

HYPOTHESIS

THE NEWSLETTER OF THE RESEARCH SECTION OF MLA

**HYPOTHESIS. The Newsletter of
the Research Section of MLA
VOLUME 12, Number 1 Spring 1998**

Chair's Message.....	1
A Reminder.....	1
Officers.....	2
Food for Thought.....	2
MLA Grants and Scholarships Booth.....	2
Research Highlights at MLA '98.....	3-4
Letters to the Editor.....	5, 12
Literature Review.....	7-8
LIBRES.....	8
Research Spotlight: Ann McKibbon.....	8-11

Research Section Chair's Message by Julie J. McGowan, Ph.D.

Because this will be my final Hypothesis column, I would like to take this opportunity to update you on some of our successes this year and to thank several individuals who have made those successes possible. This is not meant to be an exhaustive list, because many of you in the Section have made significant contributions.

I would like to begin by thanking Jan LaBeause for the wonderful job she has done editing the Newsletter. It is by far one of the best of any section. Major thanks also go to Ann McKibbon for her work on the Section's home page. If you haven't visited it lately, please do. It is not only well designed but also extremely informative, containing an extensive bibliography on research tools as well as criteria for the Section's awards, mentoring program, etc. Bob Braude has done a wonderful job on the history of the Section, and it was sent to headquarters this fall, well before their deadline for the Centennial. Bob, we really appreciate your efforts in this endeavor!

Our Chair-Elect, Ruth Fenske, has put together an incredible program for the Annual Meeting, with three contributed paper sessions, and one invited panel (pg. 3). I am sure that everyone attending MLA this year will learn a great deal and be extremely proud of our Section, thanks in large measure to Ruth and her programming efforts.

Lastly, I would like to thank our immediate past chair, Zoë Stavri, who has served as a member of the AMIA Spring Congress program committee and has been of invaluable assistance in helping us put together the Joint Symposium, on Thursday, May 28, sponsored by the Research Section and AMIA (pg. 4). I would like to encourage everyone who can to try to stay an extra day and participate.

I would like to close by adding a special note of thanks to the membership of the Section for all of the research you are doing and the assistance to new researchers you are giving. We are committed to building a research agenda for the profession, and the Section, made up of all of you, is the vital instrument to make this happen. Keep asking those research questions!

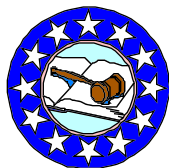


**Check it out and let us know
what you think!**

Food for
thought...

*"The real voyage of
discovery consists not in
seeking new landscapes but
in having new eyes."*
... Marcel Proust

*"Research demands
involvement. It cannot be
delegated very far."*
... Anonymous



Research Section Officers, 1997-1998

Chair Julie McGowan, Ph.D.
Chair-Elect Ruth Fenske, Ph.D.
Past Chair Zoë Stavri, Ph.D.
Secretary/Treasurer Lothar Spang
Section Council Representative Julia Ann Kelly
Section Council Alternate John Coffey
Section Nominee for Nominating Committee
..... Ann McKibbin
Awards Jury Chair Zoë Stavri, Ph.D.
Continuing Education Liaison Julie Kochi
Governmental Relations Liaison... Jon Eldredge, Ph.D.
History Task Force Chair Robert Braude, Ph.D.
Membership Committee Chair Catherine Graber
Nominating Committee Chair Andrea Ball
Research Resources Committee Chair
..... David Owen, Ph.D.
Newsletter Editor Jan LaBeause
Layout Editor Miriam Hudgins

For contact information, see MLA Directory or
Research Section Home Page
(<http://www-hsl.mcmaster.ca:80/lrs/index.html>)

MLA Grants and Scholarships Booth

CALL FOR VOLUNTEERS

... submitted by Ruth Fenske, Ph.D.

Planning on attending MLA in Philadelphia in May? Want to contribute to a good cause, meet people, and have some fun all at the same time? Volunteer to work one or more shifts at the Grants and Scholarships booth. Volunteers will be selling products related to MLA, such as mugs, pins, and notepads. All profits go to support the MLA Grants and Scholarships program.

Last year we increased profits significantly over the previous year. We need **YOU** to help us make this an even more profitable year. Booth hours are as follows:

Saturday, May 23	Noon-6:00 pm
Sunday, May 24	Noon-6:00 pm
Monday, May 25	8 am - 5 pm, close 9-10 for Plenary Session close 12-2 for Awards Lunch
Tuesday, May 26	8 am - 5 pm, close 9-10 for Plenary Session
Wednesday, May 27	8 am - 5 pm, close 9-10 for Plenary Session

Please indicate your willingness to volunteer for this worthy cause by sending an e-mail message to Mr. Pat Craig at jcraig@lsumc.edu. Thank you!

HYPOTHESIS. The Newsletter of the Research Section of MLA

HYPOTHESIS (ISSN 1093-5665) is the official newsletter of the Research Section of MLA. It is published three times a year by the Section: Spring (March), Summer (July/August), and Fall (November). 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.

Jan LaBeause, Editor
Medical Library and LRC
Mercer University School of Medicine
1550 College St.
Macon, GA 31207-0001
VOICE: 912-752-2516
FAX: 912-752-2051
E-MAIL: labeause.j@gain.mercer.edu

Research Section Sponsored Sessions

... by Ruth Fenske, Ph.D.

The Research Section is sponsoring several program events during the MLA Annual Meeting:

On Sunday, May 24th (4:00-5:30 PM) **Research for Decision Making: Evidence-based Practice for Librarianship** will be co-sponsored by the Research Policy Implementation Task Force. Papers being presented are:

"A Journal Availability Study: A Tool for Determining User Access" Julia Shaw Kokot, Martha Bedard, Steve Squires, Diana McDuffee, Linda Frank, Mike London, Charlotte Keeler, Joe Williams, and Therese Capal, University of North Carolina at Chapel Hill

"Assessing Digital Information Needs Among Users of an Urban Health Sciences Library" Phyllis C. Self, Barbara Wright, and Jessica Waugh, Virginia Commonwealth University/Medical College of Virginia Campus

"Building the Library's Future: Focus Group Interviews as a Means of Defining the Library's Role" Alice Kawakami, University of Southern California

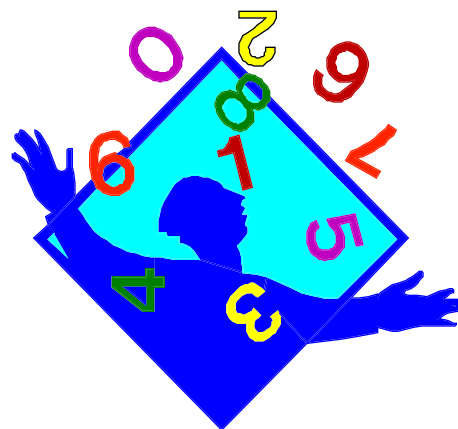
"Factors Affecting the Diffusion of On-line End User Literature Searching" Joan S. Ash, Oregon Health Sciences University

"Measuring the Quality of Customer Service in Document Delivery" Kathryn Connell, Mitch Walters, Nancy Gotcher, Lucy Vasquez, and Eric Zeidler, University of Texas Southwestern Medical Center at Dallas

On Monday, May 25th (4:00-5:30 PM) **MLA Does Research: Tips for Excellence** is a panel discussion featuring Section members:

- I. *"Asking a question"* P. Zoë Stavri, National Library of Medicine
- II. *"Choosing a methodology"* Jocelyn Rankin, Mercer University
- III. *"Appropriate analysis"* Nancy Woelfl, University of Nebraska
- IV. *"Presenting results"* Joyce Backus, National Library of Medicine

Tuesday, May 26th (10:30 AM-Noon) **Consumer Health Information Services: Do They Make a Difference?** will be co-sponsored by the Consumer and Patient Health Information Section. It includes these presentations:



"Serving the Young and the Restless: Development of a Youth Collection in a Consumer Health Library" ValleyCare Health Library & Ryan Corner Cancer Resource Center, Pleasanton, CA

"Making a Difference: Determining the Impact of a Consumer Health Information Service on Participants; Attitudes, Health Care Decision Making, and Physician-Patient Communication" Martha Earl, Connie Littleton, Shelley Paden, and Doris Prichard, University of Tennessee, Knoxville

"VT Chip: Health Care Information Consumers Define Need" Nancy Bianchi, Donna Porter, Julie McGowan, and Bob Sekerak, University of Vermont

"Just an Appetizer or the Complete Menu: Evolution of Specialized Consumer Health Web Resources Training" Linda Draper, Nancy Adams, Keir Reavie, and Wendy Wu. Detroit Community AIDS Library, Wayne State University

Tuesday, May 26th (2:00-3:30 PM) **Evaluating Training: A Critical Research Need** will be co-sponsored by the Research Policy Implementation Task Force and includes:

"Assessing the Effectiveness of MEDLINE Instruction: Objective Feedback" Alice Kawakami, University of Southern California

"What is the Value in Outreach Programs?" Jocelyn Rankin, Jan LaBeause, Mercer University, and Zoë Stavri, National Library of Medicine

"Evaluating Training in the Use of MEDLINE and Computer Conferencing by Dentists" Joanne Marshall, University of Toronto and W. Paul Lang, Doreen Bradley, and Barbara Shipman, University of Michigan

"Information Skills Training for the Clinical Epidemiology & Health Services Research Master's Program" helen-ann brown, Robert Braude, and Patricia Tamasulo, Cornell University

"Tracing the Development of Critical Evaluative Skills with the Use of the Internet" Phyllis Blumberg, Allegheny University of the Health Sciences, and JoAnne Sparks, Drexel University

Health Information Research Agenda for the 21st Century

... by Julie J. McGowan, Ph.D.

MLA's Research Section and the American Medical Informatics Association (AMIA), in collaboration with Partnerships for Networked Consumer Health Information, will hold a joint one-day research symposium at the conclusion of the MLA Centennial Celebration and the beginning of the AMIA Spring Congress. Knowledge is the constant in the work of both medical librarians and medical informaticians. There are commonalties of interest. However, the approaches to knowledge creation, management and dissemination have frequently differed. With health care emphasizing a team-based approach to medical management, this Symposium will offer participants the opportunity to frame a collaborative health informatics research agenda for the next century.

The morning session will focus on the research priorities for the three themes of the AMIA Spring Congress: the Virtual Library, Integrated Clinical Decision Support, and Consumer/Patient Access to Clinical Knowledge. The format will emphasize the interdisciplinary nature of the three topics, with thirty-minute keynote speeches by Drs. Sherrilynne Fuller, William Tierney, and Alexander Jadad, nationally recognized experts in their respective fields. Each presentation will be followed by comments from a single, dynamic reaction panel composed of Drs. Robert Braude, Paul Clayton, and Victor Strecher, representing the virtual library, clinical decision support, and consumer health information, respectively.

The afternoon will begin with breakout sessions featuring papers or panels discussing research in the respective topics. Time will be allowed at the end of each session for participants to discuss areas of future research and methods for collaboration. The last session will bring closure to the day with a thirty-minute wrap-up, where the morning's panelists will discuss the ideas presented in both the morning and afternoon sessions, incorporating comments from symposium participants. The Symposium will conclude with a final thirty-minute presentation by a nationally-known speaker, either the Surgeon General or the Director of the Annenberg Public Policy Center. An outcome of this symposium will be a proposal for a future collaborative research agenda in health informatics for the next century.

Research Highlights at MLA '98

The highly-publicized and long-anticipated Centennial Meeting of MLA '98 in Philadelphia is just around the corner, May 22nd-27th. As always, the program has something for everyone. Here's a preview of the meeting from a RESEARCH perspective. Mark your registration forms and your calendars accordingly!

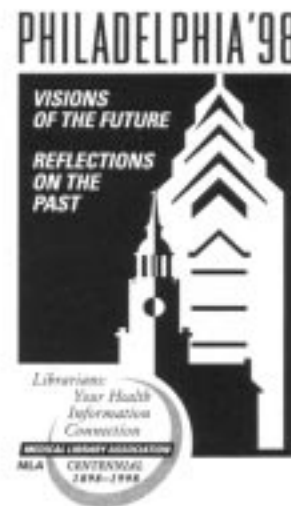
First and foremost, our Section Business Meeting is scheduled for Monday, May 25th, 2:00-3:30 PM. Your attendance and participation are crucial to letting your voice be heard and making your opinion count. Be sure to join us as we plan future directions and form the policies of the Research Section.

For program offerings see Ruth Fenske's submission on the sessions (pg. 3) and Julie McGowan's column on this page. In addition, the National Program Committee has scheduled poster sessions in the Hall of Exhibits for Monday, May 25th (3:00-5:00 PM) and Tuesday, May 26th (Noon-2:00 PM). All presentations that include a structured abstract will be eligible for the Research Section Award.

Those with an interest in the activities of their Chapters will want to attend the Chapter Sharing Roundtables on Sunday, May 24th, Noon-2:00 PM. A "Research" discussion table is among the fifteen being featured at the luncheon meeting.

For those interested in CE opportunities, there is an impressive line-up of courses from the 700 series on "Research, Analysis, and Interpretation":

- #700 Focus Group Interviewing: A Qualitative Research Methodology for the Library.**
Friday, May 22, 8:00 AM-5:00 PM
Beryl Glitz and Claire Hamasu
- #731 Epidemiology and Survey Design for Health Services Research.**
Saturday, May 23, 8:00 AM-5:00 PM
Jonathan N. Tobin, Ph.D.
- #742 The Grant Writer's Toolbox: Strategies for Developing Competitive Proposals.**
Saturday, May 23, 8:00 AM-Noon
Michele L. Kreidler, Ph.D.
- #753 Introduction to Health Services Research.**
Saturday, May 23, 1:00-5:00 PM
Marjorie A. Cahn and Catherine Selden





On Jon Eldredge's commentary "Evidence-Based Librarianship" ...

Dear Editor: The contribution by Jon Eldredge in your Fall 1997 issue was very thought provoking. It caused me to reach up to my shelf of professional references and pull down "The Research Policy Statement of the MLA: Using Scientific Evidence to Improve Information Practice" published in April 1995. I keep it right alongside my "Platform for Change," "Competencies for Special Librarians of the 21st Century" (by SLA) and all my professional directories.

On page 5 of the statement it says "Research is a systematic inquiry into a problem, with the goal of gathering evidence to produce new knowledge." My natural thought progression is that evidence-based librarianship or EBL is the use of that new knowledge to improve practice or open new avenues of practice. Both the research policy statement and Jon Eldredge make recommendations for future directions. These are not long term goals; many are beginning to appear in our professional activities. At the MLA meeting in Philadelphia there will be a cosponsored session entitled "Research for Decision Making: Evidence Based Practice for Librarianship" that I assume will provide us with first hand accounts and examples of the contribution to sound management that research provides. Looking at the list of three research-friendly values espoused by Jon Eldredge, questioning, highlighting and rewarding, and communicating it is of note that the SCC and MLA have developed criteria for evaluating, recognizing and rewarding research and are presenting research awards. Other sections and chapters have committees dedicated to promoting and recognizing research contributions by their members.

The Hospital Libraries Section has been working to establish a benchmarking process which would help build a database for external comparative studies among

hospital libraries, similar to the annual AAHSL statistics. This database would assist in questioning the "truths" of librarianship that may alter the foundation our library practice is based on. And with JCAHO's requirements for all employees to have competency checklists it would seem that performance planning and evaluation are practical and valid places to include research project participation requirements.

And as Jon said there is no shortage of topics since almost weekly I spot the kernel of a research project in the queries and discussions that are submitted to MEDLIB-L in the form of "Has anyone else ever..." or "We did this and found this, has anyone else noticed anything similar?" It would be nice to see additional messages from medlibbers saying that they have gotten together to collaborate on follow-up studies on questions of interest.

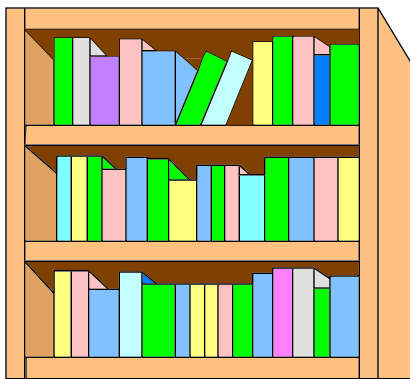
I could go on mentioning ways each of us might also actively participate in or contribute to the evidence based librarianship that is sure to increase the respect of our medical colleagues and improve the performance of our professional duties, but instead I think I'll make a couple calls and set myself a modest goal of planning, completing AND reporting on a project this year to add to the body of knowledge that will support me in the practice of Evidence Based Librarianship.

Eileen Stanley, Director of Library Services
Earl K. Long Medical Center, Baton Rouge, LA

Jon Eldredge's commentary for the Fall 1997 issue of Hypothesis on "evidence-based librarianship" (EBL) is a call for health sciences librarians to incorporate research methodologies and the "evidence" which results from effective research into the principles which guide the way we manage health information resources and provide information services. He compares the potential for EBL to the development of evidence-based medicine, noting similarities between the non-scientific, intuitive, case-study approach to clinical decision making in medicine 40 or 50 years ago and health sciences librarianship today. He then suggests a number of individual and collective strategies to establish "research friendly values" in our profession--such as building a research project into the annual goals of each librarian and ranking libraries according to the contributions of their staff to the knowledge base of health sciences



see Letters, page 12



Literature Review

Prepared by Ruth E. Fenske, PhD

Callison, Daniel. Evolution of Methods to Measure Student Information Use. *Library and Information Science Research*. 19(4):347-357, 1997.

While not a research study, Callison notes the evolution from survey, to citation analysis, to case study, for looking at student search behavior in school library media centers and at bibliographic instruction in academic libraries.

This issue of the "Literature Review" examines several information seeking studies which use a variety of research methods, ranging from qualitative to quantitative. It is apparent from reading these studies that interviews are useful in clarifying quantitative data. However, interviewing users is labor intensive and decreases the number of cases possible to study.

Mendelsohn, Jennifer. Perspectives on Quality of Reference Service in an Academic Library: A Qualitative Study. *RQ*. 36(4):544-557, Summer, 1997.

Mendelsohn interviews two librarians, one faculty member, and a graduate student about the meaning of quality, as applied to academic library reference service. The discussion was limited to service to humanities and social science users. A very important assumption of this study is that reference service providers and users can articulate what quality service is. Knowledge, willingness, and time were the most frequently coded concepts. The authors note a "network of interconnecting dimensions that go to make up quality reference service."

It certainly would be possible to conduct a similar series of interviews with various levels of user in health sciences libraries. It would be interesting to see if results were similar for science and professional school users.

Solomon, Paul. Conversation in Information-Seeking Contexts: A Test of an Analytical Framework. *Library and Information Science Research*. 19(3):217-248, 1997.

Solomon characterizes this study as a descriptive conversational analysis in a restricted conversational domain. Based on a review of the literature of linguistics and sociolinguistics, Solomon defines thirteen concepts to use in analyzing conversations in the information seeking context. He then applies the analysis to nine tape-recorded conversations between librarians and users in school library media centers and public libraries. The researcher was present at all recordings and took notes on the context and non-verbal cues.

One of his variables is vocabulary, i.e. use of a specialized terminology. Surprisingly, he did not find use of a specialized vocabulary in the information seeking context. He suggests that this might be different in a more specialized information transfer setting. I am sure most health sciences librarians would agree.

In his conclusion, he describes how findings from this type of analysis could be used in the training and evaluation of information specialists and in systems design.

Whereas Mendelsohn (discussed above) allowed her concepts to arise from the case study data, Solomon derived his concepts from a body of research literature. Either method might shed light on the librarian-user interaction in health sciences libraries or on the interaction between a user and a computer information system.



Blecic, Deborah D. et al. Using Transaction Log Analysis to Improve OPAC Retrieval Results. *College and Research Libraries*. 59(2):39-59, January, 1998.

A group of University of Illinois at Chicago librarians analyzed OPAC transaction logs before and after changes were made in the introductory screen. Search results show statistically significant differences after the changes. Some of the individual statistically significant results seem trivial, because only small numbers of searches are involved. However, since the overall rate of correct syntax searches with zero postings dropped from 35.05% to 31.35%, this may have been a case of "every little bit helps."

Data were gathered in the fall and spring of a single academic year. Improvement could have been due to student users' increased familiarity with the catalog as the academic year progressed. Also, there is no way to tell how many users actually read the revised opening screens. If everyone had read the opening screen, improvement could have been greater than the data reflect. Analysis of transaction log data can provide valuable insight. However, without user interviews, such as was done in the Mendelsohn and Solomon studies (discussed above), it is often hard to ascertain the users' real intention.

Jiao, Qun G. and Anthony J. Onwuegbuzie. Antecedents of Library Anxiety. *Library Quarterly*. 67(4):372-389, October, 1997.

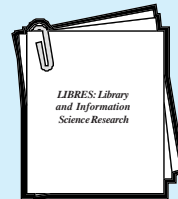
Bostick has identified barriers with library staff, affective barriers, comfort with the library, knowledge of the library, and mechanical barriers as antecedents of library anxiety. Five hundred twenty-two graduate and undergraduate students in two universities were the subjects.

The purpose of the study was to identify characteristics of students who have library anxiety, as measured by the five antecedents. Thirteen variables, including gender, age, native language, and number of library instruction courses undertaken were measured through a demographic questionnaire developed by the authors. Library anxiety was measured by Bostick's Library Anxiety Scale. Setwise regression was used to determine which subsets of the thirteen variables explain the maximum proportion of variance in each of the five antecedents.

Directionality of results is difficult to interpret from the tables alone. Although they checked for multicollinearity

and found none, it appears that status as an international student may be linked to several of the other variables. Do students in the health professionals suffer from library anxiety? If not, why not? And, if so, how could we address the problem?

LIBRES: Library and Information Science Research



CALL FOR PAPERS

LIBRES: Library and Information Science Research (ISSN: 1058-6768), an electronic, peer-reviewed, international journal, is pleased to announce a call for papers for its next and forthcoming issues. Since 1990, *LIBRES* has published articles, reports, and drafts as well as news and discussion of library and information science research, applications, and events. It began its peer-reviewed section in 1993. It is published in March and September. When warranted by the volume and flow of scholarship, special and/or supplementary issues on emergent themes will be distributed.

LIBRES is distributed through a listserver, an ftp site and three mirrored WWW sites in the United States (University of Tennessee, Knoxville Libraries), Australia and Europe. With the rise of the Web and its potential for "rich" content, the *LIBRES* web sites have grown in importance and are now a favored means of access. The potential of Web-based material can be seen in the March 1997 issue which included an article by Scott Seaman entitled *Designing an Ergonomic Circulation Desk: A Case Study*, and featured embedded video clips. News on upcoming international conferences is now entirely Web based due to the need to continually update the information.

For further information, please see the *LIBRES* web page (<http://aztec.lib.utk.edu/libres/>) or contact the Editor-in-Chief, Kerry Smith (e-mail kerry@biblio.curtin.edu.au), Head of the Department of Information Studies, Curtin University of Technology, GPO Box U1987, Perth Western Australia 6845.



When Jan graciously asked me to contribute to this column I started to wonder what I could contribute that might encourage and promote some thought on research. I have decided that a 20-year overview of why our Unit (the Health Information Research Unit of McMaster University) did the research we did, what our successes and failures have been, and how each project led to the next might be of interest to my colleagues.

When I started to work at McMaster University in the late 1970s, I had a small child at home and had decided to retire from special and academic librarianship. I was hired part-time to compile an annotated bibliography of the continuing medical education (CME) literature to ascertain what interventions improved health care knowledge, skills, and attitudes and more importantly, patient outcomes. What emerged from that bibliography, which is still being maintained and expanded in Toronto, is that very few individual educational interventions have actually been shown to improve patient health. Those that do, are often complex, multifaceted, and individualized. Simple things like Grand Rounds or lectures are not effective.

At the same time that I was working on the CME bibliography, Brian Haynes had finished his medical training and was finishing his Ph.D. His thesis studied patient compliance with the premise that if patients took their medications properly and came for their scheduled appointments their health would improve. One thesis, two conferences, and many papers and book chapters later, they decided that although patient compliance was a problem, the bigger problem for all health care professionals was how to adopt new interventions or stop doing old ones when the literature produced valid important impetus for change.

The department we worked in, Clinical Epidemiology and Biostatistics, was also developing and testing their Critical Appraisal Series for the *Canadian Medical Association Journal*. Health care professionals were taught to effectively read a report of a scientific study

and apply the results to their own practice. The department's research and observations showed that although practitioners could read effectively, it took time and they were not necessarily taking the time or developing the skills to retrieve and read the most appropriate studies.

With funding from the Rockefeller Foundation, Brian and I started to study the "before and after" of critical appraisal and to improve presentations of studies in the literature. Brian worked with other researchers and editors to develop structured abstracts, first for original studies and later for review articles and clinical practice guidelines. Abstracts of the articles were standardized and included the information clinicians needed to quickly assess the content and quality of each article. I developed and gave many workshops and seminars on personal filing systems. Both endeavors were successful although I am sure many more structured abstracts exist than comprehensive up-to-date filing systems!

With the advent of the computer and electronic communications, we felt that MEDLINE access and teaching library skills might be part of the answer to helping clinicians keep current. One of the first randomized controlled trials we did was to study if one session of a library skills course would improve library retrievals to answer the needs of a clinical problem. Half of all of the graduate students received the library skills tutorial and the other half received a statistics tutorial. Both groups were tested before and after the tutorials. The results showed no differences and the data were so difficult to understand that they are still unpublished and will likely remain so. Our annual attempts at teaching clinicians ELHILL, SearchMaster, Grateful Med version 1.0 (which demanded fully structured search statements), Grateful Med version 2.0 (with MeSH and no explodes shown), etc. did not make it to research design phase.

Several years later funding from the National Library of Medicine (NLM) allowed us to do two randomized

controlled trials of giving MEDLINE to clinicians on the wards and evaluating all MEDLINE systems using clinical examples. All studies were successful and published, but even with the advent of newer searching systems, clinicians still needed approximately 30 minutes to complete the search and get to the reading stage in their quest to answer clinical questions.

Our next steps took us away from working to change clinician behavior to improving their usual tools. First we worked with funding from NLM and the Ontario Ministry of Health to evaluate if we could produce “hedges” in MEDLINE that would allow a user to automatically screen a content-based search to retrieve citations that were appropriate for clinical application. This work was also successful, and the resulting “hedges” are built into PubMed as clinical searches. Much work is required to complete this type of study because a high-quality hand search of all citations must be done for comparison with the MEDLINE search strategies. We have been turned down numerous times when we asked for funding to duplicate and extend the work.

The second set of projects related to the production of better tools, turned our Unit into a publishing group. We decided that rather than expecting clinicians to look for clinically relevant research to keep them up-to-date, we would provide a collection of these articles, one per page, in a journal format. With funding from the American College of Physicians, we started to produce the *ACP Journal Club* in 1991. It became a well respected tool for keeping current, and in late 1995 *Evidence-based Medicine* was produced with *Evidence-based Nursing* and *Evidence-based Mental Health* coming off the

presses in early 1998. The cumulated contents of all of these journals is now large enough to be a clinically useful tool for health professionals. The computerized product is called *Best Evidence* and is available from the American College of Physicians, the BMJ Publishing Group, and the Canadian Medical Association. We have also committed to updating all material that is 5 years old on an annual basis.

In summary, our work has gone from a simplistic assumption that changes in a few isolated areas like CME courses, improved patient compliance, training in reading skills, or easier computer access will dramatically change health care. We have found that change is a life-long endeavor and needs adjustment and fine tuning on many fronts by many people.

Publications and Selected Presentations

1. Augustine, KA, Ferguson G, March FC. The stereochemistry of some organic derivatives of Group Vb elements. Part X. The crystal and molecular structure of triphenylarsenic difluoride. *Can J Chem* 1975;53:1647-51.
2. Chambers L, Davis D, McKibbin A, et al. *The impact of CME. An annotated bibliography accessing the effect of continuing medical education strategies on the program perception, competence, and performance of physicians and on patient outcomes.* McMaster University, 1983. Updates, 1984, 1985, 1986.
3. Haynes RB, Davis D, McKibbin KA, Tugwell P, A critical appraisal of the efficacy of continuing medical education. *JAMA* 1984;251:61-4. (This article was translated for the Japanese and Italian editions of JAMA.)

See Spotlight, page 10

Editor's Note: Ann McKibbin earned her Bachelors of Science at the University of Guelph with Honors in Chemistry (1971), and her Master of Library Science degree at the University of Western Ontario the following year (1972). She began her professional career as Chemistry and Computer Sciences Librarian for the Science and Engineering Library of Concordia University in Montreal (1972-1974), then as Science Librarian in the Main Library of the University of Windsor (1974-1975). From 1975 to 1980, Ann supervised the Engineering, Research and Development, and Business Libraries of Reed Paper in Toronto and Quebec City. She began working at McMaster University in 1981 as a Research Assistant in the Program for Educational Development. She became Research Coordinator of the Health Information Research Unit at McMaster in 1987 where she continues today.

With a lengthy list of formal courses taught, presentations made and publications to her credit, Ann is respected by library, information science and health care professionals alike. She is a member of MLA and ASIS (American Society for Information Science), and has been a beta tester for NLM's Grateful Med since its inception. She has long been an active member and leader in the Research Section where she currently serves as Webmaster. Her research interests lie “at the intersection of library/information science and medicine,” and have linked her name with evidence-based medicine, the *ACP Journal Club*, the Cochrane Collaboration and the *Annals of Internal Medicine* series on “How to keep up with the medical literature.”

Ann's personal interests include her husband and three children (18, 16 and 14), gardening and knitting. For more information about her research and the work of the Health Information Research Unit of McMaster University, contact her at mckib@fhs.csu.McMaster.CA.

Spotlight, from page 9

4. Davis D, Haynes RB, Chambers L, Neufeld VR, McKibbon KA, Tugwell P. The impact of CME: a methodological review of the continuing medical education literature. *Evaluation and the Health Professional* 1984;7:251-84.
5. Haynes RB, McKibbon KA, Walker CJ, Mousseau J, Baker LM, Fitzgerald D, Guyatt GH, Norman GR. Computer searching of the medical literature: an evaluation of MEDLINE searching systems. *Ann Intern Med* 1985;103:812-6.
6. Haynes RB, McKibbon KA, Fitzgerald D, Guyatt G, Walker CJ, Sackett DL. How to keep up with the medical literature. I. Why to try to keep up and how to get started. *Ann Intern Med* 1986;105:149-53.
7. Haynes RB, McKibbon KA, Fitzgerald D, Guyatt G, Walker CJ, Sackett DL. How to keep up with the medical literature. II. Deciding which journals to read regularly. *Ann Intern Med* 1986;105:309-12.
8. Haynes RB, McKibbon KA, Fitzgerald D, Guyatt G, Walker CJ, Sackett DL. How to keep up with the medical literature. Part III. Expanding the volume of literature you read regularly. *Ann Intern Med* 1986;105:474-8.
9. Haynes RB, McKibbon KA, Fitzgerald D, Guyatt G, Walker CJ, Sackett DL. How to keep up with the medical literature. Part IV. Using literature to solve clinical problems. *Ann Intern Med* 1986;105:636-40.
10. Haynes RB, McKibbon KA, Fitzgerald D, Guyatt G, Walker CJ, Sackett DL. How to keep up with the medical literature. Part V. Personal computer access to the medical literature. *Ann Intern Med* 1986;105:810-24.
11. McKibbon KA, Haynes RB, Fitzgerald D, Guyatt G, Walker CJ, Sackett DL. How to keep up with the medical literature. Part VI. How to store and retrieve articles worth keeping. *Ann Intern Med* 1986;105:978-984.
12. McKibbon KA, Haynes RB, Baker LM, Flemming T, Walker CJ. Teaching clinicians to search MEDLINE: evaluation of a short course. *Proc Annu Conf Res Med Educ* 1986; 25:231-6.
13. McKibbon K, Walker CJ, Haynes RB. SearchMaster - Gateway software that pays for itself. In: Benson J (editor). *Gateway software and natural language interfaces: options for online searching*. Pierian Press, New York, 1987.
14. Haynes RB, McKibbon K, Walker CJ. Planning for the information age: a survey of microcomputer access and use in a faculty of Health Sciences. *CMAJ* 1987;136:1035-7.
15. Haynes RB, McKibbon, K. Grateful Med. *MD Comput* 1987;4:46-9,57.
16. Walker Dilks C, McKibbon AA. Grateful Med: Searching simplified for the clinician and librarian. *Bibl Med Can* 1988;9:210-3.
17. McKibbon K, Walker Dilks CJ, Ryan NC, Fitzgerald D, Haynes RB. A study of MEDLINE in the clinical setting: design and preliminary results. *Proc Annu Symp Comput Appl Med Care*, Washington DC, November 1988.
18. Walker Dilks CJ, Ryan NC, Haynes RB, McKibbon K. MEDLINE on the Wards - Participant perceptions and usage. Upstate New York and Ontario Chapter of MLA, October, 1988.
19. Haynes RB, Ramsden M, McKibbon K, Walker CJ, Ryan NC. Medical education and Medical informatics. *Acad Med* 1989;64:207-12.
20. Walker CJ, McKibbon KA, Ryan NC, Ramsden MF, Fitzgerald D, Haynes RB. Methods for assessing the competence of physicians' use of MEDLINE with Grateful Med. *Proc Annu Symp Comput Appl Med Care*, Washington DC, November 1989.
21. Kirplani H, Schmidt B, McKibbon KA, Haynes RB, Sinclair JC. Searching MEDLINE for high quality studies on care of the newborn. *Pediatrics* 1989;83:542-6.
22. Haynes RB, McKibbon KA, Walker CJ, Ryan NC, Fitzgerald DC, Ramsden MF. Online access to MEDLINE in clinical settings: a study of use and usefulness. *Ann Intern Med* 1990;112:78-84.
23. Chambers LW, Haynes RB, Pickering R, McKibbon A, Walker-Dilks CJ, Panton L, Goldblatt E. New Approaches to addressing information needs in local public health agencies. *Can J Publ Hlth* 1991;82:109-14.
24. Walker CJ, McKibbon KA, Haynes RB, Ramsden MF. Problems encountered by clinical end-users of MEDLINE with Grateful Med. *Bull Med Libr Assoc* 1991;79:67-69.
25. McKibbon KA Haynes RB, Walker-Dilks CJ, Ryan NC, Baker L, Flemming T, Fitzgerald D. How good are clinical MEDLINE searches? A comparative study of clinical end-user and librarian searches. *Comput Biomed Res* 1990;23:583-93.
26. Haynes RB, McKibbon KA, Walker Dilks CJ, Ramsden MF. Rapid evolution of microcomputer use in a faculty of health sciences. *CMAJ* 1991;144:24-8.
27. Haynes RB, Ramsden MF, McKibbon KA, Walker Dilks CJ, Ryan NC, Johnston M. Online access to MEDLINE in clinical settings: impact of user fees. *Bull Med Libr Assoc* 1991; 79:377-81.
28. Hersh WR, Hickham DH, McKibbon KA, Haynes RB. An improved method of retrieving MEDLINE references for physicians. *Proc Ann Symp Comput Appl Med Care*, Washington, DC. November, 1991:808-12.

29. McKibbin KA, Haynes RB, Johnston M, Walker CJ. A study to enhance clinical end-user MEDLINE search skills: design and baseline findings. *Proc Ann Symp Comput Appl Med Care*, Washington, DC. November, 1991:73-7.
30. Walker CJ, McKibbin KA, Haynes RB, Johnston ME. Performance appraisal of online MEDLINE access routes. *Proc Ann Symp Comput Appl Med Care*, Baltimore, Maryland. November, 1992.
31. Haynes RB, McKibbin KA, Bayley E, Walker CJ, Johnston ME. Increases in knowledge and use of information technology by entering medical students at McMaster University in successive annual surveys. *Proc Annu Symp Comput Appl Med Care* 1992;16:560-3.
32. McKibbin KA, Walker Dilks CJ. Panning for applied clinical research gold. *Online* 1993;17:105-8.
33. Haynes RB, Johnston ME, McKibbin KA, Walker CJ, Woillan AR. A randomized controlled trial of a program to enhance clinical use of MEDLINE. *Online J Curr Clin Trials* (serial online) 1993;1993; (Doc No 56).
34. Hersh WR, Hickman DH, Haynes RB, McKibbin KA. An evaluation and failure analysis of SAPHIRE with a MEDLINE test collection. *J Am Med Inform Assoc* 1994;1:51-60.
35. Wilczynski NL, Walker CJ, McKibbin KA, Haynes RB. Assessment of methodologic search filters in MEDLINE. *Proc Annu Symp Comput Appl Med Care* 1993;17:601-5.
36. Haynes RB, Walker CJ, McKibbin KA, Johnston MR, Willan AR. Performance of 27 MEDLINE systems tested by searches on clinical questions. *J Am Med Inform Assoc* 1994;1:285-95.
37. Haynes RB, Wilczynski NL, McKibbin KA, Walker CJ, Sinclair JC. Developing optimal search strategies for detecting clinically sound studies in MEDLINE. *J Am Med Inform Assoc* 1994;1:447-58.
38. Wilczynski NL, Walker CJ, McKibbin KA, Haynes RB. Quantitative comparison of pre-explorations and subheading with methodologic search terms in MEDLINE. *Proc Annu Symp Comput Appl Med Care* 1994;18:905-9.
39. Wilczynski NL, Walker CJ, McKibbin KA, Haynes RB. Preliminary assessment of the effect of more informative (structured) abstracts on citation retrieval from MEDLINE. *MEDINFO '95 Proceedings*. 1995:1457-61.
40. McKibbin KA, Walker-Dilks CJ. Beyond ACP Journal Club: how to harness MEDLINE to solve clinical problems. [Editorial]. *ACP J Club* 1994 Mar-Apr:A10-2. (*Ann Intern Med* vol 120, suppl 2).
41. McKibbin KA, Walker CJ. Beyond ACP Journal Club: how to harness MEDLINE for therapy problems [Editorial]. *ACP J Club* 1994 Jul-Aug: A10 (*Ann Intern Med* vol 121, suppl 1).
42. McKibbin KA, Walker CJ. Beyond ACP Journal Club: how to harness MEDLINE for diagnosis problems [Editorial]. *ACP J Club*. 1994 Sep-Oct: A10 (*Ann Intern Med* vol 121, suppl 2).
43. Walker-Dilks CJ, McKibbin KA, Haynes RB. Beyond ACP Journal Club: how to harness MEDLINE for etiology problems [Editorial]. *ACP J Club* 1994 Nov-Dec: A10 (*Ann Intern Med* vol 121, suppl 3).
44. McKibbin KA, Walker CJ, Haynes RB, Wilczynski NL. Beyond ACP Journal Club. how to harness MEDLINE for prognosis problems [Editorial]. *ACP J Club* 1995 Jul-Aug:123;A12-4.
45. McKibbin KA, Walker CJ, Haynes RB, Wilczynski NL. Beyond ACP Journal Club. how to harness MEDLINE for review articles and meta-analyses [Editorial]. *ACP J Club* 1996 Mar-Apr;124:A12-4.
46. McKibbin KA, Wilczynski N, Hayward RS, Walker-Dilks CJ, Haynes RB. The medical literature as a resource for health care practice. *J Am Soc Inform Sci* 1995 46:737-42.
47. Wilczynski NL, Walker CJ, McKibbin KA, Haynes RB. Reasons for the loss of sensitivity and specificity of methodologic MeSH terms and textwords in MEDLINE. *Proc Ann Symp Comput Appl Med Care* 1995:436-40.
48. Wilczynski NL, Walker CJ, McKibbin KA, Haynes RB. Preliminary assessment of the effect of more informative (structured) abstracts on citation retrieval from MEDLINE. *Medinfo* 1995;8 Pt 2:1457-1461
49. Haynes RB, McKibbin KA, Kanani R. Systematic review of randomised trials of interventions to assist patients to follow prescriptions for medications. *Lancet* 1996; 348:383-6.
50. McKibbin KA, Walker-Dilks CJ. The quality and impact of MEDLINE searches performed by end users. *Health Lib Rev* 1995;12:191-200.
51. Haynes RB, McKibbin KA, Kanani R. Interventions to assist patients to follow prescriptions for medications. In: Bero L, Grilli R, Grimshaw J, Oxman A. Collaboration on Effective Professional Practice Module of The Cochrane Database of Systematic Reviews, [updated 03 March 1997]. Available in The Cochrane Library [database on disk and CDROM]. *The Cochrane Collaboration*; Issue 2. Oxford: Update Software; 1997. Updated quarterly.
52. Hunt DL, McKibbin KA. Locating and appraising systematic reviews. *Ann Intern Med* 1997 1; 126:532-8.
53. Hayward RS, Guyatt GH, Moore KA, McKibbin KA, Carter AO. Canadian physicians' attitudes about and preferences regarding clinical practice guidelines. *CMAJ* 1997 Jun 15;156:1715-23.
54. Guyatt GH, Haynes RB, McKibbin KA, Cook D. Evidence-based health care. *Mol Diagn* 1997;2:209-15.

librarianship through publications, papers and posters reporting research results.

While I agree with and support these goals, I would like to suggest that there is another basic factor in the development of evidence-based medicine and, more generally, the use of scientific research to support medical practice. Basic biomedical research has proven to be very effective over the past 50 years because it has actually provided useful answers to such important questions as: How does the human body and each of its complex systems work?, What are the causes of disease?, and What steps can we take that will consistently prevent or cure many diseases?

Until health sciences librarianship can pose equally compelling questions and then, through rigorous research methods, begin to provide consistently helpful answers to those questions, research will not gain widespread support from the members of our profession, from the other health professions we serve, or from the general public. We need to be asking what are the core problems or questions of health sciences librarianship that require scientifically gathered and analyzed evidence to solve or answer? As Dr. Eldredge suggests, there may be no real shortage of potential research questions in our field, but I would argue it is not enough to just dream them up. We need the focus of a few big, fundamental questions that are widely recognized as being critically important, and not just for us, but for the rest of society.

Once we have those questions and can pose them in ways which call out for answers, then perhaps that will inspire many of us to carry out studies that can lead to practices that will dramatically improve the ways we organize and provide access to health information resources and thereby improve people's health.

Gary D. Byrd, Ph.D., Director
Health Sciences Library, State University of New York
at Buffalo, Buffalo, NY

To the Editor: I was delighted to read Jon Eldredge's timely article "Evidence-Based Librarianship: A Commentary for HYPOTHESIS" in the last issue. All his points were persuasive, and two of them especially impressed me.

One of his recommendations was to "demonstrate to decision makers that sound research does not constitute an ivory tower activity, but rather it can contribute to sound management." The technological and managerial innovations which are dramatically affecting our field can make it difficult for managers to arrive at enlightened decisions, but good research can help. When published and widely read, it can point the way toward what works well and away from what does not.

A second point in the article which I particularly appreciated was that "all legitimate research has inherent value." Although Eldredge's emphasis, indicated by his title, was on evidence-based librarianship, he also encouraged rigorous library research of all kinds, "from qualitative (e.g., focus groups, ethnographic approaches, historic) to case to descriptive studies to the more analytical or qualitative approaches." Too often, library scholars fall into separate camps, believing in either traditional descriptive studies or highly statistical analyses. It is important for us to all join together under the same big tent, differing in our specific approaches but not in our devotion to sound and useful research.

Bob Wood, Chair, South Central Chapter Research Committee
Louisiana State University Medical Center, Medical Library, Shreveport, LA

On HYPOTHESIS and Ruth Fenske's "Literature Review" ...

I received my first copy of *HYPOTHESIS* last month. As a former newsletter editor for ICS (International Cooperation Section), I can relate to the intensive labor involved in the production of a high quality newsletter. Yours is definitely one of the better ones among the Sections. The contents of the newsletter are of substance and the Literature Review column alerts readers to various articles which are worth reading. Thanks for including me on the mailing list.

Polin P. Lei, Associate Librarian for Information Services
Arizona Health Sciences Library
Tucson, AZ

