist Services

Katie Lobner, Clinical Informationist; **Victoria H. Goode, AHIP**, Clinical Informationist; **Blair Anton, AHIP**, Associate Director, Clinical Informationist Services; **Jaime Friel Blanck, AHIP**, Clinical Informationist; **Sue M. Woodson**, Associate Director, Collection Services; **Robert Wright**, Basic Science Informationist; **Lori Rosman, AHIP**, Public Health Informationist; Johns Hopkins University, Baltimore, MD

Objectives: This project compared and evaluated several informationist service tracking tools that would allow efficient identification and reporting of meaningful assessment indicators included in our institution's new strategic plan. These tracking tools were evaluated based on several factors, including the ability to customize, usability, reporting functions, and ease of data input and output.
Methods: We polled health sciences libraries and librarians through MEDLIB-L to create a list of commonly used tracking tools. We also examined an online list of time tracking applications (www.lifehacker.com/5362829/five-best-time+tracking-applications). Each of the tools was assessed based on basic marketing information in order to determine which had the most desired functionality. After this initial review, three of these tools were selected for further evaluation. Each tool was tested by a pair of authors for its usability, ability to be customized, ease of data input, and flexibility in reporting functions. These tools were assessed in the context of informationist workflow in order to determine if daily use would be feasible.
Results: We examined three tools in detail: SlimTimer, Desk Tracker, and LibAnalytics. SlimTimer is focused very specifically on time tracking and is not customizable. It works well for real-time tracking, but adding data retroactively is cumbersome. Reporting is very limited. Both Desk Tracker and LibAnalytics are completely customizable and easy to use. Inputting data is simple, and accessing the tools is easy because they are both web-based. They are both customizable enough to be useful for the tracking and reporting needs of other library departments including collections and circulation.
Conclusions: Each of these tools has strengths and weaknesses. The reasons for collecting data will determine which tool is most useful for an individual institution. While all of these tools collect the amount of time spent on an activity, LibAnalytics and DeskTracker offer the most robust reporting and customization features.

Poster Number: 203

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Translating Information Skills: Moving from the Library to the Lab with Bioinformatics Services

Robyn B. Reed, Biomedical Informatics and Emerging Technologies Librarian, George T. Harrell Health Sciences Library, Penn State University, Hershey, PA; **Amy E. Donahue, AHIP**, User Education/Reference Librarian, MCW Libraries, Medical College of Wisconsin, Milwaukee, WI

Objectives: The changing information needs of biomedical researchers have resulted in new roles for health sciences librarians in the area of bioinformatics. Moving into these roles through new library services can be both promising and challenging. This case study examines the activities of librarians at two different academic institutions involved in designing and implementing bioinformatics library services, taking their different backgrounds and settings into account. The goal of this study is to assist librarians who are in the process of planning similar offerings and to encourage those who have yet to start by demonstrating the feasibility of librarian involvement in bioinformatics roles.

Methods: Both librarians successfully completed a continuing education course in bioinformatics offered by the National Library of Medicine (NLM)/National Center for Biotechnology Information (NCBI) and are using that training as a springboard into designing new bioinformatics services. This case study begins with that training and compares stakeholder identification, marketing strategies, educational content development, and service evaluation at both institutions.

Results: To market bioinformatics services efficiently, stakeholder groups were identified separately by the librarians and were very similar: Clinical and Translational Science Institute members, basic science and clinical faculty, and campus leaders (e.g., graduate program directors, departmental chairs, etc.). While fliers posted near laboratories at one institution alerted researchers to workshops, a library display case at the other institution highlighted resources and services. Advertisements and articles sent to department email discussion lists and online newsletters reached broad audiences at both locations. The fliers and emails from one library brought faculty, staff, students, and postdocs to workshops. The classes included a variety of bioinformatics resources, beginning with the Basic Local Alignment Search Tool (BLAST) followed by Entrez navigation, structure, and variation sessions. At the second library, an online form to request customized training in NCBI resources went live in January, and a bioinformatics tools class is being developed for the spring. Both librarians gather feedback using evaluation forms to guide future workshops.

Conclusions: Initiatives to introduce librarian-led bioinformatics training in academic settings have been successful to date. Challenges remain in keeping current with infrequently used skill sets, adapting to a changing biomedical environment, learning specialized needs of researchers, and establishing

stronger relationships with stakeholder groups. Future directions include expanding training offerings in response to topics proposed by workshop attendees, developing a bioinformatics reference service to complement workshops, and participating in course-integrated instruction.

Two Universities + One Campus = Collaboration?

Kathleen Carlson, AHIP, Education Librarian, Phoenix Biomedical Campus Library, University of Arizona College of Medicine, Phoenix, AZ; **Jessica Cole, AHIP**, Academic Programs Librarian, Phoenix Biomedical Campus Library, Northern Arizona University, Phoenix, AZ

Objectives: How can two universities exist on one campus and share a library when they have vastly different philosophies? The purpose of this poster is to show how partners of the Phoenix Biomedical Campus (PBC) Library are collaborating as one unit.
Methods: In the fall of 2004 began an unprecedented statewide collaboration of the Arizona Board of Regents, the three state universities, the City of Phoenix, the Translational Genomics Research Institute (TGen), and Phoenix-area teaching hospitals. This initiative, guided by a governor-appointed commission and effort to address health care shortages in Arizona, led to the establishment of the PBC in downtown Phoenix. The University of Arizona (UA) College of Medicine-Phoenix is the anchor of the PBC. The Health Sciences Education Building that opened during the summer of 2012 is home to over 300 students in UA medicine, pharmacy, public health, and nursing. There are over 100 students in the Northern Arizona University (NAU) physician assistant and physical therapy programs, and the NAU Occupational Therapy program is expected to open in the fall of 2014.
Conclusions: The purpose of this poster is to show how partners of the PBC Library are collaborating as one unit.

Unanswerable Questions: What Do You Do with Challenging Health Reference Questions?

Angela Lee, Information Services and Instructional Librarian, Health Sciences Library, John A. Burns School of Medicine, University of Hawaii, Honolulu, HI; **Carolyn Ching Dennison, AHIP**, Instruction and Research Librarian, Science and Technology Reference Department, Library, University of Hawaii-Manoa, Honolulu, HI

Objectives: Describe the characteristics of challenging health reference questions and propose ways to improve one's chances of finding answers. This study will identify the range of questions (e.g., question types, answer quality, user satisfaction) presented in online community forums like MEDLIB-L. It will duplicate a similar study in 2004 that analyzed MEDLIB-L messages but will focus on reference questions.
Methods: This study will analyze messages posted in MEDLIB-L from January 2012 to December 2012. Announcements, citation verifications, document delivery requests, and chat discussions will be excluded from the analysis. The remaining messages will be analyzed and classified according to question type, response given, response quality, and user satisfaction. Messages will be coded using a modified classification system based on Cheri Smith's 2004 study of the culture of MEDLIB-L. Identified categories include: topical search, statistical data, practice guidelines, standards, product reviews, measurement tools/tests, skills training, grants, and administrative/organizational. Once messages are categorized, a content analysis will be conducted to identify key patterns and clues for how librarians and information specialists can find answers to difficult reference questions.
Results: Results are not yet complete.
Conclusions: Analysis of the project is still ongoing.

Poster Number: 206

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Uncovering Your Electronic and Print Books Using a Next Generation Discovery Tool

Luree H. Ohigashi Oasay, AHIP, Technical Services Librarian, Health Sciences Library, John A. Burns School of Medicine, University of Hawaii-Manoa, Honolulu, HI; **Virginia M. Tanji**, Director, Health Sciences Library, School of Medicine, University of Hawaii-Manoa, Honolulu, HI

Objectives: The 12 libraries of the University of Hawaii system recently implemented Primo, ExLibris's web-scale discovery system. Our small academic health sciences library recently subscribed to Elsevier's ClinicalKey database, which includes about 1,000 electronic textbooks. Can we centralize access to all of our print and e-books collections for our users while improving work efficiency for our staff using Primo?

Methods: When we had a manageable collection of e-books, we cataloged every title and created a LibGuide for our students linking to the e-books by title and broad subject area. With the acquisition of the ClinicalKey e-book titles, we had to rethink our approach in order to optimize work efficiency and maximize exposure to all of our titles, whether electronic or print. An efficient and comprehensive means to expose both our e-book and hard copy collections was found utilizing Primo and our link resolver, ExLibris's SFX. We decided to experiment with a search scope (group of records) that includes our Voyager records and our SFX e-book holdings records. We wanted to test whether a single search might uncover other uncatalogued e-book titles, languishing undiscovered in other subscribed collections as well as the considerable print collections.

Results: By harvesting SFX e-book metadata into Primo and making it searchable alongside our Voyager records in this new scope, our users now have the option of using our "OneSearch" Books tab to discover *all* book titles held by our library, *regardless of format*. E-books that have not yet been cataloged in Voyager for whatever reason are available in Primo via this tab soon after the titles are activated in SFX. With a small technical services staff, we no longer have to worry whether our e-books are accessible to our users in a timely manner since large e-book collections like ClincalKey's are discoverable soon after activated in SFX. Instead, we now focus our time on cataloging only problematic titles in Voyager that are either excluded or missing in SFX, no longer entire collections, thus, eliminating the need for on-going bulk imports of cataloging records into our Voyager system.

Conclusions: Establishing this new scope has expedited access to our entire books collection for our users and staff no matter the format and all in one place via our new Books tab. Although there are some issues to consider, overall, our

experience illustrates that the merits clearly outweigh any problems or limitations that we have encountered thus far.

Poster Number: 207

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Undead PubMed: Raising the Dead to Raise Class Attendance

Mary Lou Klem, Reference Librarian; **Rebecca Abromitis**, Reference Librarian; Health Sciences Library System, University of Pittsburgh, Pittsburgh, PA

Objectives: The purpose of this project was to test the effect of a seasonal version of a PubMed class on attendance for that class. Attendance at a seasonal version of PubMed (Undead PubMed) offered in October 2013 was compared to attendance at standard PubMed classes offered during the same time period in 2012.

Methods: During brainstorming sessions at an academic health sciences library, offering standard classes with "seasonal" variations was proposed. Building on this idea, librarians developed and offered Undead PubMed classes during October 2013. Marketing included fliers picturing zombie librarians and the tagline, "When the zombie apocalypse occurs, your greatest weapon may be current information." Library staff and medical students were recruited to produce a video that simulated a live feed from an emergency department (ED) physician. During the Undead PubMed class, attendees and the instruction librarian interacted with the physician, who made a series of increasingly urgent search requests based on unusual patient presentations in the ED. Using these requests as teaching examples, the librarian provided instruction on searching PubMed. The class concluded with a final video message from the physician, who had become zombified while treating patients.

Results: Creating the 8-minute video involved the participation of 9 library staff (representing all departments within the library), 1 professional scenic artist, and 1 medical student. Four sessions of Undead PubMed were offered during October 2013, with a total attendance of 12 patrons (class average=3.0). In comparison, 4 standard PubMed classes offered during October 2012 were attended by 9 patrons (class average=2.25). Graphic analysis of 2 time periods (September-November 2012, September-November 2013) indicated an increase in class attendance in October 2013, relative to October 2012. However, this increase was offset by lower attendance in the months preceding and following Undead Oct (September, November). In addition to the 4 Undead sessions offered to patrons, dress rehearsals for the Undead class attracted 17 library staff and 6 medical students. The Undead class was also the subject of a front-page story in the university newspaper.

Conclusions: Undead PubMed sessions may have attracted more patrons than standard classes, although any such effect was offset by lower attendance in contiguous months. Development of this seasonal version of a PubMed class provided an opportunity for staff from all areas of the library to work together on a

project and allowed a target audience (medical students) to see librarians in a new light.

Poster Number: 208
Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Unique Mentoring Opportunity in an Academic Health Sciences Library

Lydia A. Howes, University Library Associate; **Marci Brandenburg**, Bioinformationist; University of Michigan–Ann Arbor

Objectives: To describe the University of Michigan's experience with the University Library Associates (ULA) program that encourages mentor relationships between experienced librarians and library school students as they collaborate on a significant library-related project. To investigate the perceived benefits of and opportunity for mentoring relationships between health sciences librarians and school of information students.

Methods: The ULA program at the University of Michigan provides the opportunity for School of Information master's students who are interested in academic and research libraries to combine education and work experience in campus libraries. During the second year of this program, a significant library-related project is completed under the direction of a librarian mentor, resulting in a meaningful deliverable and a project presentation. The specific project discussed in this poster aimed to provide the library with a video tutorial for a bioinformatics tool, including an assessment component, while the student gained transferable knowledge and skills. To expand upon our own experience, we interviewed several health sciences librarians about their opportunities and experiences with mentoring students, students currently participating in mentorship experiences, and librarians who had mentor relationships during their schooling.

Results: Current and former ULAs and mentors participated in a survey with a subgroup participating in more focused interviews. A unique aspect of this program is the requirement to complete a major project outside of the ULA's primary unit, which develops additional breadth and skills for the student. The authors formed a mentor/mentee relationship for the ULA's second-year project that culminated in the development of a video tutorial for ConceptGen, an enrichment testing and concept mapping tool. Through this experience, the ULA learned how to use ConceptGen and Camtasia, in addition to learning about critical components necessary for developing video tutorials with an assessment element incorporated.

Conclusions: Feedback from surveyed ULAs and mentors was generally positive, showing that the ULA mentorship program is beneficial for both the mentor and mentee. The mentee is provided with an excellent learning opportunity, while the mentor receives invaluable help accomplishing tasks and projects. The ULA model provides meaningful and influential experiences for all involved.

Use of Citation Metrics to Demonstrate Impact of an Interdisciplinary Research Center

Laura Pavlech, Graduate Research Assistant, Health Sciences Library, University of North Carolina–Chapel Hill; **Rachel Lerner**, Public Services Librarian, Edward and Barbara Netter Library, Quinnipiac University, Hamden, CT

Objectives: A librarian and graduate assistant at an academic health sciences library partnered with the program director of an injury prevention research center (IPRC) to help the center demonstrate their research impact for grant renewal. Lessons learned during the course of this project will be beneficial to librarians who provide metrics services and the researchers who they assist.
Methods: A health sciences library and IPRC agreed upon a contract whereby the library would compile publication and author-level metrics in exchange for payment for sixty hours of work. A detailed list of metrics that the library could provide was submitted to the IPRC program director, who selected several measures of impact from this list. All publications authored by IPRC researchers in the past five years were located and placed in EndNote. Web of Science, Scopus, and Journal Citation Reports were utilized to obtain the selected metrics. The metrics were then entered into the reference information in EndNote. The search feature in EndNote was used to generate counts for several of the metrics. All publication and author metrics were presented to the IPRC in the form of two Microsoft Excel files.
Results: Metrics were gathered for 490 publications authored by the 41 authors who worked with the IPRC. The time-consuming nature of the project means it is unlikely that the library will perform this work for institutes and centers of a similar size as the IPRC. However, the library could provide measures of impact for individuals and small teams of researchers and offer consultations and workshops to teach researchers how to demonstrate their impact. Altmetrics were not included on the list of metrics offered to the IPRC; the use of these metrics should be investigated and shared with researchers.
Conclusions: A health sciences library helped a large research center demonstrate their impact by allowing the center to choose from a selected list of metrics and then compiling the chosen metrics for them. EndNote allowed the librarians to organize information for a large number of references and, using the search features, determine counts for the set of references. The library learned that researchers should be encouraged to cite the grants that support their work. In the future, the library can offer individual consultations and workshops to explain different methods of demonstrating research impact.

Poster Number: 210

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Utilization of an Assessment Tool to Customize Instruction for Emergency Medicine Residents

Amy Allison, AHIP, Head, Clinical Informationist Services, Woodruff Health Sciences Center Library, Emory University, Atlanta, GA; **Kevin Bradford**, Clinical Informationist, Woodruff Health Sciences Center Library, Emory University, Atlanta, GA; **John K. Nemeth**, Clinical Informationist, Woodruff Health Sciences Center Library, Emory University Hospital Midtown, Atlanta, GA; **Mia S. White, AHIP**, Medical Education and Technologies Informationist, Woodruff Health Sciences Center Library, Emory Unviersity, Atlanta, GA

Objectives: The objectives are to assess residents' skills at locating information to address clinical questions and to use the results to customize instruction. The end goals are to: provide individualized feedback, tailor sessions based on performance, and raise self-awareness of residents' abilities in order to build skills for selecting appropriate tools and formulating strategies to locate published evidence.

Methods: In part 1 of the program, informationists created an assessment tool based on the Fresno Test of Evidence Based Medicine. Next, they developed a rubric for rating residents' responses as excellent, acceptable, limited, or not evident. This assessment tool required the residents to self-rate their search skills and then complete tasks associated with three clinical scenarios: diagnosis, prognosis, and therapy. In part 2, informationists used the results to provide residents with individualized feedback regarding their performance. In part 3, based on their scores, residents are assigned to one of two sessions. Residents scoring in limited or not evident categories received basic instruction, such as the patient/problem, intervention, comparison, outcome (PICO) method; search terms; and criteria for selecting from search results. Residents who rated in acceptable or excellent categories received instruction on more advanced topics.

Vehicles of the Future: Building Course Pages to Promote Use of Medical Library Resources

Suzanne P. Nagy, AHIP, Web Services & E-Resources Librarian; **Martin Wood, AHIP**, Assistant Director; Charlotte Edwards Maguire Medical Library, Florida State University, Tallahassee, FL

Objectives: Conversations with students and faculty indicated they that there was a disconnect between the library and medical education. To resolve the resulting underutilization of existing resources, our solution was to create direct links from our website to the most important course resources.
Methods:

1. Our approach was to develop web pages that focus on each course in the curriculum. These web pages were to be used by students in courses as well as by clerkship faculty and full-time faculty across the College of Medicine. The design was to be something more than an online syllabus, more accessible than a Blackboard site, and more targeted to the courses than LibGuides.
2. We made six sample course pages to see how they were used. Then we used the successful ones to persuade other faculty of their usefulness. Now we have twenty-three course pages.
3. Using the course syllabi as a foundation, we met with course, education, and clerkship directors to identify library resources that add value to each course. These value-added resources include e-books, select print books, e-journals, and other online library resources. Particular emphasis was given to those library resources that were available in a mobile-friendly format. Resources were included only if they were approved by the course faculty.
4. Course pages are accessible from any page on the medical library website.

Results:

1. Conversations with faculty about course pages led to more focused purchasing of new resources, as well as renewal of existing resources.
2. The process brands and gives exposure/promotes the medical library and its services and staff.
3. A medical librarian is now included in Curriculum Committee reviews of medical education courses.

4. A direct connection between medical education and medical library resources has ensued, resulting in faster access to most relevant course materials. Course pages have enhanced access to medical library resources for medical students and faculty from both on and off campus.

Conclusions: Successful. We are presently developing course pages for our residency and fellowship programs, as well as researching options for mobile access.

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Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Web of Science versus Scopus for Capturing Researcher Output: A Bibliographic Comparison

Wendy Wu, Information Services Librarian; **Alison Slyman**, Medical Librarian; Wayne State University, Detroit, MI

Objectives: How do Web of Science and Scopus compare in capturing researcher output and citation activity?

Methods: We have compiled lists of about twenty-five research faculty from three separate colleges/departments at Wayne State University: the College of Pharmacy, College of Nursing, and Obstetrics/Gynecology (OB/GYN) Division of the School of Medicine. We used the author search capabilities of both Scopus and Web of Science. In Scopus, we searched by last name, first initial, and institutional affiliation, "Wayne State." We then selected the most appropriate author profile returned. In Web of Science, we specified all years for the author search. We searched by last name, first initial, and institutional affiliation, "Wayne State." The most appropriate author profile was selected from results. We will compare total number of articles retrieved and total citations for each researcher captured by these tools. We will compare how many retrieved articles and citations are the same for both databases for a selected sample, to gauge accuracy.

Results: There was a small difference in total document retrieval between Web of Science and Scopus (9% difference) for the OB/GYN researchers, particularly compared to the wide disparity for the pharmacy department (51% difference).

- Web of Science retrieved more publications than Scopus for College of Nursing faculty. Upon closer investigation of the retrieved results, we can see that this caused primarily by a name ambiguity problem for researcher #5, to whom Web of Science attributed hundreds more publications than the researcher actually wrote.
- The large discrepancy in pharmacy publications captured by Web of Science and by Scopus could be accounted for partially by Scopus's greater coverage of pharmacy literature (including indexed citations from Embase).
- The differences in publications attributed to each individual researcher are amplified in the total number of citations for the College of Nursing in aggregate. A 5,000+ citation difference or nearly 1/3 of the total citations for the department, between citation reports of each database is non-trivial and would require substantial human analysis and labor to sort out.

Conclusions: Our preliminary investigation into actual reporting differences between Web of Science and Scopus for individual researcher outputs shows troubling differences between the reported citation activity for individual researchers and entire departments.

Web-Scale Discovery Tool: Is It Right For You?

Tara Brigham, Medical Librarian, Mayo Clinic Libraries, Mayo Clinic, Jacksonville, FL; **Kelly Arp**, Electronic Resource Librarian, Mayo Clinic Libraries, Mayo Clinic, Rochester, MN; **Carol Ann Attwood, AHIP**, Medical Librarian/Registered Nurse, Patient and Health Education Library, Mayo Clinic in Arizona, Scottsdale, AZ; **Ann M. Farrell**, Librarian, Mayo Clinic Libraries, Mayo Clinic, Rochester, MN; **Leah Osterhaus Trzasko**, Librarian, Mayo Clinic Libraries, Mayo Clinic Health System, La Crosse, WI; **Mark Wentz**, Library Associate II, Mayo Medical Libraries, Mayo Clinic, Rochester, MN

Objectives: To identify, investigate and test multiple web-scale discovery (WSD) tools to determine if one would enhance our library users' experience.

Methods: Library literature documents that single-box search engines, like Google, are preferred by users because they struggle to navigate the library websites, catalogs, databases, and e-resources. Many libraries are purchasing WSD products, as they are touted to make the library experience more "Google-like." Looking to improve our users' experience, we formed a workgroup to explore WSD systems. We conducted a literature review to help us set a framework for our investigation. A library staff survey was used to rank the most important qualities of a WSD. We identified the top four WSD vendors. They completed request for information (RFIs) packets and provided in-person demos to library staff. Staff provided feedback following the demos. To gain more insight about the tools, thirteen staff members completed apples-to-apples comparison searches of libraries that had implemented these products. A weighted matrix was used to summarize the data and rank the products.

Results: The range of possible results for the weighted matrix was from 44 (if a product scored a 1 for each criterion) to 216 (if a product scored a 10 for each criterion). The midpoint of the range was 130. The final scores ranged from 117 to 169.

Conclusions: Although one of the WSDs did score higher than the rest, the workgroup also considered the literature review, the RFIs, the apples-to-apples results, and the experiences of other libraries. Most importantly, the group noted that none of the products indexed the most highly used e-resources at our library. Although we did not have a 100% consensus within the group, the majority felt strongly that our library should delay the purchase and implementation of a WSD product. The library is in the process of redesigning its website; once that is functional, we will evaluate user satisfaction and revisit the value of a WDS tool as they will likely improve over time. Our future investigation of WSD will include requesting trial access to the top candidates to enable a better apples-to apples comparison.

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Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Web-Scale Discovery: Is It a Building Block for Your Future?

Janis F. Brown, AHIP, Associate Director, Systems and Information Technology Division; **Mary Fran Prottsman, AHIP**, Associate Director, Collection Resources Division; **Megan Rosenbloom**, Head, Metadata and Content Management; **Jin Wu**, Emerging Technologies Librarian; Norris Medical Library, University of Southern California, Los Angeles, CA

Objectives: Using web-scale discovery tools for a single Google-like search of the library's licensed online resources and catalog is a growing trend for academic libraries. But is it a building block that should be utilized in health sciences libraries? The objective of this study was to determine current practice and attitudes toward discovery tools in health sciences libraries.

Methods: While trying to choose a discovery tool for our academic health sciences library, we looked at various options including Serials Solutions' Summon, EBSCO's EDS, Innovative Interfaces' Encore Synergy and ES, OCLC's WorldCat Local, and SwetsWise's Medical Searcher. We had a difficult time determining the best option. In our discussions about discovery tools, we began to question whether they were the right tool for health sciences libraries. To gather opinions and practice from other libraries, we decided to conduct a survey. Through the survey, we asked librarians to provide answers about current use of discovery tools, decision factors, future intentions, attitudes toward discovery tools, and other questions. The survey was created using Qualtrics and was sent to various health sciences libraries' mailing lists to cover a broad cross-section of health sciences libraries and librarians.

Results: We received 296 usable responses that were primarily from academic (51%) and hospital librarians (32%) from across the United States. Forty-eight percent of the libraries represented reported providing discovery tools for their users, with Serials Solutions' Summon (34%) and EBSCO's EDS (29%) being the most commonly provided. Librarians from those libraries felt that most of their users were satisfied with the tool, with only 16% feeling that their users were either dissatisfied or very dissatisfied. However, those librarians reported less satisfaction with the discovery tools themselves, and 60% felt that either some or extensive user training was required. Of all respondents, 41% felt that discovery tools were a good idea but there was not yet a perfect product, and 24% felt that discovery tools were OK for general, undergraduate students. Cost was the most common reason for not having a discovery tool.

Conclusions: The decision to provide a discovery tool is an individual one based on funding, electronic resources for inclusion in the discovery tool, the user population, the philosophy of the library, and other factors. There is no one

discovery tool that is best for all health sciences libraries, and some may decide that the time is not right yet to implement one.

Poster Number: 215

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

What Is Important to Chapter Members? A Survey of Members of One Chapter

Barbara Cosart, AHIP, Medical Librarian, Clinical Education Center Library-Brackenridge, Seton Healthcare Family, Austin, TX

Objectives: In the wake of declining membership numbers, the Membership Committee of one MLA chapter wished to determine the satisfiers and dissatisfiers of chapter membership, and what members need in order to feel they have a return on their investment.

Methods: A SurveyMonkey questionnaire was devised and emailed to all current chapter members, as well as former members who had been members within the last five years. Questions assessed reasons for membership, reasons for non-renewal, chapter involvement, length of membership, and members' wishes for additional chapter programs and services. Responses were anonymous.

Results: Results showed a great deal of satisfaction with the chapter. Respondents rated networking, continuing education, and the annual conference as the most important reasons for membership. Continuing education was the greatest area in need of improvement and expansion, with the annual conference a close second, followed by communication (including the website). Retirement, near-retirement, and non-conference attendance were the most common reasons for non-renewal. Collaboration, advocacy, coaching, mentoring, and professional guidance were also valued. Results were sent to chapter leaders and committee chairs in the form of a report.

Conclusions: In conclusion, there is much we can do to improve the chapter membership experience in order to ensure return on investment for members, improve member retention, and recruit new members. It is hoped that this information will be used by chapter leaders as they develop future programs.

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Time: Tuesday, May 20, 1:00 PM – 1:55 PM

What Is the Blueprint to Build an Educational Experience? Investigations into Print and E-Book Use among Pharmacy and Nursing Students

Xan Goodman, AHIP, Health and Life Sciences Librarian, University Libraries, University of Nevada–Henderson ; **Suzanne Fayle**, Electronic Resources/Systems Librarian, University Library, Roseman University of Health Sciences, Henderson , NV

Objectives: This poster will describe a case study examining student preferences for print books or e-books, in an accelerated, mastery learning, baccalaureate nursing and doctoral pharmacy program. Student preference for the format blueprint of their choice for building their educational experience to create their expected future will be displayed and explained in this case study.
Methods: This study used a 3-pronged approach to discover how students were building their educational experience with learning materials. A 22-question survey was administered to a total of 539 students. Descriptive statistics were gathered from this survey to uncover student preference for and use of print or e-books. Two types of statistics were collected for the same titles of print books and e-books for the purpose of comparing student use of these format types. Circulation statistics for print books were collected. Access data for e-books with matching print titles were collected, too. A focus group was convened. Three questions were asked to learn student format preference, how they made a decision about format preference, and if there were any additional factors that contributed to their preferences for print or e-books.
Results: Results showed that students were contradictory in their stated preferences when all sources of data were compared. A higher percentage of nursing students preferred print to e-books. Pharmacy students also showed a preference for print; however, a greater percentage of pharmacy students indicated a preference for e-books. Focus group data showed variations in affective concerns regarding the use of print and e-books. Use data from circulation statistics and access data showed an overwhelmingly higher use of e-books, even though print was a stated preference.
Conclusions: Survey data indicated that pharmacy and nursing students prefer print over e-books. Circulation statistics compared with e-book access data showed that the highest use of a print title was far lower than the highest use of an electronic title. An unexpected finding was controversy over the use of e-books during assessment challenges. After exams, students have an opportunity to challenge exam questions, this challenging of assessment questions is a feature of mastery learning. Nursing students were not allowed to use electronic

materials, whereas pharmacy students were allowed to use any materials. Affective format concerns mirrored other studies.

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Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Women's Health Resources Dissemination Project

Laura Bartlett, Technical Information Specialist, Outreach and Special Populations Branch, National Library of Medicine, Bethesda, MD; **Lisa Begg**, Director, Research Programs, Office of Research on Women's Health, National Institutes of Health, Bethesda, MD; **Janice Kelly**, Chief, Outreach and Special Populations, Specialized Information Services, National Library of Medicine, Bethesda, MD

Objectives: To increase knowledge of group 1's mission and objectives, group 1 partnered with group 2 to expand outreach to academic librarians. Group 2 and group 1 developed and administered nine projects to academic libraries. Group 1 in the past had only work directly with academic faculty, so they were interested to see what new opportunities libraries had to offer.
Methods: The purpose of the Women's Health Resources Dissemination Project is to design a program to create and improve access to and use of sex and gender differences information for university and college students, faculty, librarians, and health professionals. Emphasis is on providing information or access that is relevant and usable by the intended audience and increasing the awareness and utilization of high-quality, professional-level online medical and public health information resources on sex and gender difference including basic science, sex-specific studies, disparities, and inclusion research, including the resource that serves as an access point to all National Institutes of Health sex and gender differences resources. The purpose is also to promote new and creative collaborations between university/college faculty, researchers, students, and library staffs, specifically medical and health libraries to increase the knowledge and awareness of sex and gender differences in research design and reporting.

Poster Number: 219

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Working SMARTer, Not Harder: Incorporating Smart Device Technologies for a Mobile Circulation and Printing Architecture

T. Derek Halling, AHIP, Onsite Services Librarian, Medical Sciences Library, Texas A&M University, College Station, TX; **Catherine Pepper**, Assistant Professor/Coordinator, Library Field Services, Medical Sciences Library, Texas A&M University, Round Rock, TX; **Lyndsey N. Raney**, Library Associate I, Medical Sciences Library @ Round Rock, Texas A&M University, Round Rock, TX

Objectives: To test and evaluate the effectiveness of smart device technologies as novel methods for circulation and printing processes at a distance campus of an academic medical library with challenges of a limited budget and unstaffed hours.

Methods: Circulation of a curriculum-based clinical print collection and printing of class materials and electronic library resources are two highly used services at an academic medical library embedded at a distant campus. The library space is available through badged access 24/7, but staffing is limited. Due to considerable periods of non-staffed hours, a check-out process was developed that takes advantage of smart technologies prevalent throughout the user population. Students use camera applications to capture both the resource and the user photo ID. The resulting image is sent to library staff, and a record manually entered into the circulation system. Additionally, through the use of a printer hotspot, the same smart devices were investigated to deliver print jobs and pay charges via PayPal. Effectiveness of these methods was assessed with point-of-service surveys and a campus emailed survey.

Results: Data were collected over a nearly 6-month period, from September 2013 to February 18, 2014. A total of 109 check-outs, including renewals, were recorded, with 65 (60%) in-person and 39 (40%) via smartphone. Monthly comparisons showed an average incidence for in-person check-out of 25% over smartphone check-out. However, survey responses showed that, of those using smartphone check-outs, satisfaction was extremely high. Investigations into the leveraging of smart device technology for printing purposes led to the testing of a hotspot printer that would allow for wireless printing from personally owned devices. Although the technology proved effective, associated new security risks with data and administration of PayPal business accounts have resulted in delays to maximizing the full expected benefit of the service.

Conclusions: The simplicity, speed, and convenience of the smartphone check-out service proved to be an effective and user-friendly method for both students who used that method and the library. Additional avenues of promoting the

service should be explored. Although the technological aspects of printing wirelessly from smart devices proved successful, security concerns and administrative liabilities must be addressed to consider the solution successful for both patrons and the library.

Poster Number: 220
Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Wrong Map, Right Direction: Creating Information Literacy Curriculum Maps for Bachelor of Science in Nursing (BSN) Programs

Erika Davis, Reference and Instruction Librarian/Assistant Professor, Reinsch Library , Marymount University, Alexandria, VA

Objectives: Until approval of information literacy (IL) competency standards for nursing, academic librarians may find themselves questioning how to integrate IL into nursing programs. Using curriculum maps available from the Association of College & Research Libraries (ACRL) and the provisional guide of IL nursing standards by the Health Sciences Interest Group (HSIG) of the ACRL, medical librarians will be shown an example of how to map IL outcomes to a baccalaureate nursing program.
Methods: At our medium-sized, private, liberal arts university, IL is a component of the institution's liberal core and university requirements, and is a competency taught in all programs throughout the university. Building upon skills introduced in two freshmen composition courses, IL is currently being integrated into undergraduate programs through discipline-specific IL curriculum maps developed by librarians. Through conversations with the bachelor's of science in nursing (BSN) program chair and by using typical program/plan of study documents for both the traditional BSN and the accelerated BSN programs, we identified sequential courses in each program that included research elements that require students to use library resources. Using the ACRL IL curriculum map template, available in *Analyzing Your Instructional Environment: A Workbook,* two maps were created for the BSN programs to be implemented by the medical librarian during 2013/14 academic year.
Results: While still in the early stages of implementation, the two BSN IL maps have provided a logical structure from which to plan library instruction. Having used the maps for only a short period of time has reduced the number of library instruction sessions per semester, decreased the redundancy of content being taught, and created a more orderly, scaffolded method for teaching students critical research skills needed by professional nurses to support evidence-based health care.
Conclusions: Application of the maps has suggested that reorganization of IL in the BSN programs was needed. It has proved to be a most effective tool to engage collaboration with faculty and to plan and prepare for library instruction sessions. While there are positive, anecdotal findings, the maps do not measure the expected, incremental student learning. Further study is needed to assess the expected outcome of students' learning progressively from novices to expert users of information by the time they graduate.

Poster Number: 221

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Yoga, Spaghetti Squash, Art Collages, and Shooting Hoops? Building Sound Minds and Healthy Bodies in the Library

Alexandra W. Gomes, AHIP, Associate Director, Education, Information, and Technology Services; **Gisela Butera**, Reference and Instructional Librarian; **Laura Abate**, Electronic Resources and Instructional Librarian; **Julie Silverman**, Associate Director, Collections and Access Services; **Yvonne Lee**, Collections Specialist; Himmelfarb Health Sciences Library, George Washington University, Washington, DC

Objectives: To describe our experiences developing a library-sponsored student-oriented healthy living outreach initiative.

Methods: Recognizing that while students are learning to care for others, they are often taking poor care of themselves, the librarians developed a three-pronged healthy living initiative, launched in the fall 2012 semester. Focusing on diet/nutrition, exercise, and stress-reduction, the initiative included multiple activities with partners from both on- and off-campus, as well fitness kits available for checkout. The activities varied from healthy cooking demonstrations, yoga and dance classes, to music appreciation programs and an art therapy session. Departments across campus were tapped for instructors and expertise. A new partnership was forged with Whole Foods Market, and relationships with faculty in integrative medicine, art therapy, and physical therapy, as well as staff and student instructors, were strengthened. Participants were surveyed to help assess the events and marketing success, as well as help develop future activities for 2013-2014.

Results: The variety of events and equipment appealed to a wide range of students from all three of the schools supported by the library. Attendance levels varied, based on class and exam schedules as well as competing campus events, but participants reported positive experiences and volunteered ideas and topics for future sessions. Based on feedback data, the most successful marketing avenues have been email/email discussion lists, library-based large poster, and printed flyers. The initiative continues into a second year (2013-2014) with five events in the fall semester and six events scheduled for the spring semester.

Conclusions: Students appreciate the opportunity to take a break from their studies and participate in an activity that lends some additional balance to their lives. Hosting events in the library provides easy access to events for students as well as enhanced visibility to events in public areas. Using student feedback as well as experiential information, librarians continue to design new sessions,

increase their event planning and marketing skills, and strengthen ties between the library and student/local organizations.

Poster Number: 222

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Comparisons of Learning Outcomes and Self-Reflections in Dental Hygiene Students

Ruiling (Raylene) Guo, AHIP, Associate Professor and Health Sciences Librarian; **Kristin Calley**, Associate Professor and Department Chair; **Teri Peterson**, Statistician; Idaho State University, Pocatello, ID

Objectives: The purpose of this pilot study was to compare differences of the first-year professional student learning outcomes and self-reflections before and after a structured library orientation and evidence-based decision making.
Methods: Two sessions of library instruction were given to thirty first-year dental hygiene students. Each session was two hours. The first library session included basic health information searching strategies, overview of health sciences library resources and services, and evaluation of quality of health information on the Internet. The second session focused on basic evidence-based practice, population/patient, intervention, comparison, and outcome (PICO) model, levels of the evidence, evidence searching, and use of EndNote. Dental hygiene student learning outcomes were assessed using pre- and post-test measures. A self-reflection survey was given to explore any changes in student confidence before and after receiving library instruction. Pre- and post-tests including self-reflection surveys were collected and the data were entered into an Excel spreadsheet, and then exported to IBM Statistical Package for the Social Sciences (SPSS) 21.0. Frequency and descriptive statistical analyses were performed.
Results: Results from the first library session showed that the mean of pre-test scores was 67.67 and the mean of post-test scores was 90. The paired samples test results showed that there was a statistically significant difference in knowledge and skills of health information literacy between the pre- and post-test scores (t=-8.409, df=29, Pdf=27, PPP<0.05).
Conclusions: This pilot study demonstrates a successful case of health sciences librarian' incorporation of library instruction to a newly changed dental hygiene curriculum structure to meet an educational need. It also shows a positive impact of library instruction on the outcomes of student learning and collaboration between a health sciences librarian and dental hygiene faculty.

Poster Number: 223

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Building a Conspectus of the English-Printed Medical Collection: A Case Study of Taipei Medical University Library

Shu-Yuan Siao, Head, Knowledge Services Section; **Li-Chuan Huang**, Cataloger, Technical Services Section; **Tzu-heng Chiu**, Professor/Director; Taipei Medical University, Taipei, Taiwan

Objectives: Conspectus is a collection development tool, and it describes library collection' subject area and collecting levels. In 2012, the Taipei Medical University Library (TMUL) applied the Conspectus to analyze its 30,000 volumes of English-printed medical collection due to change of information carrier, variety of learning behaviors, reduced library funding, and limited library space. This poster presents the results and its further action.

Methods: The following steps were adapted to analyze English-printed medical collection of the TMUL: Step 1: Export all bibliographic data from our automation system (www.elis.tmu.edu.tw:2082). Step 2: Keep the targeted bibliographic records (identified by the National Library of Medicine [NLM] classification numbers) for further analysis. Step 3: Remove the bibliographic records of attachments, lost, in acquisition, to be scrapped, canceled, and withdrawn books. Step 4: Use five years as the analysis unit (from 1980-2010), counting the volumes of books for each classification number of NLM. Step 5: Map the results to each academic department of the TMUL, showing the collecting levels and subject allocation of each department. The authors hope that the Conspectus can systematically serve as a reference for incoming collection building and weeding of our library.

Results: The volumes of English-printed medical books are 35,863, and are about 51.8% of total English book collection in our library system. Among these medical books, 8,837 are in the fields of preclinical medicine and 27,026 are in clinical medicine. As to the distribution of the publication year, 23.7% (8,494) were published in 2001-2005 and 22.7% (8,144) were in 1996-2000. As to the subject, in preclinical medicine, the top 3 classes are QV Pharmacology (2,344), QU Biochemistry (1,839), and QZ Pathology (1,237); the weakest 3 classes are QX Parasitology (101), QY Clinical Pathology (296), and QT Physiology (748). In clinical medicine, the top 3 classes are WB Practice of medicine (2,442), WL Nervous System (1,950), and WE Musculoskeletal System (1,871), the weakest 3 classes are WZ History of Medicine (235), WD Disorders of Systemic, Metabolic or Environmental Origin, etc. (343), and WH Hematology (347).

Conclusions: The result shows that the volumes of clinical books are 3 times greater than the preclinical ones. The volumes in publication year are mostly from 1996-2005 (46.4%), which is much higher than other intervals. All these

results had been sent to each college and department, announced in meetings to the library board, and through web pages. The result is also served as a reference for the collection weeding policy, such as no cancellation of any parasitology collection because of the poor collection (only 101 volumes). For improving TMUL's collection, the authors suggest to acquire electronic books instead of other information carriers due to following reasons: (1) limit of our library space and library budget, (2) prospering of electronic publications, (3) prevalence of mobile devices, (4) changing of students' reading habits, (5) changing of the library's policy, and (6) redefinition of property.

Poster Number: 224

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

Reaching out to the Behavioral Health Community: Partnering with a County Health Department and a Regional Behavioral Health Authority to Weave Health Literacy Practices into to the Work of Behavioral Health Providers

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Objectives: Behavioral health is a public health priority for Pima County. An outreach program was developed within the framework of Pima County Community health improvement plan's goal of promoting health literacy to populations of need. Training sessions were developed to increase public awareness of reliable health information, while improving health literacy practices of behavioral health providers in Pima County by 2017.

Methods: Working collaboratively with the Pima County Health Department and the Regional Behavioral Health Authority in Pima County (Community Partnership of Southern Arizona), a health information training series was developed aimed at behavioral health providers and consumers. Specifically designed to highlight behavioral health and substance abuse information, the training sessions are being implemented at the training center of the Community Partnership of Southern Arizona as the "Health Integration Training Series." Data to determine incoming knowledge, awareness, and health literacy is being gathered using pretest and posttest surveys.

Results: The outcomes being measured are participant learning and satisfaction, and improved health literacy. Outreach is often measured by reception and feedback from the group being served, and in the case of this outreach program, success is being measured by positive reception by participants. In addition, participant feedback is being used to rework and revise areas of the training sessions that require adjustment or improvement. A successful program will determine future continuation, additional training sessions, and possible extension of the training sessions to other regional behavioral health authorities and other health provider groups in Arizona.

Conclusions: Providing health information to behavioral health providers and consumers has created a new and unique partnership that together can meet the goals and objective of Pima County's health improvement plan. The collaborators will continue to develop and implement training sessions as a means of providing

the behavioral health community with health information and to improve the health literacy of this special population.

Poster Number: 225

Time: Tuesday, May 20, 1:00 PM – 1:55 PM

The Evolution of Push Technology for Scholarly Content

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Objectives: Compare the scope and usefulness of four new current awareness tools for scholarly content in the health sciences. Evaluate these new tools against previous methods of current awareness.

Methods: Usability analysis and content availability of four tools (Docphin, BrowZine, Read by QxMD, docwise).

Results: A variety of methods for keeping current with professional literature have been used for years, most notably in medicine and the health sciences. Technological advances have provided greater timeliness, convenience, and scope of current awareness options, from photocopied tables of contents, to email alerts, to really simple syndication (RSS). The development of mobile technology, particularly tablet computers, has provided a major advance in the ability of scholars and professionals to keep current in their fields. We compared four mobile applications--Docphin, BrowZine, Read by QxMD, and docwise--for content availability, usability, and social features to determine their overall usefulness. We found all four to be excellent options for current awareness for health care professionals. Differing abilities to customize content and other user preferences are likely to be deciding factors in choosing among these tools.

Conclusions: Mobile applications provide health sciences professionals and students with the fastest most convenient methods for staying current with the professional literature and the latest medical news. However, staying current with tools for keeping current can be bewildering. By understanding the unique features and relative strengths of these new tools, librarians--as information professionals--have great opportunities to provide consultations and recommendations for current awareness services to time-deficient users. Additionally, the guidance of users to new current awareness tools promotes the value and increases the usage of a library's collections and services.