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Hypothesis

The Journal of the Research Section of MLA



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Cover art (from the *Images from the History of Medicine* database by the National Library of Medicine):

Fashionably dressed men and women, in obvious discomfort, walk quickly from the resort's Pump Room. *Effects of the Cheltenham waters, or, 'Tis necessary to quicken your motions after the second glass ...* London: Pub. by S.W. Fores, 1823.

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As *Hypothesis* readers may recall from the last issue (v. 23, i. 2), this journal is moving through a transitional phase – from a journal *dedicated* to the Research Section to a journal *representative* of the Research Section's mission. The co-editors are seeking article submissions about research methodology and well-developed structured abstracts that concisely describe the author's research study. The co-editors hope that by reshaping the scope of the *Hypothesis*, the journal will not only serve the research mentoring needs of the members of the section and MLA, as a whole, but also provide a valuable publishing opportunity for health sciences librarians interested in research.

Also, in the last issue, the authors of "*Hypothesis: Our Past and Our Future*" stated that the *Hypothesis* was the "only MLA Section publication indexed in a well-known database." However, this statement must be retracted because Mark Funk of Weill Cornell Medical College, Medical Library and Past President of MLA, informed the authors that the Hospital Libraries Section's publication *National Network* is indexed in the Cumulative Index to Nursing and Allied Health Literature (CINAHL), as well as the *Hypothesis*. The authors thank Mark for this correction, as they certainly do not want to provide misinformation.

Although brief, this issue provides insight and information about research and publishing, as well as a list of Research Section events at the MLA Annual Meeting. First, Diane Cooper motivates medical librarians to conduct more high-quality research stud-

ies in her article "Are We Thirty Years Behind? – Our Research Challenge." Next, Hope Lemen explores the "World of the Call for Papers" and provides practical advice both for announcing and answering calls for papers.

In the Chair's Column, Carole Gilbert summarizes the accomplishments of the Research Section for the 2011-2012 year. Jonathan Eldredge continues his theme of "Creativity in Research" in "The Research Mentor" with an enlightening interview with Philip Eaton, M.D., a revered researcher at the University of New Mexico. In her Literature Review column, Ruth Fenske provides a synopsis of the latest trends in library science research. The co-editors are saddened to announce that Ms. Fenske is retiring and will no longer write her invaluable column. Although Ms. Fenske will be missed, the co-editors would like to thank her for her contribution to the *Hypothesis* and wish her a happy retirement.

Finally, the news section includes a list of events hosted by the Research Section at the upcoming MLA Annual Meeting in Seattle, WA. The image chosen for the cover of this issue is meant to symbolize MLA members making their way to this year's conference – despite the *real* reason for the comical characters' hurried steps! In honor of the annual meeting's sports theme, this column's ending quote represents not only the attitude of winning athletes, but also successful librarians.

Champions keep playing until they get it right.
Billie Jean King

ARE WE THIRTY YEARS BEHIND? OUR RESEARCH CHALLENGE

I. Diane Cooper, MSLS, AHIP

NIH Library, Office of Research Services, National Institutes of Health

As medical librarians, we're used to providing our clinician clients with credible published literature. Many of us have learned to use evidence based techniques to find relevant literature, filter it, and appraise the validity of the methods before selecting the articles. In many clinical specialties, the evidence based literature is robust, so finding pertinent articles is straightforward.

But what if a librarian outside our field did an evidence-based literature search on the science and practice of medical librarians? Try it. You will find a few comparative studies, but mostly case studies.

In this way, our field is much like the practice of medicine 100 years ago. Clinicians started out publishing case studies in journals. For example, the *British Medical Journal* was originally mostly case studies. Then, they began to collect cases and publish results for groups of patients. Then, they began to compare groups. It was only in the past 30 years that the importance of randomization, controls and sham interventions began to dominate decisions made in the medical science field. Evidence based medicine became the catch phrase at the end of the last century and continues today.

So, maybe we are only 30 years behind in our science. But, it is rare that a double blind randomized controlled study with a sham intervention appears in our literature. Of course, our field doesn't easily lend itself to RDBC trials. It is easy for us to describe for our peers an exciting innovation that we feel is worthwhile, and that is important to do. To achieve a randomized blinded trial, we would have

to develop a consortium of libraries with a willingness to participate in research. One library could develop a "black box" intervention, and it could be assigned randomly to participating libraries. That couldn't be done. Or could it?

If you are interested in expanding your research skills, the MLA Research Section at this year's MLA Annual meeting in Seattle offers paper presentations that will help you gain skills in conducting library research. Kris Alpi has put together two sessions on research. One session of papers will be *Spring Training: Statistical Literacy and Techniques in Library Research and Practice* followed by a second session of papers on *Effective Dissemination of Findings: Pitching Your Research with Speed and Accuracy*.

In addition, MLA '12 is offering a course, "Formulating a Research Plan through Collaboration", taught by Heather Holmes and Elizabeth LaRue. This course will introduce the research process and study design, and demonstrate the value of collaboration on research projects. The class will focus on having participants develop an answerable research question(s), choose a study design best suited to answering their question(s), and determine which data collection method would be most appropriate.

THE WORLD OF THE CALL FOR PAPERS

Hope Leman, MLIS

Center for Health Research and Quality, Samaritan Health Services

Many of us as librarian-researchers have at one time or another had to try to find a place in which to publish our research or have noticed a call for papers (CFPs) among the messages in the discussion lists to which we subscribe. Additionally, many of us serve as editors or sub-editors of journals of librarianship and have to write up and disseminate CFPs of our own. In the past five years or so, I have published articles in journals of librarianship, served as a column editor for the *Journal of Hospital Librarianship*, developed and continue to maintain a free online database that posts CFPs (<http://www.researchraven.com/>), and now serve as a list editor for H-Net History of Science, Medicine and Technology discussion list (H-Sci-Med-Tech <http://www.h-net.org/~smt/>).

In these varying capacities, here are some of the things I have learned about calls for papers.

First, quite to my surprise (for it seems an easy mistake to avoid), many of those who post CFPs on the Web fail to list basic facts such as the year of the deadline or the complete location of the conference. There are few things more frustrating, for example, than seeing a CFP for a subject dear to your heart that you would love to write about only to discover after much clicking (or abandoning the attempt despairingly) that the deadline had passed a year or more before.

And, as much as we would like to assume that our towns are known to all and sundry, it is imperative to include the state in which a conference is to be held. Often, for instance, only the city is given or sometimes the city but not the country.

Second, when looking for places to publish your papers or if you have a CFP of your own, be sure to check out *A Library Writer's Blog* (<http://librarywriting.blogspot.com/>). It is edited by Corey Seeman of the University of Michigan (cseeman@bus.umich.edu). He is most helpful and welcomes CFPs.

Third, in recent years there has arisen a hazard for scholars in the form of what the librarian-blogger Jeffrey Beall refers to as “predatory publishing” (i.e., shady publishers who prey on the desire of early

career scholars to get published and who charge high fees or engage in other unethical practices). Beall is a one-man storehouse of information about these outfits, and his blog *Scholarly Open Access: Critical Analysis of Scholarly Open-Access Publishing* (<http://scholarlyoa.com/>) is not just fascinating reading, it is a public service to the scholarly community. He has spotted an alarming trend and applies shrewdness and energy to examining it.

Fourth, even though we are librarians, it is important to consider places health sciences librarians might not think about as venues for presenting papers. Think beyond the usual library conferences. I have given papers, for instance, at the 2010 meeting of the Genetic Alliance and at the 2010 Oregon Public Health Association Conference. This is a good way to introduce new audiences to the fact that medical libraries exist and to meet people from outside the library world.

At the Genetic Alliance meeting, for example, I met nurse researchers, the leaders of disease advocacy organizations, and health and medical policymakers at the federal level. Think about the skills you have that people outside the library world might not know you have. I spoke at the Genetic Alliance meeting about Web design at one session and about the Open Science movement at another. Read CFPs in many fields in the health sciences. (Take a look at CFPs on ResearchRaven—roam around the many categories to get an idea of what is out there vis-à-vis CFPs in the health sciences.) You’d be surprised how we can work our way into new arenas.

Fifth, look for opportunities to present papers at library conferences generally, not just those connected to the health sciences. For example, this year, two of my colleagues in the Pacific Northwest Chapter of the Medical Library Association, Laura Zeigen and Emily Glenn, each gave talks at Online Northwest on topics of interest to all librarians not just medical ones. Zeigen co-presented with an academic librarian about the implications of mobile computing for librarians, and Glenn spoke about various cloud computing services of possible value to librarians and their patrons. Not only does answering CFPs for general library or tech conferences give us a chance to show our stuff to our

THE WORLD OF THE CALL FOR PAPERS, continued

counterparts in other types of libraries, it also enables us to portray medical librarianship as cutting edge to the many library students that frequent such conferences.

Sixth, when circulating CFPs, be sure to send them not just to MEDLIB-L but to the various section discussion lists of the MLA. I have come across CFPs, for instance, in the discussion lists of the Nursing and Allied Health Resources Section, the History of the Health Sciences Section, and as mentioned above that of the Research Section.

Seventh, keep your eyes open for CFPs that are not labeled as such. For instance, the article you are now reading arose from a message I saw in the discussion list of the MLA's Research Section—but the mention of a need for articles was just part of a message about *Hypothesis* in general. Grab every opportunity you can to get published—and the newsletters of the MLA are a great place to do that. Not only are the editors skillful and you will learn a lot from them, but the newsletters are up and available on the Web and easily accessible if you want to retrieve bits of your writing to show potential employers or peers who could benefit from an article you have published.

Eighth, once you have spotted a CFP don't be shy about writing a short message inquiring about it to the person who posted it. Even if you have never written for a publication before, the editors are often generous with their time and expertise. And, once you have written an article, you may see opportunities to become a column or even journal editor or a book reviewer (a great way to get the latest books free!).

Ninth, even if you don't want to write an article, CFPs are a fascinating look at emerging issues in the health sciences (and in fields such as the medical humanities and the health-related social sciences), as well as the jargon and buzzwords (e.g., "institutional ethnography") of some fields. I love working on ResearchRaven because it is incredibly interesting to read what scholars are organizing special issues or conferences about and sometimes very moving when it comes to previously understudied, underserved groups such as the disabled. There are few worlds more interesting than that of the CFP.

Happy searching, reading and writing!



CHAIR'S COLUMN

Carole M. Gilbert, MSLA, AHIP, FMLA

Having such an early Spring, with unseasonably warm weather – daffodils in March and our dogwood blooming five weeks earlier than usual – I should be energized to “make hay while the sun shines”! Having said that, I realize that my year as chair of the Research Section of MLA is nearly over, and though we accomplished a great deal, your officers did not get everything accomplished that we would have liked to accomplish.

Probably every chair of every section says that at the end of every year! What I hope is that we did what you, the membership, wanted to be done and that succeeding officers will carry on the work of the section. That said, here is what we accomplished this year:

Recruitment e-mail was sent to all members of MLA by our Membership Committee, who also followed up with members who did not renew their memberships this year. Welcome letters were sent to new members who signed up for free memberships at the Section Shuffle, and free memberships were provided to student/new librarian presenters at the NLES New Voices program, as well as the first author of RS award-winning papers and posters.

Kris Alpi has had a very busy year, planning not only the Section programs for 2012, but also for 2013! The 2012 programs are:

Sunday, May 20th; 4:30 – 6:00pm; Convention Center, Room 613/614

Spring training: Statistical Literacy and Techniques in Library Research and Practice. Cosponsored by the Public Health/Health Administration Section and the Molecular Biology and Genomics SIG. (Note that there are 2 programs titled Spring Training. Be sure to attend ours!)

Tuesday, May 22nd; 7:00 – 9:00am; Convention Center, Room 211

Annual Business Meeting – continental breakfast, committee reports, time for discussion and input from Section membership

Tuesday, May 22nd; 2:00 – 3:30pm; Convention Center, Room 615/616

Effective Dissemination of Findings: Pitching your Research with Speed and Accuracy. Cosponsored by the Public Health/Health Administration and International Cooperation Sections and the Translational Sciences Collaboration, Clinical Librarians and Evidence-based Health Care, and Outreach SIGs.

Additionally, some Research Section members will be involved in judging papers and posters (Meeting – May 20; 7:00-9:00am; Room 304) and the Section Shuffle (May 20; 6:00 – 7:00pm; Room 4C 1 & 2).

The Research Agenda Committee has met and is ready to present their findings at the Annual Meeting. Research Section members are asked to discuss these findings as well as the Committee's suggestions for the next logical steps.

Recruiting mentors to help new researchers, including library students, is still a need that the Section has not fully accomplished. Please think about being a mentor. It does not require face-to-face meetings, just a little time to help would-be researchers solve research problems, including protocol development and data analysis. It is critical to the success of library research and to the health of our section. Please volunteer. You'll find it very rewarding.

Diane and Deidra are working on a new issue of *Hypothesis* so if you are reading this column, you know that they succeeded in getting it out before MLA. I know that being the editor of a journal requires a real time commitment; however, our membership really needs this communication tool and it is a good recruitment tool, as well. We appreciate Diane's and Deidra's willingness to be the editors. I am sure they would appreciate any would-be writers to help with this task.

The Board has worked-on, completed, or approved several projects this year.

First, thanks to Susan Lessick and her Research Section Strategic Planning Committee for completing its work on the section's new vision statement

CHAIR'S COLUMN, continued

and strategic plan. The plan was developed after an extensive consultation process that involved a Spring 2011 online survey of Research Section and MLA members (Survey on Research Activities of Librarians); discussion of the draft at the 2011 section business meeting; and obtaining feedback from the membership via email, our Facebook page, and posting the draft plan on the section website. The committee received many positive comments from section members about the draft plan at the business meeting and over the summer. The plan was adopted in late Fall and will be posted on the Research Section website.

Other business this year included periodic communications with the Annual Meeting planners and re-

view of the Section Bylaws (January) to make sure that the Section is in compliance with the MLA bylaws concerning electronic voting (we are!). Diane Cooper served as nominating committee chair and the slate was approved by the Board (February). The Annual report was submitted to MLA in April. So it has been a fairly busy year.

This Section should be the leader among MLA Sections, "promoting the importance of research and assessment to improve library practice and patient care, based on the best available evidence." Thank you for the trust placed in me to be your leader, and I hope that my contribution as your 2011-2012 Chair fulfilled that trust.



LITERATURE REVIEW

Ruth Fenske, PhD, AHIP

Grasselli Library, John Carroll University

This is the last of the Literature Review columns I have been writing for *Hypothesis*, starting with the Fall 1995 issue. I have enjoyed having the opportunity to do an in-depth analysis of a number of research articles of relevance to health sciences librarianship several times every year. As I move on to retirement, I wish everyone well in the pursuit of excellence in research in health sciences librarianship.

Note: The journal with the title portal is intentionally lower case.

Phelps SF, Campbell N. Commitment and trust in librarian-faculty relationships: a systematic review of the literature. *J Acad Libr.* 2012 Jan;38(1):13-9.

Peters C, Dryden AR. Assessing the academic library's role in campus-wide research data management: a first step at the University of Houston. *Sci Technol Libr.* 2011;30(4):387-403.

Lage K, Losoff B, Maness J. Receptivity to library involvement in scientific data curation: a case study at the University of Colorado Boulder. *portal: Libr Acad.* 2011(Oct);11(4):915-37.

Cullen R, Chawner B. Institutional repositories, open access, and scholarly communication: a study of conflicting paradigms. *J Acad Libr.* 2011(Dec);37(6):460-70.

Building positive relationships with library users is key to the success of any library. Several articles on various aspects of librarian/faculty relationships have appeared.

Phelps and Campbell did a systematic review of the literature on librarian/faculty relationships. One of their primary resources on the process of doing a systematic review was by our own Ann McKibbin. As would be expected, all processes were carefully documented. It is important to note that the literature search included databases above and beyond LIS databases.

Their first goal was to discover what methods have

been used to study librarian/faculty relationships. Three hundred and four articles were analyzed for this part of the study. Although the articles mentioned librarian/faculty relationships in some way, very few focused on analyzing the relationship itself. Only 25% of the articles were research studies and of 77 research articles only two looked in depth at the relationship. One used a grounded theory approach and one looked at personality as measured by Myers-Briggs. Looking at the 304 articles as a whole, the authors note that "it is clear that the importance of the relationship is primarily to librarians." Most were written by or co-authored by librarians and were published in library journals. Although this point is not entirely clear to me, they maintain that librarians "have published according to their interest in the library and not about the elements of their relationship with the faculty specifically."

They chose to use the Key Mediating Variable (KMV) model of relationship marketing as a framework for their analysis. This model suggests that commitment and trust are intermediate variables between five antecedents and five outcomes. Thirteen of the articles met all the inclusion criteria; the inclusion criteria included a high presence of the variables in the KMV model. The three antecedents which were present in librarian/faculty relationships which contributed to a positive relationship were relationship benefits, shared values, and communication. The antecedent which hindered the relationship was "opportunistic behavior." They consider marketing library services to be "an ulterior motive that could be interpreted as less than positive." They say this is "enterprise" more than relationship building. In the model such opportunistic behavior affects trust but not relationship commitment. Positive outcomes were cooperation and ability to experience functional conflict. They point out that librarians are probably more likely to write about a positive outcome than a negative one. A negative outcome identified in this study was "uncertainty on the part of the faculty about librarians as instructors." This could have had to do either with the whole idea of information literacy or to the perceived competence of the librarians as instructors.

They believe the KMV model was a "useful structure . . . because it furnished specific elements of

LITERATURE REVIEW, continued

relationships that contribute to good collaborative partnerships.” However, they also believe that this business focused model did not translate well to library service. They suggest that some of the variables, such as shared values and cooperation, are “expected social norms of academia and therefore are not always written about explicitly.” They suggest that using a grounded theory approach which allows categories to emerge from the data itself might yield a more useful way to study librarian/faculty relationships.

This is a well-done article on a topic of great importance to health sciences librarians. I would be interesting to see if the KMV model, which arose from business, would work better in looking at client/librarian relationships in hospitals. Hospitals are more corporate than academe but many of the clients of academic libraries are academics. However, clients and librarians in hospitals are both focused on excellent patient care. Perhaps such a study would run into the same possible problem of expected social norms not written about explicitly as did this study.

The Winter 2012 Literature Review column looked at two articles having to do with libraries' role in e-science. One aspect of e-science is the management of large data sets. Peters and Dryden report on a pilot assessment of University of Houston data management practices. Fourteen ongoing projects funded by NSF or NIH were identified. Ten of fourteen principal investigators agreed to be interviewed. The principal investigators were asked a standard set of thirty interview questions. A copy of the questions is included as an appendix.

In the end, the researchers found that projects that involve large-scale data sets do exist on the University of Houston campus but are not funded by NSF and NIH. Most were content with using departmental and campus information technology resources to store their data. The study did uncover a need for help with developing data management plans for grant proposals, finding campus data-related services, publication support, and research assistance related to data management. An unintended outcome was that faculty who had not interacted much with the library in the past now know the types of research support services the library can offer. The library plans to organize a meeting of data service

providers on campus and to do a new, expanded study of data management needs among a wider range of job categories, funders, and disciplines.

One question asks about what they see as the library's role in data services and another suggests eight different data services and which campus entity they would expect to provide each of the services. There is no direct analysis of the answers to these questions. It appears that the interviews did uncover future roles the library could play and they served to introduce the faculty to what the librarians could do.

Lage, Losiff, and Maness also looked at the status of scientific research data activities (data curation) and support, this time at the University of Colorado Boulder. The primary purpose of this was more to assess researcher receptivity to library involvement than to do a detailed needs assessment.

Thirty-five researchers were invited to participate in fifteen to thirty minute interviews. Twenty-six accepted. Nine questions were asked. Qualitative analysis was used to identify themes. They then developed eight “persons” to illustrate the range of attitudes and needs they uncovered. They hoped to use the personas identify the researchers most receptive to library involvement.

Analysis of the personas showed that members of the team most involved in data curation activities were most receptive to help from the library. Some interviewees “view data maintenance as an additional responsibility that takes away from their research.” Some researchers with no current assistance in managing their data were receptive to a library sponsored repository simply as a way to get some help with data management. Some felt an imperative to share scientific data and felt the library could help. Those involved with proprietary and human subjects data were not receptive to a library run repository. Some who were in very competitive fields or who had an existing repository were also less interested. And none wanted to participate in a repository whose design did not fit their needs. The authors feel their conclusions are applicable to any academic library. Academic health sciences libraries might meet with more resistance than general academic science libraries when the data involve privacy issues.

LITERATURE REVIEW, continued

One place to store an institution's research data is in an institutional repository. An institutional repository could contain any intellectual output of an institution. Items in an institutional repository are preserved forever and are freely available.

Cullen and Chawner start out by saying that academic librarians "have been persuaded by the Open Access movement that [the traditional scholarly communication process] does not adequately disseminate and promote the work of their own scholarly research communities." They indicate that, despite the best efforts of librarians, faculty members have not bought into the idea. They felt that, since New Zealand is geographically isolated, scholars there might be especially enthusiastic about what institutional repository advocates consider to be a way to enhance exposure and citation to their research.

Cullen and Chawner drew a stratified random sample of 1991 of 7469 academic staff of New Zealand universities and polytechnics. There were 556 responses to their survey.

The text tells us that 345 (63.5%) were aware of the institutional repository concept. But, the discussion tells us this number is 75%. Only 55% were aware their own institution had an institutional repository. Twenty-four percent had deposited a research piece in their institutional repository; forty had deposited only one item. Questions about the pros and cons of institutional repositories had large standard deviations, meaning there was a wide range of views. The major reasons for depositing had to do with making their work available, increasing the exposure of their work, and meeting the demands of the institution. Personal benefits were less important. Prime disadvantages were increased workload for those making the deposit, lack of perceived ease of use of institutional depositories in comparison to databases, and privacy concerns. Tables 6 and 7 show benefits of institutional repositories and reasons discouraging deposits, broken down by depositor (yes column) vs non-depositor (no column). Mandatory depositing was not at all favored, except for their own and their students' theses. These two tables are not easily understood without reading the text to see what "yes" and "no" mean. Even those who had deposited did not see the benefits in terms of its im-

pact on scholarly communication. Those who made deposits continue to use the traditional peer review and publication system.

They also analyze differences according to age, academic rank, and discipline. Although the sciences, in general, had a higher percentage of depositors, the health sciences were considerably lower. They observe that the data show that existing invisible colleges are still very important to researchers. They say that possibly existing invisible colleges continue working well because of the "ease and speed of communication online."

In conclusion, they say there is a question about "whether the crisis in scholarly communication is as acute as some have suggested, and whether institutional repositories are a solution that the academic community is looking for." Perhaps the "conflicting paradigms" are not as much in conflict as librarians think. They believe traditional scholarly communication has evolved to provide easier access to high quality research. Finally they list five valuable roles institutional repositories can play even if they don't replace the traditional system of peer review and publication.

Although this article doesn't directly deal with librarian/faculty relationships, it does point to an area where librarians and faculty are not in sync.

Whitty MT, Buchanan T, Joinson AN, Meredith A.

Not all lies are spontaneous: an examination of deception cross different modes of communication. *J Am Soc Inf Sci Technol.* 2012 Jan;63(1):208-16.

This article deals with a topic that may come into play when dealing with staff and users. After an interesting review of the literature on various aspects of lying, the authors describe their seven day diary study with 104 undergraduates in the United Kingdom. The seventy-six students who completed the diary in full are included in parts of the analysis and all 104 in other parts. Eighty-nine percent of the 76 were female. Demographics were collected and each participant did a series of psychological measures online. All social interactions and lies were to be reported. Forms were submitted on a daily basis.

LITERATURE REVIEW, continued

Participants averaged 150 interactions over the entire week. Lies averaged 6.25 with a range of 0 to 18. About five percent of the interactions involved deception. Thirteen percent of telephone interactions involved deception and eight percent of face-to-face. Lies by phone were statistically greater than face-to-face lies. More lies were told via text than via other electronic media. Although the participants average many more text messages than face-to-face communications, the mean lie index for text was lower than for face-to-face and much lower than for phone. Serious lies involved more planning. Although there were relatively fewer lies told via text, lies told via text had the highest level of planning. Lies intended to protect or benefit the self were most common. Lies to those closest to the person were most frequent and decreased as distance from the target grew greater; there was a slight spike in lies to total strangers, but these were nowhere near the number told to those closest to the liar. However, the more distant the relationship, the more likely the lies was to be self-oriented. This appears to indicate that lies to those closest to the liar were more likely to be intended to benefit the recipient of the lie.

What are we to make of all of this? Possibly the answer is that confronting possible liars face-to-face is better than talking to them on the phone.

Sulimanoff I, Hernandez M, Gibson DS. The clinical medical librarian program: the Memorial Sloan-Kettering experience. *J Hosp Libr.* 2011 Oct/Dec;11(4):338-47.

Aitken EM, Powelson SE, Reaume RD, Ghali, WA. Involving clinical librarians at the point of care: results of a controlled intervention. *Acad Med.* 2011 Dec;86(12):1508-12.

Finally, there are two articles on clinical medical librarians (CML). The first is an analysis of the results of a ten question survey of members of the psychiatry staff and nurses at Memorial Sloan-Kettering about their CML program.

The psychiatry CML program had been in effect for nine years at the time of the online survey. Although it is not clearly stated, it is assumed that all twelve of twenty possible respondents were psychiatrists. One hundred percent of the psychiatry

respondents found the services of the CML to be excellent.

The nursing CML service was two years old at the time of the survey. Only 122 of 1800 nurses responded to the survey. Seventy-eight percent rated the CML services as excellent. Apparently the nursing CML services were only offered to certain groups of nurses.

The text says the surveys were sent to "key members" of the groups receiving services. For the psychiatrists, it appears the twenty targets were fellows and attendings; however, it is not clear if this was all the psychiatrists or only part of them. Likewise, it is not clear who was in the target group of 1800 nurses. Possibly many of the 1800 were not offered CML services.

Both groups made most use of in-depth literature searches and analysis. Some of the psychiatrists "expressed a need for having a clinical librarian at the meetings because they felt better search results were obtained when the librarian was present during case report discussions." The authors report that nurses have a "need for identifying best evidence for best practice." This was not one of the suggested impacts given in their survey; it must have arisen from the nurses' comments.

They ask about preferences for a set of suggested new services but do not discuss the results. It is not clear to what extent their recommendations arise from the survey results.

Finally, four authors at the University of Calgary have done a study of the effects of the CML on residents and clinical clerks. Clinical clerks are final year medical students. All participants had had prior "evidence-based library training." Participants were assigned to intervention and control teams on the general internal medicine inpatient services, using the normal procedures. An experienced librarian worked with the study group ten to twelve hours per week for six months in 2009. Both study and control groups received pre- and post-intervention surveys. They did not include a copy of the survey with the article.

Forty-two residents and clinical clerks rotated through each team during the period of the study.

LITERATURE REVIEW, continued

There was an overall response rate of 59% (50/84). The response from the study group was over 80% (34/42). However, it appears that only 62% (26/42) of the study group did the pre-intervention survey. The response from the control group was 38% (16/42). This is not surprising because the surveys for the two groups were identical, meaning questions about the CML would not make much sense to the control group.

On the post-survey, 100% of the study group and 79% of the control group felt that the ability to find high quality information was important to patient care. On a slightly different note, most members of the study group were receptive to having a librarian on the team both before and after the intervention. This may be because all participants received a letter outlining the purpose of the project. It would be interesting to know how many members of the control group were receptive to having a librarian on the team both before and after they did their rotation. If the letter revealed that the point of the study was the effect of having a CML on the team, it would make sense that the control group would be just as receptive to having the CML as the intervention group was before the intervention. After the intervention,

the only way the control group could answer this question would be for them to imagine that they had had a CML to help with the information-seeking tasks they had had during the rotation. Only two of 34 study group respondents did not request any assistance from the librarian. Control group respondents were much less likely to ask for help from a librarian, although some did search for information on their own. Almost everyone in the intervention group changed a treatment plan due to help provided either directly or indirectly by the CML. Some also changed a diagnosis. Reported qualitative comments were positive.

Self-identified limitations are dependence on self-reporting, the size of the number of participants, and the possibility of cross-contamination between the two teams, i.e. the study group shared CML information with the control group. The other limitation, though not one they mentioned, may have been informing the participants about the purpose of the study ahead of time. It's not clear if they were told the study was about the use of information or if they were told specifically that it had to do with having a CML on the team.



THE RESEARCH MENTOR

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Interview with Philip Eaton, M.D., on Creativity in Research

Background

Employees at the University of New Mexico consider Phillip Eaton, M.D., to be the preeminent clinical researcher on their campus. Dr. Eaton heard about my columns on creativity in research in *Hypothesis* from a colleague. He asked to meet with me. Before our meeting I emailed him my past articles and pending manuscripts to offer him a glimpse of what I was covering in this column series. During our first and second meetings we eventually decided that *Hypothesis* readers would benefit from learning about his insights on creativity in research based on the questions posed in this interview.



R. Philip Eaton, MD. Cathleen Rineer-Garber. Copyright © 2012

Dr. Eaton was born in 1935 in Grand Rapids, Michigan. He received his B.S. from the College of Wooster in Ohio, his M.D. from the University of Chicago, and trained during his internship and residency in Internal Medicine at the Washington University School of Medicine in St. Louis. Dr. Eaton trained in Endocrinology and Metabolism at both Washington University and the National Institutes of Health. He relocated to the University of New Mexico's School of Medicine in 1968, where he held joint appointments in Internal Medicine and Mathematics, to establish the endocrine program. He held the position of Executive Vice President of the UNM Health Sciences Center from 1998 until his semi-retirement and assumption of Professor Emeritus status in 2005. Dr. Eaton has continued to be a whirlwind of activity with his research, writings, grandchildren, and photography hobby since 2005.

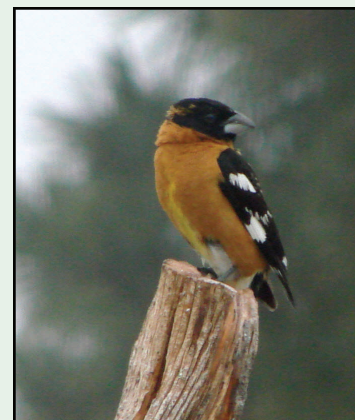
What triggers the first creative step?

When you observe an exception to the rule. I can think of an example from both my professional and

my personal life. This happens to me as a clinician, when I meet with a patient with an otherwise normal presentation with a significant exception. This observed anomaly can happen to an experienced clinician or a new physician. The experienced physician detects an exception to a pattern observed in the past hundreds if not thousands of patients with the same presenting problem. The experienced clinician recognizes something amiss in the pattern he or she expects to observe. The new physician can have the same experience when encountering a deviation from what he or she has been taught, but might not appreciate its significance.

Stiff Hand Syndrome does not commonly appear in patients with Type 1 diabetes. In one of my patients, years ago, she was worried only about her stiff hands because she could not even hold a cup of coffee. Nothing else about her diabetes posed a concern. Among thousands of past patients not one had mentioned this as a chief complaint. Some patients included it among the annoyances or minor complaints, but never as the principal concern. I very much wanted to help her. I wondered why she was so afflicted with such stiff hands.

Exceptions to the expected pattern also happen in my everyday personal life when I take one of my grandchildren for a walk to take photographs of birds or flowers. As I frequently tell my grandchildren, "If you want to see a bird, you need to look." Our walks become lessons in close observation. For example, we might walk by a lake shrouded in fog back in Michigan and carefully observe our surroundings until we notice the unexpected: an eagle perched on a dead tree branch waiting to hunt for fish. Over the past three years I have written more than 50 poems about these experiences that incorporate



Black-Headed Grosbeak. Phillip Eaton. Copyright © 2012

RESEARCH MENTOR, continued

my grandchildren's individual names connected with the experiences. I compile these poems specific to each grandchild and include photographs of birds or flowers that we experienced, some expected and many unexpected, from our same shared walk.

Both professional and personal experiences involve careful observation with a break in the expected patterns. Observation is not enough. The observation coupled to the anomaly becomes the focus of the endeavor.

What role does hypothesis play with creativity in research?

A hypothesis seeks to explain the mechanism of a problem. Out of necessity the clinical world must be primarily concerned instead with desired results for patients. To use the previous example of Stiff Hand Syndrome, I had to form a hypothesis as to why this one patient suffered so profoundly. What distinguished her problem from other patients? What explanation would I discover that would not only help her but also increase our broader understanding of diabetes? I hypothesized that some process led her to accumulate water in the tissues of her hand, specifically as hydrated collagen. No one, to my knowledge as an endocrinologist, had ever thought about this kind of physiological mechanism. I decided to try to replicate the effect of aldose reductase inhibitor in animal models. Using Magnetic Resonance Imaging (MRI), I was able to detect the accumulation of water in the collagen cells in my animals. I then discovered the same process in my patients using MRI.²⁻³



Small Purple Fringed Orchid.
Phillip Eaton. Copyright ©
2012

When does a clinical trial involve creativity in research?

If a clinical trial tests a hypothesis, then it represents a creative process.

Once I had acquired this mechanistic understanding of the Stiff Hand Syndrome process, I then wondered if I could extend my observation to a terrible problem among diabetics: diabetic neuropathy. Eventually, I was able to apply my previous understanding of the anomaly of Stiff Hand Syndrome to diabetic neuropathy. In the latter condition, water accumulates in the neural compartment causing terrible pain and loss of nerve function.⁴

Readers of *Hypothesis* probably give more thought than most people to the relationship between the research process and a publication history. In this regard, the chronology of publications described above follow the creative search from problem to hypothesis to testing the hypothesis to treatment that then led to reflection upon the broader implications of the research to other diabetic complications. I hope that these interviews have offered insights into creativity and research for your readers so they might venture into their own research with a creative approach.

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RESEARCH SECTION NEWS

RESEARCH SECTION PROGRAM AT MLA 2012

Kristine Alpi, MLS, MPH, AHIP / Chair-Elect, Research Section

William Rand Kenan Jr. Library of Veterinary Medicine—North Carolina State University

It was nice to see the article in the MLA News about the Research Section Programming for 2012 and 2013 - thanks to Christine Marton for the plug!

If you are not planning to attend MLA 2012 in person, but would like to participate virtually in the business meeting on Tuesday morning, please let me know (kris@jeffalpi.net), so we can plan accordingly.

Here are the rest of the details about Research Section meetings and programs at MLA. Rooms are subject to change - check your official program or website at the meeting.

We start Sunday with an informal meeting about the awards judging program.

Research Award Judging Process Revealed –

Awards co-chairs Donghua Tao and Sandy De-Groote discuss the judging process for posters and papers with current and future judges.

Sunday, 5/20/2012, 7:00am - 9:00am

Washington State Convention Center - 304

(No food will be provided for this meeting, so bring your morning beverage or snacks.)

On *Sunday from 4:30pm - 6:00pm*, our first lead section program "**Spring Training: Statistical Literacy and Techniques in Library Research and Practice.**" NB: There are two programs entitled Spring Training - come to ours!

Section Shuffle

Sunday from 6:00pm – 7:00pm

We need some Research Section members to coordinate this since I will be moderating the session that ends at 6pm and cannot get away. Help, please!!

Research Section Business Meeting

Tuesday, 5/22/2012, 7:00am - 9:00am

Washington State Convention Center - 211

(We will have beverages and continental breakfast)

In the afternoon . . .

2:00pm—3:30pm, our second lead program session

"Effective Dissemination of Findings: Pitching Your Research with Speed and Accuracy" moderated by Gail Y. Hendler.

Don't forget our cosponsored event - "**New Voices: Let's Hear It from the Rookie Lineup**" – led by the Medical Library Education Section.

Monday, 5/21/2012, 10:30am – 12:00pm

If you have any questions about the programming, please let me know (kris@jeffalpi.net). I look forward to seeing many of you at MLA!

