

# HYPOTHESIS

THE JOURNAL OF THE RESEARCH SECTION OF MLA

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The Journal of the Research  
Section of MLA  
VOLUME 19, Number 2  
Summer 2005

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## MLA Papers and Posters Win Awards

### Marcy Brown Wins First Hospital Librarian Research Award

--Submitted by Carole Gilbert, Awards Committee Chair

MLA is always a wonderful place to get ideas for projects and research. This year was no different as nearly 100 papers and almost 200 posters were presented by our colleagues.

The Awards Committee reviewed all abstracts prior to attending MLA and selected those most likely to be research-based for further review. However, all posters were reviewed and as many papers as possible were attended by a group of volunteer reviewers. Judges used a standard evaluation form for scoring the presentations and posters. At least two reviewers scored the papers and posters. After the annual meeting, score sheets were compiled and judges made the final determination of winners by email.

Thanks to all those who helped judge abstracts both at home and at the meeting. This year I shared the huge job of judging papers and posters with Molly Harris who took responsibility for the papers. Altogether we had a volunteer crew of more than 25 volunteers who made life much easier by selecting and critiquing.

Last year at MLA, the Research Section created a new award—**The Hospital Librarian Research Award**. This award is an attempt to encourage hospital librarians to do research and present the findings to colleagues at meetings and in published articles. The first winner of this award (drum roll, please) is **Marcy Brown**. Marcy is a hospital librarian at Forbes Regional Hospital in Monroeville, PA. She presented a poster on how she used performance analysis techniques to identify weaknesses in the inpatient diabetes education program, to determine causes, and recommend solutions. She received a check for \$100 from the Research Section.

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**HYPOTHESIS. The Journal of the Research Section of MLA**

<http://gain.mercer.edu/mla/research/hypothesis.html>

*HYPOTHESIS* (ISSN 1093-5665) is the official journal of the Research Section of MLA. It is published three times a year by the Section: Spring (March), Summer (July/August), and Fall (November). It is also available at: <http://gain.mercer.edu/mla/research/hypothesis.html>

Items to be included should be sent to the Editor by the 15th of the preceding month (i.e., February 15th for Spring, June 15th for Summer, October 15th for Fall). Copy is preferred by e-mail, but will be accepted in other formats.

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## Chapter Research Committees Report

— submitted by Priscilla Stephenson

### The Physiology of a Research Study

—by Pamela Sherwill-Navarro and Addajane Wallace

Medical librarians spend a considerable amount of time supporting the research efforts of others, but they often wonder why they should take the time and effort to do research in their own profession. Our article<sup>1</sup> that was awarded the 2005 Eliot Prize offers some reasons why this research is of value. Even when librarians move beyond the ‘why,’ they then often stumble on the ‘how.’ The beginning point for every research project is an idea or question that you decide to pursue.

The research that resulted in our article began with the question, “Do currently practicing medical librarians know about the King study?”<sup>2</sup> This led to a literature search for similar articles that discussed the value of medical librarianship in the clinical environment. The search identified 4 articles<sup>2,3,4,5</sup> that became the foundation of our study.

Somehow the question evolved, and we decided to try to determine if these types of articles were being read and used by other authors. At this point we had a lot of head scratching and puzzled looks. We asked ourselves, “How can we measure this?” An idea emerged about the use of citation analysis, a process often used by university faculty to demonstrate the value of articles they have writ-

ten. We reasoned that if these four articles were widely cited, we could use citation analysis with a slight twist and examine the value of the articles, rather than the value of an individual author, to the field of librarianship.

A second literature search failed to identify other studies that had used this approach, so we contacted the experts at ISI, the database producers of Web of Science. ISI was supportive and provided suggestions, information, and even performed preliminary searches for the study that aided us in expanding and clarifying the original idea. With some clarification and a sketchy roadmap, the research began. A citation search to determine which articles had cited the 4 source articles was performed using the Web of Science database. The articles proved to have been widely cited, so we felt we had a viable topic for study.

Even without obtaining the actual articles, we were able to characterize many things about the citing articles: the type of publications (library, medical, nursing, administration) in which they appeared; what type of professionals (librarians, physicians, others) were authors of these

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## New Editor!

The Editorial Board of *Hypothesis*, along with the Executive Committee of the Research Section, is pleased to introduce your new Editor -

### **Priscilla Stephenson**

Priscilla will be taking over with the Spring 2006 issue after co-editing and training with Andrea through 2005. Having been the column editor for the Chapter Research Committees Reports for the past couple of years, Priscilla comes to the Editorship with great skills and experience.

### **Welcome Aboard!**

Andrea, who has served as Editor since 2001, is headed back to graduate school—this time for a Master’s in Information Management at the University of Washington’s iSchool.

We thank Andrea for her hard work and dedication. Under her care, *Hypothesis* has grown from a paper-based chapter newsletter to an online international journal.

### **Best of luck, Andrea!**

( *Physiology of a Research Study — Continued from page 3* )

articles; the publication's country of origin; and the gap between the publication date of the citing reference and that of the original article.

We wanted to move the project beyond this simple counting. The literature suggested that it was important to look at the types of articles using these studies and to examine how the studies were used in the articles. Based in part upon an article by Zachert<sup>6</sup>, we developed a list of categories to characterize the purposes of the articles. To measure how an article was used, we developed a point system: the lowest score, 1, was used for articles that merely listed the source article in the introduction or discussion; the highest value, 5, went to those articles that used the source articles to develop their research methodology.

We obtained copies of all the citing articles that had been published in English. We read and reviewed the articles and scored the citing articles according to their use of the source articles. This data was entered into an Excel spreadsheet, where we were then able to generate graphs and tables exploring the relationships between the source articles and the cited articles.

Examining the results in this manner clarified some hypotheses and muddled others. There are two central conclusions that developed:

- Library research has an impact on members of the profession
- Library research is read, noticed, and used by authors and researchers from other disciplines.

The findings also led to implications for further research, which brings us back to the idea stage. Continue to ask your self 'why' and discover 'how' you can conduct research to answer those questions. ●

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( *Research Awards — Continued from page 1* )

A prize of \$100 was given for each First Place paper and poster; Second Place and Honorable Mention awards received \$50. In addition, each of the authors was sent a certificate commemorating the award.

This year's winners for papers are **Carol Perryman** and **Catherine Arnott Smith** who tied for first place. Honorable mention went to **Cindy Gruwell**, **James Beattie, Jr**, and **Bradley Benson**.

First place poster winners were: **Priscilla Stephenson**, **Lin Wu**, **Betsy Park** and **Perveen Rustomfram**. There was a tie for second place between **Rose Campbell** and **Dolores Judkins** and **Andrea Ryce**, **Sheldon Kotzin**, and **Karen Hofman**.

**Congratulations to all the winners!**

#### Paper: 1st place (tie)

##### Information Behaviors in an Online Smoking Cessation Community

**Carol Perryman**, fellow, PhD Student, School of Information and Library Science, University of North Carolina-Chapel Hill, Durham, NC

**Objective:** Explore the information use environment (IUE) of people attempting to quit smoking using a Web-based cessation forum; examine this population's perceptions of support received from various channels, including family, peers both on- and off-line, and health care professionals.

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# International Research Reviews

-submitted by Anne Brice

## *What Public Health Teachers Know About Their Library Services and What are Their Needs and Expectations from a Scientific Library*

*Ewa Nowak, Barbara Niedzwiedzka. Information Studies Department. Institute of Public Health, Jagiellonian University Medical College, Krakow, Poland*

As the authors of this paper suggest, library services are becoming increasingly sophisticated, with new resources and technologies deployed and with new ways of addressing user needs being developed. In this environment it is even more necessary to ensure that these services are meeting real user needs, supported by evidence where possible, and not purely based on assumptions or prior service history. The central role of information literacy in supporting teaching and learning is generally accepted. However, providing effective services to meet these needs requires a common understanding between academic and library staff concerning roles and outcomes. In order to fully exploit the increasing knowledge base, and to realize the full benefits of access to both resources and expertise, awareness of the services offered needs to be raised. This study from Poland set out to learn more about academic expectations regarding information literacy skills and awareness of the library's role, in order to apply the findings to library practice.

### Background

The Institute of Public Health Library has developed a range of services, but little is known as to whether these library services are adequately used by academic faculty and whether they meet their needs and expectations. The study questions were:

- Are academic faculty interested in enhancing the information skills of their students?
- Are they aware of the library services that are available for their students and for themselves?
- Do they know what they can expect from information specialists/librarians when it comes to preparing their students for studying?

### Setting/Participants/Resources

Academic teachers of the Institute of Public Health (Purposeful convenience sample, N=30)

### Methodology

Semi-structured interviews recorded, transcribed and text-analyzed. Analysis of present Medical Library and Institute of Public Health Library sources and services.

### Results

1. Most academic teachers understand the concept of students' information competencies and the value of the application of these to their teaching. All interviewed teachers use activating methods in their teaching and want

*(Continued on page 6)*

*( Research Awards — Continued from page 4 )*

**Methods:** Fourteen participants in a Web-based forum responded to a semi-structured survey that inquired about medications and decision support resources and then asked participants to evaluate their experiences. Next, 371 cessation-related messages from the forum were compiled, categorized, and analyzed for content to better understand the importance and frequency of specific types of cessation-related information transactions. Current "gold standard" cessation literature was compared to survey responses and forum messages, with an initial hypothesis that a gap existed between the two.

**Results:** Survey respondents viewed the existence of an online community of peers as a positive factor in their cessation effort. Although no attempt was made to generalize findings beyond the initial pilot, gaps were tentatively identified between support provided by health care

and in-person community resources and information needs expressed by this population.

**Conclusions:** In their provision of a milieu for the exchange of cessation-related information and community support, online forums may enable support at a depth and quantity unavailable through more immediate channels. Further studies are needed to develop a better understanding of the information-related behaviors of this population.

**Paper: 1st Place (tie)**

### **Taxonomy Development for Meaningful Data Analysis**

**Catherine Arnott Smith**, assistant professor, Informa-

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( *Public Health Teachers — Continued from page 5* )

their students to be equipped with information competencies from the beginning of their studies (first and second years). The majority of teachers do not want to teach information competencies themselves during their module.

2. The top five information competencies (following the ACRL standard) most valued by academic staff in their students are. . .

- the ability to read text with understanding
- the ability to assess the credibility of information
- the ability to search for publications and other information on a task related topic
- the ability to write assignments on the task related topic in a pre-determined form
- the ability to synthesize information from different sources.

3. Academic teachers at IPH are not fully aware of the existing wide range of library sources and services. They do not know that most of the major databases are accessible on-line from their desks and from those of their students. Most of them are not aware of the kinds of support they can expect from library services and library staff other than very traditional (lending books, searching).

There is a gap between teachers' overall expectations of information competencies training, and that which is currently provided. There is no sufficient communication between library staff and academic staff in regard to adjusting IC training to meet the demands of academic teaching faculty.

### Discussion/conclusion

The pilot study has shown that academic medical libraries should more actively inform users about their sources and services, and that they should bring their services, especially training services, to their users more directly.

Continuous measurement of the use of library services and sources, and monitoring of the needs of library users has to take place if, richer and more sophisticated with every year, library sources and services are to be sufficiently used. Certain actions such as library services and resources awareness training, better communication with library users including academic teachers, and marketing of library instruction programs, should follow these measurements in order to adjust services to user needs. •

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( *Research Awards — Continued from page 5* )

tion Studies, Syracuse University, Syracuse, NY

The Ten Thousand Questions Project, funded by the Medical Library Association's Donald A.B. Lindberg award, has meant the collection of thousands of consumer health-related questions. Meaningful organization of data along data-driven themes is a necessary, but intimidating, step for all knowledge workers, and it is a task for which librarians are professionally better equipped than most. I will talk about how I developed a taxonomy for questions based on previous research in librarianship, information science, computer science, nursing, medical informatics, and all of the above!

### Paper: Honorable Mention

#### Weaving Evidence-based Medicine Resources into the Internal Medicine Residency Morning Report

**Cindy A. Gruwell**, associate librarian, and **James Beattie Jr.**, associate librarian, Bio-Medical Library; and **Bradley Benson**, assistant professor, Pediatrics, Department of Medicine; University of Minnesota-Minneapolis

**Objective:** To enhance evidence-based learning experience and information discovery skills of internal medicine residents participating in the Monday morning report.

**Methods:** In the fall of October of 2003 two librarians, the associate director of medicine/pediatrics residency program, and two chief residents embarked on a collaborative effort to introduce and employ EBM resources via "real-time" searching during the Department of Medicine's weekly morning report conference. Each week, the librarians search the topic of the day, taking into account the types of information needed and questions posed during the session. Taking advantage of an informal atmosphere, we access numerous resources with the clinical experience of the programs' associate director to further explore, pose questions, and clarify aspects of the disease state being presented. Using MEDLINE as the "core" resource, we work diligently to include other resources both subscription-based and those freely available on the Internet to explore various aspects of "evidence" during the morning report. These include MICROMEDEX, Stat!Ref, UpToDate, imagesMD, MDConsult, and others. After each session, the presentations of the chief residents and librarians are fused into one PowerPoint-driven recap and mounted on the Web using Macromedia Breeze.

**Results:** Feedback from residents, medical students, and various members of the faculty has been very positive. Residents state that they have a better understanding of how to access and utilize many of the tools that we use during their presentations. In addition, the residency program is able to utilize this collaboration to meet new

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standards of the Accreditation Council for Graduate Medical Education (ACGME), set forth in 1999.

**Conclusions:** The collaboration between members of the Bio-Medical Library and the Internal Medicine Residence Program has been instrumental in skill building both for the residents and the librarians. The residents are learning about the varied resources available from the library and other EBM centric entities, the librarians in turn, have a much clearer picture of the information challenges and needs of residents, faculty, and physicians in the clinical setting.

**Poster: 1st place**

**Tenure and Faculty Status in  
Academic Health Sciences Libraries**

**Priscilla L. Stephenson, AHIP**, coordinator, Reference Services, and **Lin Wu**, reference services librarians, Health Sciences Library, University of Tennessee Health Science Center-Memphis, and **Betsy Park**, head, Reference Department, and **Perveen Rustomfram**, reference librarian, Ned R. McWherter Library, University of Memphis Libraries-Memphis

**Objective:** The purpose of this research is to examine the status of library faculty in academic health sciences libraries and the current appointment, tenure, and promotion policies for academic health sciences librarians.

**Methods:** The survey population includes all academic health sciences libraries in the United States and Canada. We used the directory listings of the Association of Academic Health Sciences Libraries, the American Association of Colleges of Osteopathic Medicine, *Barrons' Directory of Colleges and Universities*, and *HardinMD: Medical/Health Sciences Libraries on the Web*. The survey was mailed to 181 directors of academic health sciences libraries in the United States and Canada. The survey yielded 129 usable responses, with a response rate of 71%.

**Brief Description:** This research project examines the status of library faculty and current practices regarding appointment, tenure, and promotion of academic health sciences librarians in the United States and Canada. Previous studies of four-year college libraries and comprehensive university libraries conducted in the 1980s and early 1990s did not include health sciences libraries. We hypothesize that the professional school focus of academic health sciences libraries will be reflected in differences in faculty status and tenure for these librarians.

**Results:** Library directors from seventy-four (57%) responding libraries stated that professional health sciences librarians at their institutions have faculty status, while only thirty-nine (30%) stated their librarians are eligible for tenure-track status. Health science librarians hold

faculty rank at fifty-nine (45%) institutions and are eligible for promotion through the academic ranks at sixty-three (48%).

**Conclusions:** Results of this study are similar to those of previous studies of comprehensive university libraries, in that job performance is more frequently evaluated than teaching, research, or service when health sciences librarians are evaluated for tenure and promotion. Sixty-three (51.9%) of the health sciences libraries require librarians to publish to receive tenure and/or promotion, and publication is encouraged for tenure and/or promotion at eighty-seven (67.5%) of the health sciences libraries.

**Poster: 2nd Place (tie)**

**Comparing Bedside Information Tools:  
A User-centered, Task-oriented Approach**

**Rose Campbell**, National Library of Medicine fellow, Department of Medical Informatics and Clinical Epidemiology, and **Dolores Judkins, AHIP**, head, Research and Reference Services, OHSU Library, Oregon Health & Science University-Portland

**Objective:** To compare several bedside information tools using user-centered, task-oriented measures in order to provide a tool for those making or supporting purchasing decisions between products.

**Setting/Subjects:** The Oregon Health & Science University Libraries are academic health sciences libraries serving a diverse clientele of students and clinicians. Study participants will be drawn from this clientele and may include pharmacists, physicians, medical students, residents, physician assistants, nurses and other health care practitioners.

**Methods:** Users will be asked to answer ten clinical questions using a variety of bedside information tools. Users will evaluate each tool for ease of use and user satisfaction. This user-based information will be combined with information gathered from direct examination, such as currency, coverage, and subscription information.

**Anticipated Results:** It is anticipated that different classes of users, such as residents or nurses, may prefer different bedside information tools.

**Conclusion:** To select a product that will satisfy users, it is essential to consult with primary users of the product. User-centered evaluations are needed to make an informed purchasing decision.

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**Poster: 2nd Place (tie)**

**Using Bibliometric Evidence as a Tool to Determine  
Developing World Research Priorities:  
A Preliminary Study**

**Andrea Ryce**, National Library of Medicine associate fellow, Health Sciences Libraries, University of Washington-Seattle; **Sheldon Kotzin**, chief, Bibliographic Services Division, National Library of Medicine, Bethesda, MD; and **Karen Hofman**, director, Division of Advanced Studies and Policy Analysis, Fogarty International Center, Bethesda, MD

**Objective:** This study was undertaken to discover to what extent, if any, journals from developing countries are publishing research articles on chronic, non-communicable diseases and disorders (NCD). Understanding where researchers in the developing world are focusing their energies may enlighten health research funding priorities. An analysis, by topic, of articles published in local journals from developing countries can be used as one indicator of the priority areas of scientific research in the country.

**Methods:** The occurrence of non-communicable chronic diseases is rising in developing countries as a result of changes imposed by industrialization, different food sources, and environmental degradation. The purpose of the analysis is to determine if this shift is reflected in published research or not and, if so, whether the movement is significant. Bibliometric principles were used to determine a country's publishing productivity in specific disease areas. Using MEDLINE, an indexing analysis was completed by searching a sample of journals for the frequency of specific Medical Subject Headings (MeSH) terms. The list of journals was created by choosing four publications from each World Bank region: Latin America, Middle East and North Africa, Sub-Saharan Africa, Europe and Central Asia, South Asia, and East Asia and Pacific. A list of general non-communicable disease topics was compiled and then converted to the applicable MeSH. An automated PERL script systematically searched the predetermined set of journals and topics in MEDLINE for the years 1998-2003.

**Results:** The journal sample during 1998 through 2003 yielded 16,524 articles, of which 7,012 (42.4%) were indexed with one or more of the 18 NCD topic terms. NCD topic retrieval among the chosen journals varied by region with the highest percentage of articles in Europe and Central Asia (47.8%) and the lowest in Latin America (36.4%).

**Conclusions:** This bibliometric analysis, while only a pilot study, reveals that even in regions with a large number of low-income or low-middle-income countries, substantial NCD research is ongoing. Analyzing the medical literature of local and regional journals could be useful to health policy makers in ascertaining areas of importance and concern.

**The Hospital Library Award**

**Using the Performance Analysis Process to Improve  
Patient Education Projects**

**Marcy L. Brown, AHIP**, medical librarian, Health Sciences Library, Forbes Regional Hospital, Monroeville, PA

**Objective:** Describe how the hospital librarian used performance analysis techniques to identify weaknesses in the inpatient diabetes education program and determine opportunities for staff educational interventions. The purpose of the analysis was to outline the optimal patient educational experience in comparison to the actual, determine causes for the variance, and recommend solutions to help achieve optimal diabetes education.

**Methods:** The analysis took place at a 300+-bed suburban community hospital that admits many patients newly diagnosed with diabetes each year. Any registered nurse (RN) or licensed practical nurse (LPN) working on an inpatient floor could be called upon to teach a new diabetic. Realistically, about 200 nurses staff the three units with the greatest likelihood of housing these patients and were the focus of the performance analysis. Analysis included the following:

1. Stakeholder interviews with nurse managers and a nurse educator; interviews were approximately twenty minutes each and contained a series of focused but open-ended questions
2. A literature search to identify best practices in inpatient diabetes education
3. An informal audit of the medical charts of all newly diagnosed diabetics during a specified, three-week period.

**Results:** Actuals showed that education worksheets are vague and visually cluttered; diabetic education is not provided until the day of discharge; physician ancillary orders are rarely initiated; education is performed all at once, creating information overload, and nurses received little education on how to teach diabetics.

**Conclusions:** Barriers to optimal patient education encompass several performance factors, including nurse skills and knowledge, constraining environmental factors, low motivation, and lack of organizational support. Recommendations include additional training for nurses, form and education kit redesign, and standardization of several procedures. ●



RESEARCH SECTION

**Business Meeting**

Monday, May 16, 2005 — 7:00 am – 9:00 am

Convention Center, Room 20 — San Antonio, Texas

Incoming Chair **Martha (Molly) Harris** welcomed section members to the meeting.

**Molly Harris** began the discussion by suggesting that a successful section is due to marketing, and that the section needs to advertise its research awards, write articles about the section for *MLA News* and *MLA Forum*, and prepare materials for the Section Council booth. The wonderful information printed in *Hypothesis* is “preaching to the choir,” and others could benefit from the expertise of section members. **Molly Harris** is interested in hearing ideas for increasing awareness of the section.

Section members attending the business meeting ratified the ballot that elected **Mary Jackson** (Chair-Elect/Program Chair), **Susan Lessick** (Secretary/Treasurer), and **Francesca (Fran) Allegri** (Candidate to the MLA Nominating Committee) earlier this year. **Ruth Fenske** agreed to serve as the alternate Section Council representative.

**Molly Harris** thanked **Andrea Ball** for her many years of service as the editor of *Hypothesis*, and circulated another thank-you card that will be sent to Andrea. Now that **Priscilla Stephenson** is the new *Hypothesis* editor, a replacement is needed for the chapter research column that Priscilla edited. **Leslie Behm** offered to help. **Carol LeFebvre** offered to get *Hypothesis* indexed by LISA.

**Molly Harris** acknowledged **Leslie Behm** for her excellent work developing the section mailing list, which has been a boon for many section activities.

**Molly Harris** called on several individuals to deliver various reports:

**Section Council Report – Jill Crawley-Low**

This year, the deadline for submitting paper/poster abstracts was extended. Section Council is interested in knowing what members think of this extension. Several members stated that there was not enough time to review abstracts and expressed concern about why it took so long for electronic abstracts to be posted to the conference site. There was some discussion about keeping the same format for submitted abstracts: objective, methods, anticipated results. Sections are reminded that elections need to be completed by **February 15, 2006**. MLA’s board is emphasizing global initiatives beyond sister library relationships which may be coordinated by the International Cooperation Section.

**Treasurer – Elizabeth Connor**

The section started with \$2699.37 in its bank account as of May 2004, spent \$1268.51, and received \$1836.28 in membership dues from MLA headquarters. As of April 30, 2005, the bank balance stands at \$3267.14.

**Awards Committee – Carole Gilbert**

The judges of papers/posters will meet later today. Molly Harris pointed out that the evaluation sheets focus on quantitative measures and she would like the section to develop evaluation standards that other chapters and sections can use.

**Bylaws Committee – no report**

(Continued on page 10)

**Continuing Education Committee – Kristine Alpi**

The evidence-based librarianship journal club will start June 1, 2005. Continuing education chairs will be asked about the usefulness of MLA's independent reading program.

**Evidence-Based Librarianship Implementation Committee – Jonathan Eldredge**

The Delphi technique will be used to narrow down the list of the most important answerable research questions.

**Government Relations Liaison – no report**

**International Research Collaboration Committee – Jonathan Eldredge**

The International Evidence Based Librarianship Conference <<http://conferences.alia.org.au/eb12005/generalInformation.html>> will be held in Brisbane, Australia from October 16-19, 2005. **Jonathan Eldredge** serves on the IEBL program committee. This conference is interesting because it encompasses all kinds of libraries, not just health sciences libraries.

**Membership Committee Chair – Diane Cooper**

Over this past year, the section has gained 39 members and recruitment efforts are underway to improve awareness of section programs and activities.

**Nominating Committee Chair – no report**

**Practice Guidelines Advisory Committee – Molly Harris**

**Molly Harris** has given all of her committee paperwork to **Dawn Littleton** who will develop guidelines on "guidelines to the evidence." **Jonathan Eldredge** will confer with Dawn Littleton.

**Program Committee – no report**

**Mary Jackson** is chairing an Outreach SIG meeting and is not available to report, but she has conferred with **Molly Harris**.

**Research Resources Committee – Leslie Behm**

An updated research bibliography will be sent to **Allan Barclay** for uploading to the section site.

**Research Results Dissemination Committee – no report.** **Jonathan Eldredge** reminded everyone that **Liz Bayley** is very active in the section and is the author of the standard guide for writing structured abstracts. **Molly Harris** will contact **Liz Bayley** for more information about the dissemination of research results.

**Web Site – no report.**

**New Business**

• **Key dates**

During the first week of **July 2005**, **Molly Harris** will be using the section mailing list to ask for section input for section goals and objectives that she will submit to MLA by **July 25, 2005**. Basically, Molly is going to focus on 1) showing librarians that they can use basic research techniques in their every day work, and 2) developing a Web-based list of other chapters/sections that have research committees and awards programs. The section could provide written guidelines, a "best practice" statement, and mentors that could help other chapters or sections establish a research committee and awards program. South Central Region and Southern Chapter have excellent track records for promoting research among their membership, and liaisons to such organizations could write an excellent chapter column on the subject.

In order to prepare her midyear report by **December 19, 2005**, **Molly Harris** will ask section officers to submit their reports by **early December 2005**.

As mentioned earlier by **Jill Crawley-Low**, section elections need to be completed by **February 15, 2006**.

The **annual report** is due April 14, 2006 meaning that section officers need to submit their final reports to **Molly Harris** by **April 1, 2006**.

- **Procedure Manual**

**Molly Harris** suggested that the Research Section procedure manual be patterned after the Southern Chapter <<http://www.scmla.org/>> and/or Technical Services Section <<http://library.umsmmed.edu/tss/Manual%20May%202002.pdf>> documents. The deadline for completing the procedure manual is at the next annual meeting in May 2006. **Molly Harris** asked section officers to work on this during Fall 2005 and submit information about their area of responsibility (name of committee, purpose, responsibilities, yearly schedule). **Leslie Behm** offered to help. **Molly Harris** asked everyone to keep the information as generic as possible. The Research Section site will also include information about the section's goals and objectives, reports, and will link to the section membership roster maintained on MLANET.

- **Awards**

The bylaws will be changed to reflect that papers "from all Section programs will be evaluated for the Research Award," and this change will be reflected on the section Web site. As stated during **Carole Gilbert's** report, the evaluation form used by the awards judges will be revised. There was discussion about increasing the number of awards, using section funds to pay the annual conference registration fee (\$405) for the presenter of the best paper/poster, and/or offering a complimentary Research Section membership as an award. **Elizabeth Connor** (outgoing Secretary/Treasurer) confirmed that since the section no longer pays the cost of printing *Hypothesis*, there are funds to pay registration and/or membership fees. Corporate sponsorship is also possible for funding some of the awards but this would have to be cleared with MLA headquarters.

- **Section Web site**

**Molly Harris** reiterated that the section needs to do more marketing, and perhaps identify a section member who can work on public relations. **Hanna Kwasik** offered to develop a brochure and/or poster session about the section for the next MLA meeting.

The section site can include revised bylaws, the new procedure manual, news and information about section committees, a committee contact for additions/corrections to specific parts of the site.

Based on **Jill Crawley-Low's** survey of all Chapters (7 respondents out of 14) and Sections (7 respondents out of 21), survey respondents are interested in:

- a description of the Research Awards with links to Chapters and Sections that have research programs, awards and/or grants. This section could also link to the evaluation forms used by the various awards committees.
- "canned" articles that could be sent to the various Chapter newsletters. [Content already published in *Hypothesis* can be used if we adopt a policy statement about re-use of content with proper attribution/credit. **Jonathan Eldredge** suggested that we pattern such a policy statement after the one used by the University of New Mexico.]
- develop content about "how to get started in research," with a list of resources and continuing education classes.

Someone suggested that a blog would be good for section news.

At the close of the business meeting, **Molly Harris** thanked everyone for their attendance and adjourned the meeting.

Respectfully submitted,  
Elizabeth Connor, MLS, AHIP  
Secretary/Treasurer 2003-2005

## Apply Today!

### **HLS/MLA Professional Development Grant for Hospital and Clinical Librarians**

Application Deadline: February 1, 2006



Are you looking for funding to:

- \* attend a meeting?
- \* further your professional education?
- \* conduct research?



The HLS/MLA Professional Development Grant is designed to support participation in professional programs or scientific research.

The grants help librarians in hospitals and other clinical care settings to develop and acquire knowledge and skills as described in Platform for Change (MLA's Educational Policy Statement) and Using Scientific Evidence to Improve Information Practice (MLA's Research Policy Statement.)

For further information and an application, see the MLA web site:

[http://www.mlanet.org/pdf/grants/hls\\_app\\_20030807.pdf](http://www.mlanet.org/pdf/grants/hls_app_20030807.pdf)

For additional questions contact Deborah Jameson, email: [djameson@partners.org](mailto:djameson@partners.org)

## Book Review

*Submitted by Kristine Alpi, MPH, AHIP*



Gorman, G.E. & P. Clayton. *Qualitative Research for the Information Professional: A Practical Handbook*. 2<sup>nd</sup> ed. London: Facet, 2005. 282

pp. \$95.00.

With today's demands for accountability and assessment, qualitative research offers methods that fit the natural inclinations of libraries to study their services. Gorman and Clayton provide a wonderful introduction to qualitative research. Gorman is Professor of Library and Information Management at Victoria University of Wellington, New Zealand and Clayton is Associate Professor in Information Management and Program Director for Information Studies at the University of Canberra, Australia. Changes for this second edition include new chapters on evaluating qualitative research and a sample case study on knowledge management; a new author (Dr. Sydney J. Shap) for the historical investigation chapter; and an updated bibliography.

The introductory chapters place qualitative study into the larger research context making this an excellent text for students and new researchers. Numbered research scenarios throughout illustrate key issues and truly resonate. These scenarios and the figures and tables are listed at the beginning of the book. More experienced scholars will benefit from the section on gaining access to research sites and detailed discussion of four qualitative techniques: observation, interviewing, group discussion technique, and historical investigation. The distinction between qualitative and quantitative methods introduced at the beginning is carried through. The authors explain the exclusion of content analysis as it has become more associated with quantitative research and statistical analysis. However, the exclusion of Delphi technique in the group discussion chapter comes only in the further reading notes which mention that it is not included due to its quantitative focus. The chapters on fieldwork, documentation and organization, data analysis and writing will support those needing guidance to fully develop and disseminate their findings. Each chapter begins with highlighted focus questions and ends with a review of the chapter and a "where now?" section of thought and analysis questions. Further reading and notes to literature from 1951 to 2004 lead readers to further writings in books, journals and on the web. There is also an annotated Select Bibliography at the end, which is excellent, but does not include Beryl Glitz's *Focus Groups for Libraries and Librarians* published by Forbes/MLA in 1998.

*Qualitative Research for the Information Professional* is highly recommended for all levels of information professionals and library & information science students.

## Letter from the Immediate Past Chair



*You would be forgiven for wondering who I am. I am just now recovering from a personal annus horribilis (actually more like 15 months). For MLA 2004, I was in the hospital with a post-operative wound infection; at MLA mid-year, I was stranded in Europe after being robbed of everything but the clothes on my back; and for MLA this year, I was recuperating from major orthopedic surgery. Fortunately, everyone on the Section committees did a fantastic job and Molly Harris – well, there isn't enough to say about how she has come through for me. I came back to work June 6<sup>th</sup> 2005.*

*However, thanks to email I have not been unaware or totally inactive. Since I took this job, we have had two years of wonderful programming at MLA, encouraging others to do research, showing them how, and celebrating the profession's research accomplishments. We are firmly ensconced in the field of Evidence-Based Librarianship. All of this, of course, has been documented in Andrea Ball's fabulous Hypothesis. I want you all to know that thank-you cards were sent around and signed by all the Section officers. Andrea was not able to attend this year's MLA Annual Meeting, but we happen to live in the same town, so I presented her with a book and the cards in my home at the end of May. During Andrea's tenure, Hypothesis officially became a "journal" rather than a newsletter, is indexed in CINAHL, and has international readership (and editors and writers).*

*My jobs now are to assist Molly, and to find us a new Chair-Elect. This is my third time being a Section Chair, and I can truly say they have all been so very rewarding. MLA is such a dynamic and enthusiastic organization that putting programs together has never been a matter of twisting arms – except to fit everything into the available time slots! Please consider this boost to your career and opportunity to meet wonderful librarians. Pass the word – and many thanks to everyone who serves the Research Section of MLA!*

—Elizabeth H. Wood



### Evolution of Evidence:

*Global Perspectives on Linking Research with Practice*

The Third International Evidence-Based Librarianship (EBL) Conference will be held during October 16-19, 2005 in Brisbane, Australia. The MLA Research Section is a co-sponsor of this event, which features a focus upon applied research.

This conference will provide numerous opportunities for librarians to sharpen their research skills and to identify potential research collaborators from other nations. The program will feature reports of original research representing contributors from 14 countries, ranging from Albania to Malaysia to the UK. Workshops will help participants to learn new research skills while the social events such as the morning and afternoon teas and even a river cruise will facilitate international collaboration.

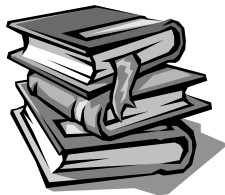
Some of the original research topics to be presented:

Strategic planning and decision-making - Measuring value - Teaching information literacy - Customer service - Informatics training for public health workers - Marketing and promotion - Observing user behavior

Both qualitative and quantitative methodologies will be represented in the methods workshops and in the original research reports.

**More information can be found at the Third International EBL Conference website:  
<http://conferences.alia.org.au/eb12005/index.html>**

Jon Eldredge, MLS, PhD, Chair  
MLA Research Section International Research Collaboration Committee and  
Member, Third International EBL Conference Program Committee



## Literature Review

—submitted by Ruth Fenske, Ph.D.

**Arnold, Julie and Neal Kaske. Evaluating the Quality of a Chat Service. portal: Libraries and the Academy. 5(2):177-193, April 2005.**

**Boyd-Byrnes, Mary Kate and Marilyn Rosenthal. Remote Access Revisited: Disintermediation and Discontents. Journal of Academic Librarianship. 31(3):216-224, May 2005.**

**Bradford, Jane T., Barbara Costello, and Robert Lenholt. Reference Services in the Digital Age: An Analysis of Sources Used to Answer Reference Questions. Journal of Academic Librarianship. 31(3):263-272, May 2005.**

**DeGroot, Sandra. Questions Asked at the Virtual and Physical Health Sciences Reference Desk: How Do They Compare and What Do They Tell Us? Medical Reference Services Quarterly. 24(2):11-23, Summer 2005.**

Several articles on the changing nature of reference services have been published.

Bradford et al established that in the 02-03 academic year, reference librarians at Stetson University used online sources 58.54% of the time. Almost 24% of all questions were answered from the librarian's own knowledge, without consulting any other source. Reference books were consulted for only 9.38% of the answers. Total reference titles (173) used to answer reference questions represent less than 2% of total reference titles owned. Data were collected for two months in the fall and two months in the spring semester. The biggest problem was reaching consensus about what "librarian" as a source should be. Nevertheless, these data show that reference librarians in one university are using online resources much more than they are using print reference sources.

In November 2003, reference librarians at the University of Illinois at Chicago Library of the Health Sciences recorded data on all in-person, phone, e-mail, and chat reference questions. Nine hundred thirty-nine questions were answered. Seventy-four percent were answered in person; 16.67% by phone; 4% by e-mail; and 5.1% by chat. The most common type of in-person reference question was about book and journal holdings. Fifty-one percent of chat reference and 13% of e-mail questions concerned finding information on a topic. In-person was the most frequent way to ask all kinds of questions, except that citation questions were most frequently asked by telephone. Questions on accessing electronic resources came in equal numbers by phone and in-person.

Faculty and staff preferred to ask by phone, undergraduates preferred chat, graduate students came in person and used e-mail, and unaffiliated users called on the phone most often. Only 5% of the questions were answered using print sources.

Boyd-Barnes and Rosenthal, evening reference librarians at Long Island University, studied 43 non-traditional students who came in or called after they had an in-class presentation on remote access searching. The subjects represented 35% of 122 students in six graduate education research classes. Searching problems are divided into procedural, cognitive, technical, and personal issues. The most frequent and challenging problems were "content analysis of subject matter." Numerous examples of each type of problem are given and five case studies provide further illustrations. The authors conclude that a "significant number of students require much more intermediation than they or we expected." They caution against over-hyping remote access. One, of course, wonders about the 79 students who did not ask for further help. Were they more proficient, did they do all their work on the open Internet, and how discerning were faculty in regard to choice of resources when grading the papers? Perhaps those who asked for further help were the most conscientious students rather than the least able. It would be interesting to do a similar study using students in the health professions.

Arnold and Kaske studied data on 419 chat reference questions answered at the University of Maryland College Park from January through August 2002. Two or more librarians read each question and coded question type, type of user, and outcome (correct or incorrect). Differences were resolved by the researchers. University of Maryland students, students from other University of Maryland campuses, and outsiders were 88% of the users. Over 40% of chat reference questions were policy and procedural questions; just fewer than 20% were specific search questions. Directional and research (as defined by Katz) questions were the least frequent. Overall accuracy was 91.72%. In general, ready reference, specific searches, policy and procedural, and holdings questions were answered correctly. Answers for outsiders were most likely to be incorrect. They point out that this study was based on actual reference questions rather than on questions developed by researchers for unobtrusive studies (which generally yield only 55% correct answers). They cite another recent study by Sexton and Richardson, which also found 90+ percent correct answers with real questions.

Considered as a whole, these studies show that in-person reference is still being used, that remote users may have considerable problems in searching on their own, that reference librarians generally give correct answers, and that print reference sources are rarely used these days.

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( Literature Review — Continued from page 14 )

**Ivanitskaya, Lana, Ryan Lucas, and Anne Marie Casey. Research Readiness Self-Assessment: Assessing Students' Research Skills and Attitudes. Journal of Library Administration 41(1/2):167-183, 2004.**

**Jiao, Qun G. and Anthony J. Onwuegbuzie. The Impact of Information Technology on Library Anxiety: The Role of Computer Attitudes. Information Technology & Libraries. 23(4):138-144, December 2004.**

**Monoi, Shinichi, Nancy O'Hanlon, and Karen R. Diaz. Online Searching Skills: Development of an Inventory to Assess Self-Efficacy. Journal of Academic Librarianship. 31(2):98-105, March 2005.**

**Talja, Sanna. The Social and Discursive Construction of Computing Skills. Journal of the American Society for Information Science and Technology. 56(1):13-22, January 1, 2005.**

**Woodworth, Karl (Woody) and Linda Garr Markwell. Bored, Yawning Residents Falling Asleep During Orientation? Wake'em Up with a Test. Medical Reference Services Quarterly. 24(1):77-85, Spring 2005.**

Lana Ivanitskaya and other Off-Campus Library Services librarians at Central Michigan University noticed that a significant number of distance education students who had received library instruction geared toward a particular assignment still had a complete lack of understanding of how to complete the assignment. They persisted in using only the Internet and indicated they had simply been unable to locate the right kind of materials on the Internet. The librarians speculate that the students had an inflated perception of their information-seeking skills, because they had been able to depend on the Internet in the past. Hence, they saw no need to pay close attention in the required library instruction sessions. The authors decided to design an assessment tool that would cause students to understand in what areas their skills were below par. Although not a research article, the authors describe the development and validation of the Research Readiness Self-Assessment tool. There is both a multidisciplinary version and a health professions version. Each student receives written feedback on strengths and weaknesses. Examples of the feedback are given.

In the Summer 2004 Literature Review, I reviewed an article about a pre- and post-test of MEDLINE searching skills used with first-year medical and dental students at the San Antonio University of Texas Health Science Center. Those authors also felt students inappropriately thought their Internet search skills would carry over to database searching. Again, the students needed a wake-up call.

The next article concerns a similar experience at Emory with first-year residents. Woodworth and Markwell no-

ticed that residents "often daydreamed, seemed bored, drifted off to sleep, chatted among themselves, or left early" from required one or two hour library orientations. They also noticed in one-on-one coaching session that residents often had an inflated perception of their MEDLINE searching skills. With the advent of pre-tests given and graded at the beginning of each orientation session they noticed the residents were chagrined, because they felt they knew how to search but still scored lower than they are used to scoring on tests. The majority scored between 30% and 70%. These librarians were surprised that getting low scores seemed to motivate the residents to pay attention to the orientation, to ask more and better questions, and to request one-on-one follow up sessions. The authors provide an interesting question-by-question analysis. Unfortunately they did not also administer a post-test, so it is impossible to know if better attention has resulted in higher scores on the test of searching skills. Comments on a short evaluation form they used were generally positive.

Monoi, O'Hanlon, and Diaz, of Ohio State University, describe development of an instrument, which measures online searching self-efficacy of undergraduates post-instruction in a one-credit online search skills course. They quote a definition of self-efficacy from Albert Bandura: self-efficacy can be described as a person's belief in him or herself to successfully perform a task. They wondered if instruction might affect not only search performance but also students' self-perception of their search skills. They describe the development of the instrument and the assessment of reliability and validity of the inventory. Although the table which presents their results (Table 4) is difficult to read, the text tells us that high confidence before instruction did not necessarily result in better performance, but that post-instruction efficacy scores did positively correlate with scores on specific assignments and overall performance. The authors explain correctly that since they did not have a control group, it is impossible to tell what is causing what. They also say "apparently the higher confidence levels before instruction of some students are not based on real knowledge of the searching related tasks but rather reflect overconfidence in their abilities."

Jiao and Onwuegbuzie ask if students' attitudes toward computers predict library anxiety. Their subjects were 94 African American graduate students enrolled in the College of Education of a historically Black university. They found there is a relationship between library anxiety and computer attitudes. Here again the direction of the relationship cannot be determined, given the design of the study. They also caution against generalizing to all graduate students.

Talja, a professor in the Department of Information Studies at the University of Tampere in Finland, takes a more theoretical and general approach to what she calls "information technology literacy." Forty-four research-

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( Literature Review — Continued from page 15 )

ers, including 12 nurse scientists, were interviewed about their relationships with computers and their information technology competence. She found what the researchers said varied from one context of discussion to another. She does not give any specific results, broken down by discipline, but cites other articles related to the broader study on academic information technology cultures of which this was a part. This study has implications for those studying attitudes toward online searching.

**Distlehorst, Linda H. Elizabeth Dawson, Randall S. Robbs, and Howard Barrows.** Academic Medicine. 80(3):294-299, March 2005.

**Kindade, Scott.** A Snapshot of the Status of Problem-Based Medicine in U.S. Medical Schools, 2003-2004. Academic Medicine. 79(11):1067-1072, November 2004.

**Lang, Thomas.** The Value of Systematic Reviews as Research Activities in Medical Education. Academic Medicine. 79(11):1067-1072, November 2004.

**Wastaway, Shohair F., Charles W. Uth, and Christopher Steward.** Science & Technology Libraries. 24(3/4):327-370, 2004.

**Whitcomb, Michael E.** Editorial: Why We Must Teach Evidence-Based Medicine. Academic Medicine. 80(1):1-2, January 2005.

A number of recent articles make the case for incorporating the use of professional literature into the curriculum. Wastaway et al document the development of new learning communities at the Illinois Institute of Technology, look at patterns of collaborative work in the communities, look at the communities' use of library and non-library resources, and identify methods of library involvement. Subjects were 81 students who volunteered to participate in the study. Over 80% worked in groups, most of which were self-selected. "Half of the groups never get useful information from either the library or librarians." When asked to rate sources of information on a four-point scale, there were striking differences between undergraduates and graduate students. All undergraduates thought their professors and the Internet were good or excellent sources of information and the library was poor. Fifty to sixty percent of graduate students also liked professors and the Internet, but all graduate students thought the library was a good or excellent source of information. This study shows that engineering students studying in groups do try to find information, but they were not very effective. The authors recommend just-in-time information literacy instruction. It would be interesting to do a similar study with various groups of health sciences and pre-health sciences students.

Problem-based learning is medicine's form of formal group learning. Use of information resources is essential. Students may decide what resources to use. Distlehorst et al compare nine Southern Illinois University medical school classes in which students could choose a problem-based learning track or a standard track. Over time, more and more students chose the PBL track. PBL students were older than standard students and were likely to be female. PBL students had higher MCATs. PBL students did somewhat better in the psychiatry and obstetrics-gynecology clerkships and in overall clerkship performance and in all subcategories of clerkship performance. There were no significant differences on USMLE Step 1 and USMLE Step 2. It is interesting to note that, in the face of continuing faculty skepticism about PBL and having two tracks, as of 2000, entering students no longer can elect a PBL track. Kinkade determined that only 6% of 123 U.S. medical schools use PBL for more than 50% of the preclinical curriculum. Seventy percent used PBL in some way. Twenty-two percent of the schools had used it in the past and no longer were using it.

In his January 2005 editorial in Academic Medicine, Michael Whitcomb tells us he believes the reason Americans do not receive optimal care is because doctors are not up to date. He believes that, in order to improve the quality of care, medical schools and residency programs should teach EBM and develop positive attitudes about it. A way must be found for practicing physicians to have access to online resources appropriate for answering clinical questions and to organize their practices to allow time for using resources to answer clinical questions and keeping up to date.

Thomas Lang, a writer and editor, believes "the vast majority of manuscripts [produced by residents and fellows] report research of modest quality on topics of limited importance." He argues that doing systematic reviews of the literature would be of more value to residents and fellows, giving both the advantages and disadvantages of substituting doing systematic reviews as training for research for residents and fellows.

**Ely, John W. et al.** Answering Physician's Clinical Questions: Obstacles to Potential Solutions. Journal of the American Medical Informatics Association. 12(2):217-224, May/Apr 2005.

**Green, Michael L. and Tanya R. Ruff.** Why Do Residents Fail to Answer Their Clinical Questions? A Qualitative Study of Barriers to Practicing Evidence-Based Medicine. Academic Medicine. 80(2):165-182, February 2005.

**Nicholson, Laura and Lisa Y. Shieh.** Teaching Evidence-Based Medicine on a Busy Hospitalist Service: Residents Rate a Pilot Curriculum. Academic Medicine. 80(6):607-609, June 2005.

(Continued on page 17)



(Literature Review — Continued from page 16)

**Rosenbloom, S. Trent, Nunzia Bettinsoli Giuse, Rebecca N. Jerome, and Jennifer U. Blackford. Providing Evidence-Based Answers to Complex Clinical Questions. Evaluating the Consistency of Article Selection. Academic Medicine. 80(1):109-114, January 2005.**

**Schilling, Lisa M., John F. Steiner, Kristy Lundahl, and Robert J. Anderson. Residents' Patient-Specific Questions: Opportunities for Evidence-Based Learning. Academic Medicine. 80(1):51-56, January 2005.**

**Westbrook, Johanna I., Enrico W. Coiera, and A. Sophie Gosling. Do Online Information Retrieval Systems Help Experienced Clinicians Answer Clinical Questions? Journal of the American Medical Informatics Association. 12(3):315-321, May/June 2005.**

In the Summer 2002 Literature Review, I reviewed a JAMIA article by William Hersh et al in which medical and nurse practitioner students were asked to answer clinical questions using MEDLINE. In their discussion, they say "this task is challenging for students at this level of experience." Recently there have been a number of articles on the use of information resources by residents and practicing physicians.

Nicholson and Shieh say evidence-based medicine is perceived as being too time consuming for use in a busy clinical environment. Their goal was to teach evidence-based medicine on a busy in-patient service in order to demonstrate that EBM can be used, even when there are time constraints. Thirty-six 02-03 internal medicine residents on the Stanford University hospitalist rotation were given EBM instruction by the two attending hospitalists and were given an opportunity to apply EBM on actual patients. Twenty-three (64%) of the residents returned a follow up questionnaire in which they were asked to "rate the impact of the curriculum on their understanding of 20 EBM terms or practice skills. There was at least a somewhat strong effect for 16 of the 20 questions. These residents do feel they have a better understanding of EBM and are using it on later rotations. The authors credit pre-filtered EBM tools such as the Cochrane Library and the ACP Journal club, and using EBM limits with MEDLINE with enabling residents to locate quality evidence quickly. Plans were underway to use pre-tests and post-tests of skills as well as perceptions. It is important to note that the hospitalist rotation is the only one having only two attendings and having no overnight call. They admit that establishing and maintaining an EBM knowledge base among attendings on all services will be a definite challenge.

Schilling et al of the University of Colorado Health Sciences Center also cite time as an obstacle to use of EBM. Forty-three internal medicine residents in the outpatient clinic in 01-02 were asked to formulate four clinical questions, based on real patients, on at least one-week

intervals. Residents were given two 45-minute instructional lectures. Residents filled in a questionnaire for each clinical question. Questionnaires were returned for 154 of 234 questions (68%). Eighty percent of the non-respondents said "overriding patient care responsibilities" was the reason for not completing the exercise. The remaining 20% of non-respondents did not provide a reason. Residents used MEDLINE and UpToDate for answers to 89% of their questions. MEDLINE and UpToDate were the most frequently used and most helpful resources. The information affected clinical decision-making in 78% of the cases. The majority spent 11 to 30 minutes retrieving answers. This method of teaching EBM does less to address the perception of EBM being time-consuming than did the Stanford method.

Green and Ruff used focus groups to study barriers to practicing EBM. A convenience sample of 34 categorical residents in the Yale primary care internal medicine program were asked why it was hard to pursue or find answers to clinical questions and what could be done to overcome the barriers. Eight themes emerged: access to electronic resources, skills in searching, question tracking, time, priority, personal initiatives, team dynamics, and institutional culture. Illustrations of each type of barrier are given. The authors recommend "reliable, rapid, and preferably exclusive access to electronic information sources at the point of care," more training in articulating questions and searching; and clinical question conferences or mentored information searching to force making time for information use; better systems to track questions; and fostering a favorable EBM microclimate. Changing hospital institutional culture may be the most formidable barrier.

Ely et al studied general internists, general pediatricians, and family physicians under 45 years of age practicing in eastern Iowa. Forty-six were randomly selected and ten were specifically selected because of minority status. Forty-eight (86%) agreed to participate. Subjects were observed for four half days, spaced at approximately one month intervals. They were also interviewed about questions that arose in each clinical encounter. At the end of the four months, they also were asked about obstacles to answering questions and for suggestions for improvement. Physicians asked 1062 questions but pursued answers to only 55% of the questions. Of these, 41% were answered without difficulty, 31% with difficulty, and 28% were not answered. This means 60% of clinical questions either were not answered or were not pursued. Ten paper and electronic resources accounted for 37% of the answers. Although not all subjects were asked why they did not pursue answers, when it was asked the most common reason was the expectation that no useful information would be found. Ready availability of a human source of information and lack of time were also frequently cited. Major recommendations were providing "comprehensive information that anticipates and answers the specific needs of practicing physicians" and making

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the information efficient to use. They also wanted to be told what to do in highly specific terms. The author recommended use of the NLM Clinical Questions Collection.

Westbrook et al recruited 75 experienced Australian hospital-based doctors, family practitioners, and clinical nurse consultants to participate in a laboratory experiment. Each subject was given eight clinical scenarios, presented in random order, which they first answered unaided. Subjects were then given 80 minutes to answer the same eight questions using six online information retrieval systems. Five of the online information retrieval systems are described as being in “predigested summarized form with reference available for follow up”. PubMed was one of the systems. Subjects were instructed to spend no more than ten minutes on each question and to provide documentation for each answer, including those for which they already knew the answer. Subjects were also asked how much clinical experience they had, they rated their computer skills, and they indicated how often they use online retrieval systems.

Scenarios were designed to call for answers already known to most clinicians and some for answers not already known. “Conflicting evidence” was the correct answer in some cases. A medical librarian, an expert panel, and the research team all did searches to establish correct answers.

Five hundred fifty-seven usable pairs of answers were available. Subjects answered 29% of the questions correctly on the pre-test and 50% on the post-test. Over twenty percent of the answers were right before the intervention and still were right after it; 7% of the answers were changed from right to wrong after using the online system; 33% were wrong before and right after; and 39% were wrong before and wrong after. Average time to answer a question using the system was 6.1 minutes.

Computer skill and previous use of online information retrieval systems had no effect. Family practitioners had significantly better pre-test scores. There were no significant differences between the groups’ correct answers on the post-tests. All three groups experienced significant improvement, with clinical nurse consultants experiencing the most improvement.

Although significantly more answers were changed from wrong to right, the fact that 39 answers went from right to wrong and 220 incorrect answers still were not correct after using the information retrieval systems is troubling. Was this due to lack of motivation in the artificial laboratory setting, poor searching, poor databases, or inability to find an answer in the time allowed? The most interesting result is that use of the information retrieval systems improved the clinical nurse consultants’ performance to a

level similar to that of the physicians. This study raises more questions than it answers.

Rosenbloom et al tested the hypothesis that Vanderbilt Clinical Information Consult Service (CICS) librarians are “well-equipped to interpret and filter the literature in response to complex clinical questions”. Complex questions are “those that when initially explored by the CICS librarians, had no clear consensus answer presented by the biomedical literature, or those that required CICS librarians to address a number of facet questions”. Vanderbilt CICS librarians are integrated into clinical teams and have advanced training in research design, biostatistics, and clinical and information science. Subjects were five general physicians, five physicians with advanced training in research methods (who participated in clinical research and active practice), and five experienced CICS librarians.

Focus groups were used to obtain seven consensus facets for each of the two complex clinical questions chosen for the study. CICS librarians worked together to develop a consensus search strategy which yielded 12 citations for one question and 25 for the other, after an initial review by the CICS librarians. All 15 subjects reviewed the 37 articles. Each subject selected up to five pertinent articles for each question and assigned a relevance rating for overall pertinence and one for each of the consensus facets. Although there was higher agreement on one question than on the other, there was no significant difference between groups as far as overall pertinence rankings. Informationists tended to agree with each other as did the methodologists. There was more variation among the generalists. They note that generalists were more likely to select review articles and note another study which showed practicing physicians like summary articles which can be quickly read. Agreement on pertinence ranking was good on all but one facet of the first question. For the second question, there was both low within group and between group agreement for three of the facets.

They conclude: informationists identified medical articles relevant to complex clinical questions as reliably as did physicians trained in clinical research and may assist practicing clinicians by providing information to patient cases. The authors point out several limitations in their study. My biggest question is how involvement of the same group of CICS librarians at the search stage, at the initial review stage, and again as subjects in the study affected the results.

These twenty articles are just a small number of the research articles relevant to our practice as health sciences librarians that have appeared in the literature in the last six months. I would encourage everyone to dip into the literature on a regular basis. ●

**Section Member Reports on  
2004 David A. Kronick Traveling Fellowship**

***Exploring the Roles of Health Care Professionals and  
Librarians Involved with Complementary and Alternative Medicine***

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\* This work was supported by the Medical Library Association's 2004 David A. Kronick Traveling Fellowship. The full article will be published in the January 2006 issue of *JMLA*.

**Objectives**

To conduct qualitative research about the role of health care professionals and librarians involved with complementary and alternative medicine (CAM). The goals were: to identify resources used by experienced CAM centers; to explore the librarian's role as well as their approach to teaching and searching with respect to CAM; to acquire information about CAM education; and, to connect with other librarians in the CAM field.

**Methods**

Semi-structured interviews with open-ended questions were used.

**Results**

Sixteen health care and information professionals from eleven different institutions in Boston, Baltimore and Calgary were interviewed. Major themes from the interviews were: CAM funding, integration of CAM and conventional medicine, roles of librarians, "hot" CAM issues and information access. Information about four aspects of CAM education (general, undergraduate, graduate and continuing) is presented. A wealth of information resources were identified.

**Conclusions**

A CAM librarian's role is unique, many specialize in specific area(s) of CAM and opportunities exist for librarians to partner with CAM groups. CAM information professionals' major roles involved information access and retrieval and education. Further study is required concerning: CAM consumer health, integrative CAM and conventional medicine models and the librarian's role in a CAM environment. CAM funding is a major concern.



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