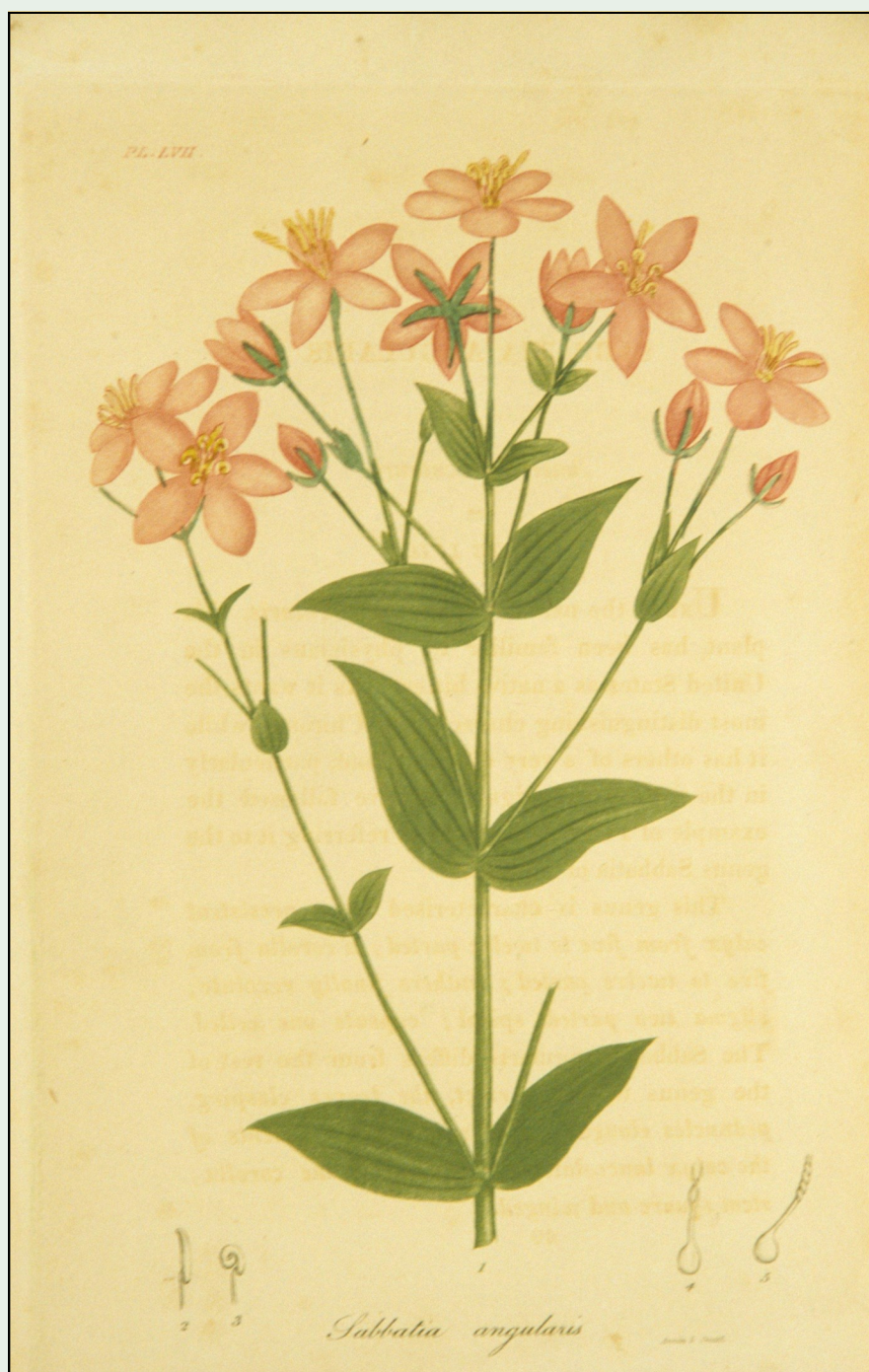


Volume 27, Issue 1

Winter 2015

Hypothesis

The Journal of the Research Section
of the Medical Library Association



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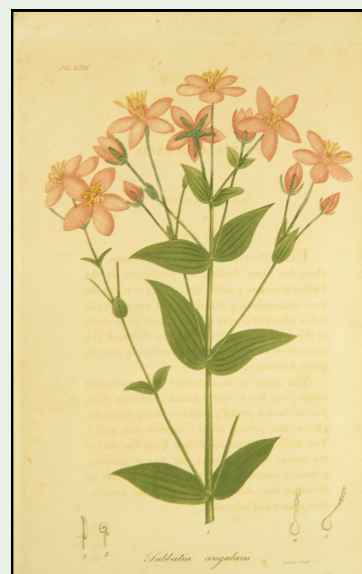
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A LOOK AT THE SCHOLARLY OUTPUT OF THE MEDICAL LIBRARY ASSOCIATION RESEARCH SECTION

Peer-Reviewed

Terrie R. Wheeler, AMLS¹; Noga Yaniv, MSc²; and Ruth E. Fenske, PhD³

The Research Section (RS) has guided the Medical Library Association (MLA) specifically, and the field of health sciences librarianship more generally, in the practice of seeking evidence to inform decision making and practice. The best evidence comes from well-designed research projects. The Section has mentored many health sciences librarians in designing research projects, in conducting research according to the scientific method, and in publishing their results. MLA has adopted a Research Agenda and it relies on the Section to carry out that agenda. Further, the Research Section has played a role over the years in advancing the scholarship of the organization. For example, the MLA has embraced scholarly publishing by setting high standards in its own publication, the *Journal of the Medical Library Association*. Major articles in the journal are research based, require a structured or academic abstract, and generally consist of objectives, methods, findings, results and conclusions.

Objective

While the Research Section has been critical in advancing the scholarly communication within the field of health sciences librarianship, rarely has the Section highlighted its own role in scholarly output. That is the purpose of this abbreviated study.

The authors were curious to discover what scholarly publications trends might exist among RS members. Some questions to answer were:

- 1) Which journals were most often selected for publication by RS members?
- 2) Were any of the works highly cited?
- 3) Did RS members engage in self-citation?
- 4) Have any RS members built a body of work on a certain topic or topics that have affected the profession at large?
- 5) Which RS members are most prolific?
- 6) Does citation mapping indicate that some RS members have had a national or international impact?
- 7) Are any RS member papers cited often enough to place them in the top ten percentile [1] of all papers published by discipline and year of publication?
- 8) Does the Research Section encourage

collaboration with authors not in the Section, or, do RS members co-author primarily with other RS members?

The authors wanted to answer these questions by looking at the scholarly output of the RS members, and ran the search strategy that was created in Web of Science on April 6, 2014. The search parameters included 1970 to date (April 6, 2014) and all document types. The strategy yielded 1,100 publications by RS members.

Methods

One author downloaded the 2013 - 2014 roster of members of the Research Section from the MLA website. The authors used surnames, first and middle initials when known, and organizational affiliations to identify the scholarly output of the Section. Thomson Reuters' Core, formerly Thomson Reuters' Web of Knowledge, was searched from 1970 to date. Of the 258 section members, 160 published at least one publication that was indexed by the Thomson-Reuters Core during this period. As the names that were downloaded from the section membership file did not always include middle initials, the authors took extra care to review articles by subject matter or affiliation to ensure that as often as possible they had selected the correct records for inclusion. The authors checked webpages and curriculum vitae as necessary to ensure accuracy as well as used the name disambiguation tool in Thomson-Reuters' Core, along with checking certain records for full names in PubMed. After executing the search strategies on each current member in the section, the search strategies were combined into a single set and the final search strategy was run.

Findings

Authors ran a citation report on the resulting citations (Figure 1). There were 142 papers written in 1995 but in 1996 there was a drop to 18 papers. Beginning in 1996 there was an increasing trajectory of papers over time. Closer analysis of the 1995 papers reveals that Patricia Reavis, Barbara Epstein and Lynn Piotrowicz authored 115 book reviews that appeared in the December, 1995 issue of *Psychiatric Services*, which accounted for this unusually large productivity in one year.

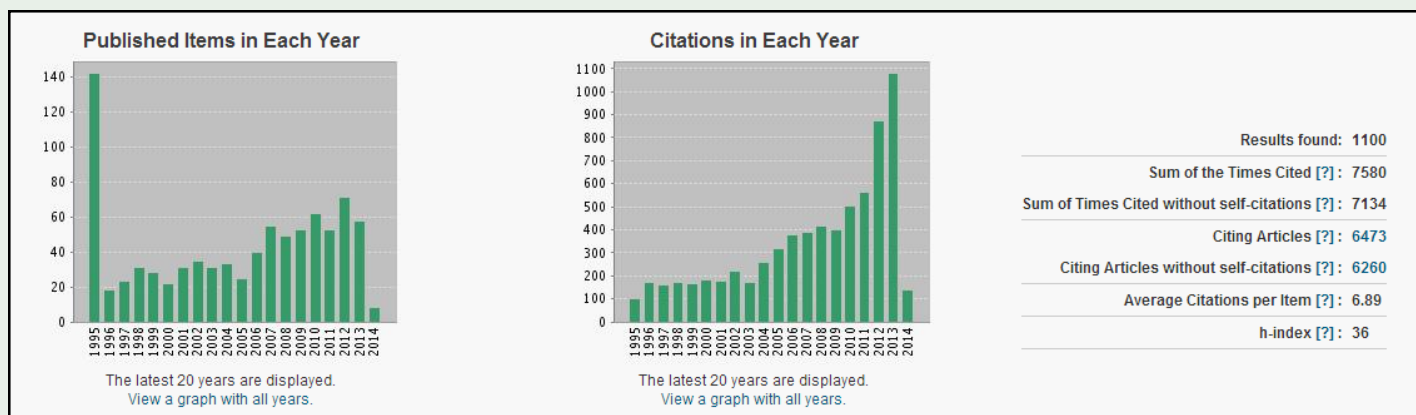


Figure 1. Citation Report of Citation Activity on RS members' papers

By default, a Web of Science Citation Report shows the latest 20 years of citations in a view. One can click on another view to see a graph with all years of citations.

The citations to RS member articles in each year also reveal a steady upward trend which is generally found in sets of papers. There was a marked increase in 2012 (875) and 2013 (1078). This was a combination of more papers published in 2012 and of certain papers, such as papers 1, 2 and 3 in the top ten highly cited papers (Figure 2) having a high citation rate during that period. The times cited for the entire set in Figure 1 is 7,580, or approximately 194.36 citations per year. Papers published by RS members that are indexed in Web of Science have an h-index of 36. An overview of the h-index and the reliability of such indices can be found in an article by Alonso et al [2].

To find the ten journals in which members of the Research Section most frequently published, we analyzed the set by source title. The top journals were:

- *Journal of the Medical Library Association* (222 papers),
- *The Bulletin of the Medical Library Association [precedes the JMLA]* (148 papers)
- *Library Journal* (139 papers). Several members have authored book reviews for *Library Journal*, which accounted for this higher number.
- *Psychiatric Services* (115 book reviews)
- *Neurologist* (33 papers)
- *Library Trends* (22 papers)
- *The Journal of Family Practice* (17 papers)
- *Online CDROM Review* (15 reviews)
- *Reference and User Services Quarterly*, formerly *RQ* (15 papers)
- *College and Research Libraries* (14 papers)

The Web of Science subject categories most frequently used to identify papers in this set were as follows: Information Science and Library Science (718 papers), Public Environmental and Occupational Health (134 papers), Health Policy Services (126 papers), Psychiatry

(123 papers), and Computer Science Information Systems (79 papers).

The nine most prolific members, according to the Web of Science data, during that time frame were Barbara Epstein (129 papers), Margaret Henderson (46 papers), Linda Smith (43 papers), Kay Wellik (43 papers), Joanne Gard Marshall (38 papers), Pru Dalrymple (35 papers), Lucretia McClure (34 papers), Ellen Detlefsen (32 papers), and Scott Plutchak (31 papers).

The Research Section's most influential authors, according to number of citations, were Carol Lefebvre with two papers in the top ten, totaling 1,239 citations; Shandra Protzko with a single paper in the top ten (454 citations); and Michele Tennant, who was co-author on the sixth, seventh and tenth of the top ten most highly cited papers, (394 citations). By far the most highly cited paper is the 1994 *BMJ* article on systematic reviews co-authored by Carol Lefebvre. Lefebvre's two papers in the top ten established the librarian's role in systematic reviews, as Michele Tennant's three papers influenced thinking on the librarian's role in the field of bioinformatics. Not only was Joanne Marshall's Rochester Study in the top ten, but her body of work throughout her career established best practices for identifying the value of information provided by librarians.

According to percentile ranking [3] in the social sciences, papers one, two and three of the top ten significantly outperformed their peer publications in citation frequency during 2014, falling into the top 1% of cited papers in their field in their first ten years after publication. These findings were verified with Thomson-Reuters' Essential Science Indicators™. Essential Science Indicators tracks papers whose citation counts place them in the top 1% of their discipline over a ten-year period after publication.

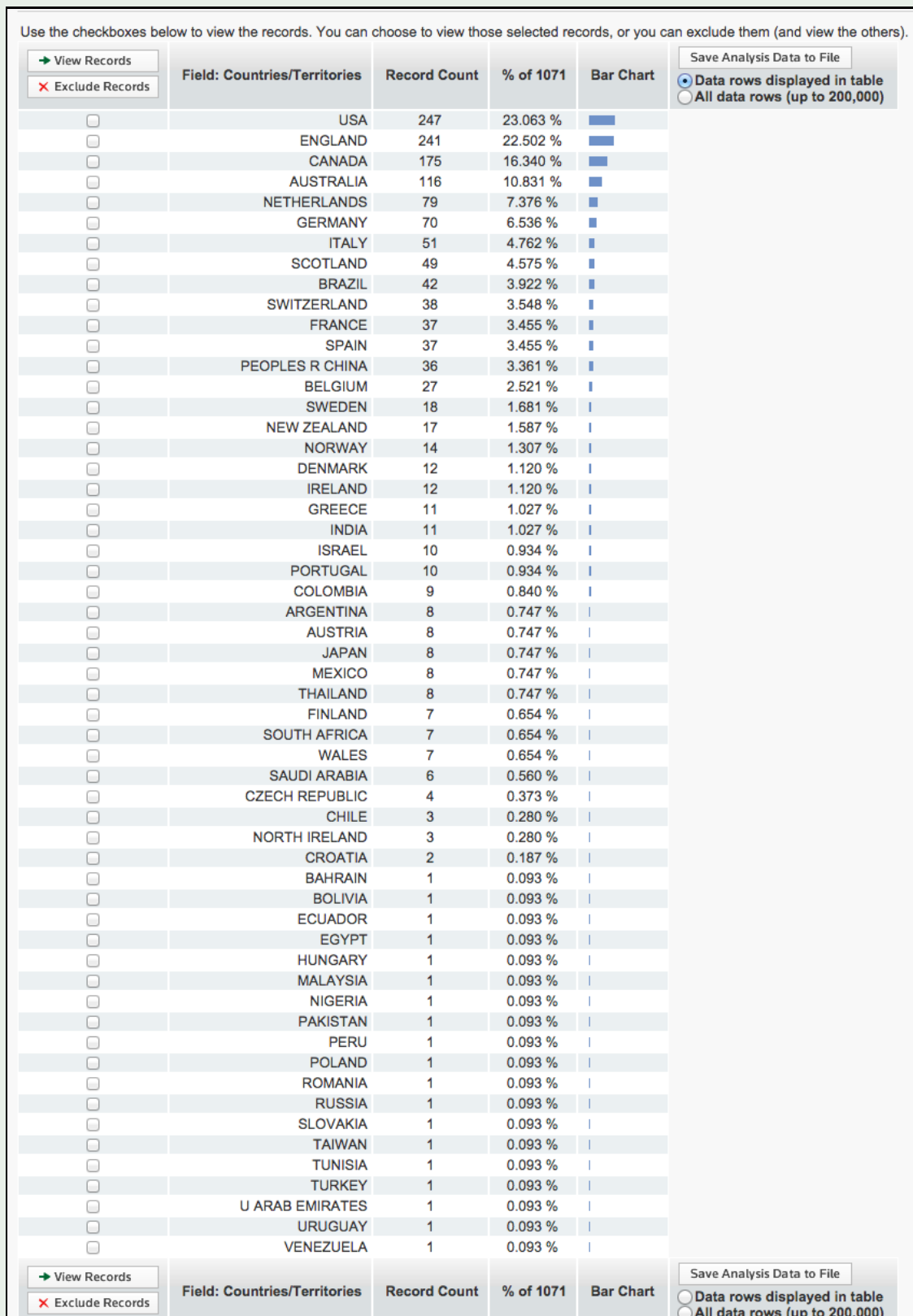


Figure 3. Citation histogram from Thomson-Reuters Web of Science™

Shows Carol Lefebvre's paper on systematic reviews cited 1071 times by authors in many different Asian, Eastern and Western European, and North American countries.

members demonstrated their collegial relationship to other health professionals as they increased their scholarly production and expanded the corpus of our profession's knowledge. As for collaboration with other MLA members, the study authors found that some Research Section members did co-author with fellow Section members, but there was no indication that the Section played in role in those collaborations.

Limitations

This study was limited to the papers authored by Research Section members that were indexed in Thomson-Reuters' Web of Science. Since the author disambiguation tools currently available also limited this study, much of the disambiguation was done by hand or by checking websites. Timeframe was limited to the period from 1970 to April 6, 2014. To accurately reflect RS membership, the roster of members for the year 2013 - 2014 was used. This limited membership inclusion criteria to those who had paid memberships in 2014.

Conclusions

This brief study of the publishing habits of the Research Section revealed that Section members added to the corpus of knowledge supporting evidence-based practice. It demonstrated that RS members appear cognizant of not over utilizing self-citation. Research Section members had respectable citation rates with a few in the very highest percentile ranking and they had papers that influenced thought internationally. The most frequent publication outlets were MLA publications. Since some RS members published in medical or more general information science journals, this indicated further opportunities to take RS member research beyond *JMLA* to increase awareness of Section research and scholarship to the larger medical community. The authors hope that this brief study revealed some of the value to be found, as well as some of the inherent limitations, in using bibliometric analysis.

References

1. Bornmann L, Leydesdorff L, Mutz R. The use of percentiles and percentile rank classes in the analysis of bibliometric data: Opportunities and limits. *Journal of Informetrics*. 2013;7(1):158-165. doi: 10.1016/j.joi.2012.10.001.
2. Alonso S, Cabrerizo FJ, Herrera-Viedma E, Herrera F. h-index: A review focused in its variants, computation and standardization for different scientific fields. *Journal of Informetrics*. 2009;3(4):273-289. doi: 10.1016/j.joi.2009.04.001.
3. Bornmann L, Marx W. How good is research really? Measuring the citation impact of publications with percentiles increases correct assessments and fair comparisons. *EMBO Reports*. 2013;14(3):226-230. doi: 10.1038/embor.2013.9.
4. Seglen PO. Citation rates and journal impact factors are not suitable for evaluation of research. *Acta Orthopaedica*. 1998;69(3):224-229. doi: 10.3109/17453679809000920.
5. Wallace ML, Larivière V, Gingras Y. A small world of citations? The influence of collaboration networks on citation practices. *PloS ONE*. 2012; 2011;7(3):e33339. doi: 10.1371/journal.pone.0033339.
6. Demaerschalk, Bart, Wingerchuk, Dean, Wellik, Kay, Budavari, Adriane, Carter, Jonathan, Dodick, David. There Is MERIT to Evidence Based Neurology Training in Residency: P01.006. *Neurology*. 2006;66(5):A16.

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REPORT ON THE *HYPOTHESIS* AND RESEARCH SECTION COMMUNICATION SURVEY

Kristine M. Alpi, MLS, MPH, AHIP¹ and Brooke L. Billman, MA, AHIP²

The Research Section (RS) of the Medical Library Association (MLA) has published *Hypothesis*, an open access journal formerly structured as a newsletter, since Summer 1987. In order to plan for the future of RS' research-related communications and strategies, the RS Executive Board and the *Hypothesis* Editorial Board decided to seek information from the health sciences information (HSI) community about their engagement with and interest in publishing in *Hypothesis*.

Objective

The purpose of this investigation was to gain insight from the HSI community about the current usage of the RS open access journal *Hypothesis* and possible improvements that would meet the needs of those interested in learning more about HSI research.

Methods

Members of the *Hypothesis* Editorial Board developed an online survey to gather information from MLA members and others. It was reviewed by the RS Executive Board, but as the survey was anonymous and meant for section quality improvement, no Institutional Review Board review was pursued. The link to the 20-24 question online survey in Survey Monkey was distributed on October 7, 2015 to the RS email list, announced in the October 15 MLA Focus, and linked from the MLA webpage hosting *Hypothesis* content. We are unsure whether it was forwarded to other lists. The online survey was open until November 1, 2015.

Results

The survey was completed by 53 individuals. While distribution via lists is uncertain, using the MLA membership of approximately 3,000 as a denominator, the response rate was approximately 0.02%. Of respondents providing demographics, 98% (n=42) were current MLA members and 61% (n=27) were current or past RS members. Forty (98%) were based in the United States. Although most respondents were in academic health science centers (n=27, 64%) or a college/university (n=8, 19%), five hospital librarians (12%), one working outside of libraries (2%), and one retiree (2%) also responded. No library or iSchool faculty or students responded, nor did any corporate, public or specialty librarians. Responses were received from four (10%) librarians with three or few years of experience, sixteen (38%) with 4-10 years, twelve (29%) with 11-20 years, and ten (24%) with more than 21 years. Multiple

responses were permitted for many non-demographic questions resulting in percentages exceeding 100%. In descending order for frequency, the most common avenues for becoming aware of *Hypothesis* were the RS member email list (n=20, 42%), MLA Focus (n=10, 21%), other MLA publication or email list (n=4, 8%), LISTA (n=2, 4%), CINAHL (n=1, 2%), and forwarded messages from other lists (n=1, 2%). No one reported finding it searching the web, and ten respondents (21%) were unaware of *Hypothesis*. Additional avenues described in comments included being told by RS members in person at the MLA meeting (n=1) and when accessing the Structured Abstract writing guidelines published in *Hypothesis* used for MLA meeting submissions (n=2).

Several of the questions were intended for the respondents who were aware of or read *Hypothesis*. When asked about frequency of reading it when it was published 2-3 times per year, only ten respondents (19%) read every issue, with an additional eleven (21%) reading at least one, but not all, issues per year. Surprisingly, 32 (60%) of the 53 respondents said they never read it; this presumably includes the ten who were not aware of it. Of the 17 indicating how much of each publication of *Hypothesis* they read, most (n=8, 47%) read around half of each issue while 29% (n=5) read less than half and 24% (n=4) read more.

Twenty respondents indicated why they read *Hypothesis*. Percentages for each offered reason are shown in Figure 1 and equal more than 100% as multiple responses could be selected. The three "Other" responses are summarized as 1) reading about various research methods, 2) gaining knowledge about methods and techniques in medical librarianship research, and 3) using it as a forum to publish with research mentees. Readers were asked to rate the usefulness of content published in *Hypothesis* on a scale from No opinion/not-applicable (0), Not very useful (1), Somewhat useful (2), to Very useful (3) in three contexts. After removing no opinion responses, the average score for usefulness to the respondents' current position or educational program (n=11) was 2.0 (SD 0.4) and the average usefulness for a desired position (n=10) was similar at 1.9 (SD 0.7). Usefulness to respondents' research whether related to position or not (n=12) averaged 2.3 (SD 0.7).

Many types of content have appeared or could appear in *Hypothesis*. Respondents indicated the likelihood of reading each of the following content types on a scale ranged from Would not read (0) to Very likely to read (3). Table 1 shows the mean likelihood of reading this content

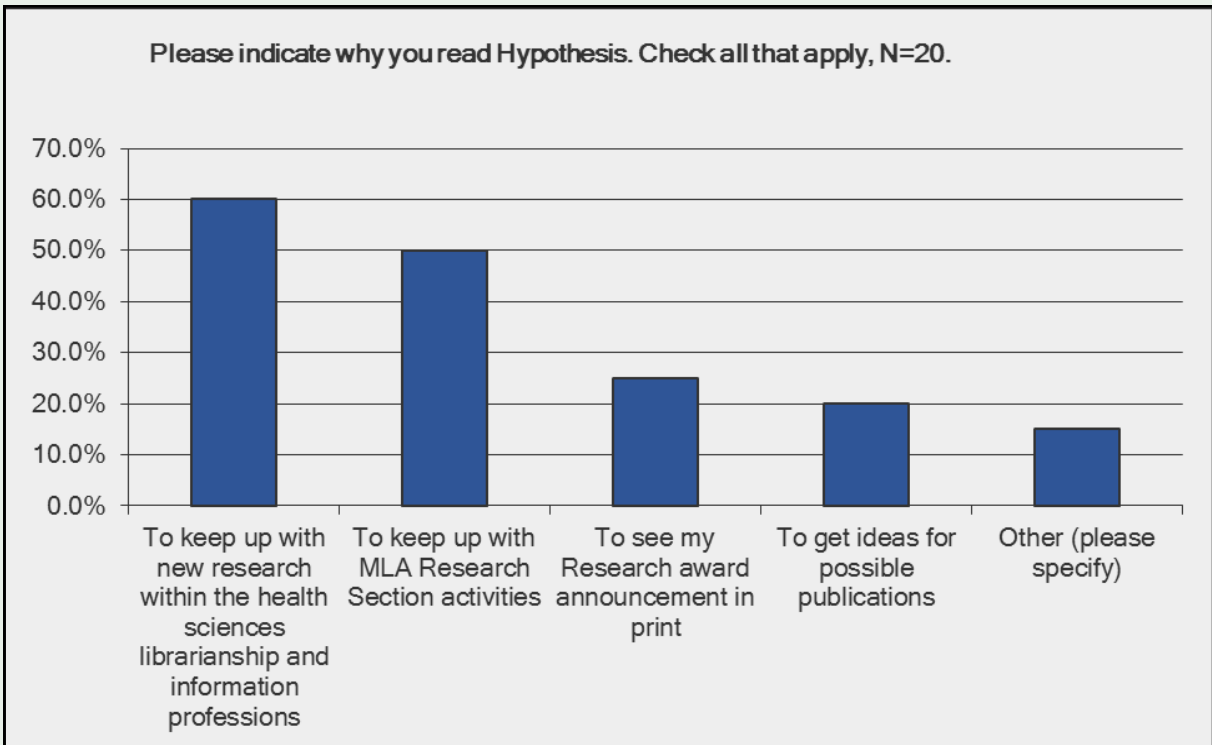


Figure 1. Why respondents read Hypothesis, N=20

if presented in *Hypothesis*. Almost all content types were rated at least somewhat likely to be read (2.0). Those most often rated very likely to be read were articles reporting original research (n=24, 56%) or articles on research methods and strategies (n=26, 62%). Content suggested under “Other” were 1) failed research lessons learned, 2) reviews of library research-related textbooks, and 3) summaries of new technology applications to library science.

Another content question asked whether informal peer-reviewed project write-ups would be of interest. As currently envisioned, these would be geared towards librarians who are doing projects and producing outcomes, and perhaps even changing their practices based on their results. The intent is to be able to share outcomes, lessons learned, successes, and failures so that those in the HSI community can learn from one another. Of the 46 respondents who answered this multi-choice question, more than half would like to read write-ups in *Hypothesis* (n=27, 59%) while the idea of reading these in an online, blog-type format and not having to wait for an issue of *Hypothesis* was preferred (n=32, 70%). Only two responded that they would not be interested in reading these regardless of format. The open-ended question “What would make you more likely to read *Hypothesis*?” generated twelve responses which were classified into discoverability characteristics (n=7) and content characteristics (n=5). Ideas shared related to discoverability included:

- more awareness and communication via email (TOCs, specific reference to what *Hypothesis* is)
- announcements in existing channels like MLA Focus or MLA News or tweeting about new issues/article,
- individual indexing of articles for inclusion in Google Scholar and being easier to find on the web.

Content suggestions offered diverse opinions. One suggested reporting research that has been through IRB review (expedited or otherwise), another suggested featuring photography by one librarian in each issue, and two others’ commented about the practice of research and publishing (shared in the respondents’ own words):

- “Having my colleagues submit content about what really happens with our research efforts in libraries of all sizes not just academic medical center libraries.”
- “Any journal that understands that librarians are, first and foremost, customer service agents would pique my attention. That journal would cater to real-world issues. Journals proposing that librarians are on par with actual scientists/researchers seem always to struggle with the fact that submissions aren’t “scientific” enough....”

The average likelihood of contributing the content types to *Hypothesis* appears in Table 1. The scale ranged from Would not contribute (0) to Extremely likely (3). Mean scores all fell between Not very likely (1) to Somewhat likely (2). The types of content with the most respondents

indicating Somewhat or Extremely likely to contribute were articles reporting original research (n=24, 56%) or articles on research methods and strategies (n=26, 62%). Other content contribution issues mentioned were original research with a research mentee and the desire only to report summaries of original research which is planned for publication in a peer-reviewed journal. For the previously mentioned informal peer reviewed project write-ups, half of respondents (n=21, 50%) would be interested in sharing these in *Hypothesis* while one-third (n=14, 33%) would be interested in sharing via an online, blog-type format and not waiting for an issue of *Hypothesis*. Others (n=17, 40%) expressed that they might be interested, but don't have a project like that in the works, or that they publish projects like that elsewhere (n=3, 7%).

When asked whether they would follow an online forum to discuss publications read in *Hypothesis*, a majority said Maybe (n=26, 54%) or Yes (n=8, 17%) while fourteen (29%) indicated they would not. There were no majorities on preferred comment features of an online forum such as required sign-in (n=14, 30%), full name (n=17, 36%) or first name display (n=7, 15%), and editorial review (n=8, 17%). Many respondents (n=18, 38%) had no opinion on features of such an online forum.

Of the 43 respondents who answered whether or not they had considered publishing in *Hypothesis*, three respondents (7%) indicated they had published and two (5%) were considering it. The vast majority (n=38, 88%) had neither considered submitting or had submitted an article. When asked how important a list of specific characteristics was in making a decision to submit work, more than half of respondents included peer-reviewed (n=32, 74%), no author fees (n=30, 70%), and online submission system (n=22, 51%) as being very important.

Average scores for each characteristic are provided in Table 2.

The preferred publication frequency of *Hypothesis* was twice a year (n=18, 43%) followed closely by more than twice a year (n=16, 38%), with eleven (26%) preferring on an ongoing basis as content arises. Only two suggested annual publication.

Two questions in the survey were presented only to RS members. The first asked about the process and amount of a possible stipend for the *Hypothesis* editor. Almost half (n=13, 45%) indicated a majority vote of RS members should be required to approve spending dues money on a stipend for the *Hypothesis* editor regardless of the amount. Only three (10%) felt it should be up to the editor whether to request a stipend for editing *Hypothesis*. In terms of the amount, the responses are listed in order of frequency:

- A stipend up to \$100 per issue seems reasonable. (n=14, 48%)
- A stipend up to \$100 per year, regardless of the number of issues, seems reasonable. (n=5, 17%)
- No stipend should be offered. (n=3, 10%)

Five usable comments were offered. Two respondents raised questions to inform the process— is a stipend typical; is there a standard for this type of work; what is the level of effort on the part of the editor; and is a stipend needed to attract a responsible editor? The other three comments related to the amount, suggesting 1) it should be tied to the overall MLA operating budget, 2) a recommendation of \$250 as more reasonable considering all the work involved, and 3) that it seems reasonable but not knowing whether \$100 an issue or \$100 a year would be needed.

	<u>Reading</u> Likelihood Mean Score	<u>Contributing</u> Likelihood Mean Score
Articles reporting original research by health sciences librarians/information professionals (HSLIP)	2.5	1.7
Articles on research methods or strategies that have been/could be used by HSLIP	2.5	1.6
Summaries of research conferences or training opportunities	2.2	1.1
Summaries of original health informatics and librarianship dissertations and theses.	2.0	1.0
Abstracts of award-winning presentations at MLA annual and chapter meetings	2.0	1.2
Announcements of research conferences or training opportunities	2.0	1.3
Announcements of research funding opportunities	1.6	1.2

Table 1. Likelihood of Reading or Contributing Content to Hypothesis, N=41-43.

	Average rating (0=Not important, 1=Not very important, 2=Somewhat important, 3=Very important)	Response counts
Peer reviewed	2.7	43
No author fees	2.6	43
Indexed by PubMed	2.4	43
Online submission system	2.3	43
Time from acceptance to publication	2.3	43
Open access	2.2	43
Download statistics available	1.9	42
Online peer review system	1.8	42
Indexed by LISTA	1.8	42
Indexed by CINAHL	1.7	43
Public commenting available	1.0	42

Table 2. Potential Authors' Interest in Various Publication Characteristics

Responses for the second question (N=29) about how members feel about *Hypothesis* as part of the Research Section activities are listed in order of frequency of response below:

- I would like to see more opportunities for members to be involved in *Hypothesis*. (n=18, 62%)
- I am proud that our Section produces a peer reviewed online journal. (n=16, 55%)
- I have been disappointed in the absence of *Hypothesis* issues in the recent past. (n=9, 31%)
- I don't give any thought to *Hypothesis*. (n=7, 24%)
- *Hypothesis* is redundant with other online journal or newsletter publications. (n=2, 7%)
- *Hypothesis* is redundant with other avenues of section communication available. (n=1, 3%)

Five respondents provided comments for the Research Section to consider. Two related to awareness of *Hypothesis*, with one having learned about *Hypothesis* years ago but having forgotten about it until this survey and the other having not stumbled upon *Hypothesis* in spite of being an RS member for years. Two comments related to the various features of *Hypothesis*. For one respondent, the importance of various features in choosing to publish depended on the type of publication; for original research indexing and peer review is very important, but for how-to type method articles, conference summaries, or critically appraised topics, those characteristics are not as important. The fifth comment is quoted here directly: "In theory I like *Hypothesis*, but it doesn't give enough back for the effort put into it...Lack of PubMed indexing, inability to see distinct articles without

looking at the whole issue, etc...It seems too much like a newsletter and nothing like a journal."

Finally, the majority of respondents (n=33, 75%) preferred to learn about the survey results from an MLA Focus announcement. Additional avenues were posting to the MLA RS section list (n=22, 50%) or linked from the RS website (n=19, 43%). Six respondents (14%) preferred the EBLIP list.

Discussion

A limitation of this study is that it only describes the usage of *Hypothesis* by respondents who were primarily MLA members in the United States. The online usage data for the RS website which includes *Hypothesis* shows that only 34% of page views are from the United States with the next highest countries as China (22%), Great Britain (7%) and Italy and the Russian Federation with 4% each. This suggests an international audience for *Hypothesis* and other RS communications that did not participate in this survey. As no responses were received from library or iSchool faculty or students, it is unclear whether *Hypothesis* has value for educational activities outside of its primary audience of practicing librarians.

It is not surprising that there is a lack of awareness of *Hypothesis* since the last issue published was Summer 2014. While it seems that there is an audience for many types of content based on the likelihood of reading scores, it is less certain whether there are sufficient potential authors to provide this content given the likelihood to contribute.

Hypothesis is an MLA RS communication tool and ultimately decisions about the value of the journal related to the work involved in its production are internal. The RS leadership intends to use the feedback gathered from this survey to improve RS communication of research-related content to a variety of audiences. The findings will be disseminated through MLA Focus and email list postings with a link to this specific article in *Hypothesis*. Presenting the findings in this manner allows for both the indexing and discoverability requested by survey respondents, but also shares our questions and methodology with other organizations planning to evaluate their communication strategies.

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Thank you to all the respondents who took the time to participate in the survey. The *Hypothesis* Editorial Board and other RS members who contributed to developing this survey were Kristine M. Alpi, Brooke L. Billman, Leslie Behm, Ellen Detlefsen, Jonathan Eldredge, and Heather Holmes.

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SECTION CHAIR'S COLUMN

Emily S. Mazure, MSI, AHIP¹, Research Section Chair, 2015-2016

'Tis the busy season! And based on our Section's Mid-Year Report to MLA, we are indeed busy.

I know many of our members have contributed to the accomplishments we have already made in just a few short months, so first let me thank everyone for their time. Our Section wouldn't be nearly as wonderful without everyone chipping-in.

A few highlights to note:

- Our website moved (along with the rest of MLA)! If you haven't explored the new site please do. You'll need to log in to access most of the RS content now- <http://www.mlanet.org/p/cm/ld/fid=503>
- We submitted two special content sessions for MLA 2016, and both were accepted!
 - *Beyond the Search: Expanding the Role of the Librarian in the Systematic Review Process*
 - *Professional Communication Skills: Publishing and Presenting your Research*
- The remaining team leader positions for systematic review projects have been filled.
- Members displayed our Section's poster at four Chapter meetings: the Midwest Chapter, South Central Chapter, Mid Atlantic Chapter, and Southern Chapter. We are looking to host it at additional Chapter meetings if anyone is interested!
- A new mentoring page has been added to our website with updated research expertise areas and guidelines. This information will eventually be added to MLANET so that all association members can view it- <http://www.mlanet.org/p/co/ly/gid=29&req=load&fid=818>
- The MLA Research Imperative Taskforce is well on its way to developing an MLA research curriculum and compiling research resources and tools.
- The *Hypothesis* Editorial Board surveyed MLA members on the future of *Hypothesis* and the results are included in this issue (pg. 8). They will be using the data to develop recommendations for the future of the journal.

As much as we have already accomplished, there is still more to do. Please look for future opportunities to volunteer in the coming months!

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NEW AWARD FOR BEST *JMLA* RESEARCH PAPER WITH AN MLA AUTHOR – INAUGURAL 2014 WINNING AUTHORS!

Aileen McCrillis, MS, MPH¹ and Kristine M. Alpi, MLS, MPH, AHIP²

The Research Section of the Medical Library Association (MLA) is proud to announce a new award for high-quality research by MLA members. The Best *JMLA* Research Paper award is for a paper selected biennially, in even numbered years, and consists of a cash award sponsored by the MLA Research Section. The purpose of the award is to recognize the best high-quality peer-reviewed research paper by an MLA member author published in the two previous years in the *Journal of the Medical Library Association*.

Eligibility

All papers published in the two previous volumes (years) of *JMLA* preceding the MLA annual meeting on even years, are reviewed for eligibility for the award. Articles must be full-length research papers to qualify for consideration. *JMLA* uses the HHS definition of “research”. HHS regulations define research at 45 CFR 46.102(d) as follows: “Research means a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge. Activities which meet this definition constitute research for purposes of this policy, whether or not they are conducted or supported under a program which is considered research for other purposes. For example, some demonstration and service programs may include research activities.” At least one the authors must be an MLA member at the time of the award judging. Members of the Awards Committee confirm membership by checking the MLA online directory. No nomination procedure is used for this award. All eligible papers are considered. This award is distinct from the Ida and George Eliot Prize presented annually by the MLA for a nominated work published anywhere by any author in the preceding calendar year that has been judged most effective in furthering medical librarianship.

Selection Criteria and Process

The Research Section identified a three person committee to identify papers and score them. The committee normally consists of the MLA Research Section Awards Committee Co-Chairs and an additional Research Section member with research publication experience recruited by the Awards Committee. If a potential committee member is an author of an eligible paper, he or she will be replaced as a judge by an additional Research Section member identified by the remaining committee members. This happened with the 2014 award as one of the Awards Committee Co-Chairs was an author on an eligible paper.

The Research Section criteria for scoring best paper presentations at the MLA annual meeting (<http://www.mlanet.org/p/cm/ld/fid=938>) were modified to replace presenter with author and those specific to oral presentations were not considered. If there is a tie in numerical score, the award will go the paper scored higher by 2 of the 3 judges.

The identification of eligible articles occurs in early February of even years, in this case 2014 and the judging of the qualifying papers occurred in April of 2014. The award winner is notified in the summer of that year, typically at the same time that the Research Section notifies winners of the MLA Annual Meeting Best Papers and Posters Research Award, communicated to MLA members in *MLA Focus* and then communicated to *JMLA* readers more broadly through a special announcement in the *JMLA*.

...And the Winner is...

The inaugural winner of the 2014 Best *JMLA* Research Paper for the biennial 2012-2013 is:

Measures of health sciences journal use: a comparison of vendor, link-resolver, and local citation statistics (Apr 2013; 101(2): 110–119). All three of the authors were MLA members at the time of publication: **Sandra L. De Groote**, MLIS, AHIP, Scholarly Communication Librarian; University Library, University of Illinois at Chicago, Chicago, IL; **Deborah D. Blecic**, MLS, AHIP, Bibliographer for the Life and Health Sciences, University Library, University of Illinois at Chicago, Chicago, IL; **Kristin Martin**, MLIS, Electronic Resources Librarian, University Library, University of Illinois at Chicago, Chicago, IL.

The judging process for the next biennial award considering *JMLA* research papers from 2014-2015 will begin in the early February of 2016. Submit your best research to *JMLA* and perhaps your article will be the next winner!

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MLA 2014 ANNUAL MEETING RESEARCH AWARD WINNERS, CHICAGO, IL

I. Diane Cooper, MSLS, AHIP¹; Sandra De Groote, MLIS, AHIP²; and Aileen McCrillis, MS,

Congratulations to the 2014 MLA Annual Meeting Research Award winners selected by the Research Section Awards Committee and Judges! Thanks to the 44 preconference and onsite judges for their excellent efforts to identify these wonderful papers and posters using the evaluation criteria on the Research Section website. The Research Section presented a \$100 cash award for 1st Place for both papers and posters, and also for the best paper/ poster that included a hospital librarian as an author. A \$50 cash award is presented for 2nd Place for both paper and poster, and a \$25 cash award is presented for each Honorable Mention paper and poster. Enjoy the abstracts of the winning papers and posters!

Contributed Papers

1st Place

Authors: **Nicole E. Brown**, Multidisciplinary Instruction Librarian, New York University, New York, NY; **Susan K. Jacobs**, AHIP, Health Sciences Librarian, New York University, New York, NY; **Arieh D. Ress** Adjunct Business Librarian and Tutorialsmith, New York University, New York, NY

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

Section Program: Boarding out: The Embedded Librarian (Corporate Information Services Section)

Abstract

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

Methods: This project uses an instructional design paradigm to create and embed video tutorials in learning environments for graduate-level nursing students at a large academic institution. This five-step model provides a framework for analyzing, designing, developing, implementing, and evaluating instruction, the ADDIE model. Partnering with graduate nursing faculty, the

librarian strategically positions timely, curriculum-integrated, bite-sized "chunks" of information, such as sample database searches, filtering strategies, and bibliographic management support, in the student's virtual environment. Screencasts embedded at the point of need employ the principle of "stickiness" and the concept of visual literacy with the goal of keeping students engaged. Embedded video gives nursing students a high degree of learner control and provides them with interactivity and the flexibility of remote and asynchronous access. Evaluation and assessment will include metrics from the learning management system and library research guides.

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

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

2nd Place

Authors: **Adelia B. Grabowsky**, Health Sciences Librarian, Reference, Auburn University, Auburn, AL

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

Section Program: Mobile Devices in Health Sciences Education and Clinical Practice (Veterinary Medical Libraries Section)

Abstract:

Objectives: To assess if and how advanced practice nurses (APNs) are using smartphones to seek clinical

information as well as barriers they face and training/resource needs they have related to information seeking via smartphones.

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

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

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

Honorable Mention

Authors: **Amy Chatfield**, Information Services Librarian, University of Southern California, Los Angeles, CA; **Annie M. Hughes**, Information Services Librarian, University of Southern California, Los Angeles, CA; **Lynn Kysh**, Information Services Librarian, University of Southern California, Los Angeles, CA; **Megan Rosenbloom**, Head, Metadata and Content Management, University of Southern California, Los Angeles, CA; **Jin Wu**, Emerging Technologies Librarian, University of Southern California, Los Angeles, CA

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

Section Program: Mobile Devices in Health Sciences Education and Clinical Practice (Veterinary Medical Libraries Section)

Abstract:

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

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

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

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

Contributed Posters

1st Place

Authors: **Ruiling (Raylene) Guo**, AHIP, Associate Professor and Health Sciences Librarian; **Patrick Hermanson**, Program Director and Assistant Professor; **Tracy Farnsworth**, Director and Associate Dean; **Teri Peterson**, Statistician; Idaho State University, Pocatello, ID

Title: Collaborative Research on Hospital Administrator Beliefs and Attitudes toward Evidence-Based Management in Health (*Poster #76*)

Abstract:

Objectives: The purpose of this study was to conduct collaborative research on exploring hospital administrator beliefs and attitudes toward the practice of evidence-based management (EBMgt) and to identify barriers to adopting EBMgt and needs for learning EBMgt among hospital administrators in Idaho.

Methods: A cross-sectional, descriptive, and non-experimental design was utilized in this study. A survey instrument was developed based on literature reviews and expert opinions. A questionnaire was distributed to 108 members of the Idaho Hospital Association (IHA), who were given 3 options for returning the survey: web, mail, and onsite. To determine the consistency and reliability of the instrument, a test-retest procedure was conducted among 10 health care management professionals across the nation. The survey data were collected and analyzed descriptively using IBM Statistical Package for the Social Sciences (SPSS) 21.0.

Results: Fifty-two hospital administrators returned the questionnaires for a 48% (52/108) response rate. The return results of the 3-mode survey delivery were: 25 (48%) online, 24 (46%) mail, and 3 (6%) onsite. Out of 52 respondents, 26 (50%) were chief executive officers/presidents; 11 (21%) were chief financial officers; and 14

(27%) were chief operating officers and chief nursing officers. Thirty-eight (73%) had master's degrees, 4 (8%) had either a medical doctoral degree or doctoral degree, and 8 (15%) had a bachelor's degree. Seventy-one percent of hospitals were located in rural areas and 29% in urban areas. Concerning the attitudes and beliefs, 35 respondents (67%) strongly agreed and 13 (25%) agreed that it is important for health care administrators to make decisions based on the best available evidence. Twenty-six (50%) strongly agreed and 15 (29%) agreed to support the adoption of EBMgt in health care management. Eighteen (35%) strongly agreed and 28 (54%) agreed that evidence-based decision making increases the quality of their health care management decisions. The participants were most inclined to use organizational data, consult their colleagues, and engage professional websites when making decisions. Twenty-one out of 52 (40%) respondents reported that they had never been to libraries. The participants identified lack of time, lack of training, and unfamiliarity with EBMgt as the top 3 barriers that hindered their practice of EBMgt. Forty-three respondents (83%) reported that they had not previously attended EBMgt training, and 42 (81%) were interested in receiving EBMgt training.

Conclusions: Hospital administrators showed favorite attitudes toward the practice of EBMgt in this study. The barriers to the practice of EBMgt and needs for receiving EBMgt training were identified among hospital administrators.

2nd Place

Authors: **Joshua E. Richardson**, Assistant Director, Clinical Services, Weill Cornell Medical Library, Weill Cornell Medical College, New York, NY; **Daina R. Bouquin**, Data and Metadata Services Librarian, Samuel J. Wood Library and C. V. Starr Biomedical Information Center, Weill Cornell Medical College of Cornell University, New York, NY; **Helen-Ann Brown Epstein**, AHIP, Clinical Librarian, Retired, Weill Cornell Medical Library, Weill Cornell Medical College, New York, NY; **Diana Delgado**, AHIP, Associate Director, User Support, Research, and Education, Weill Cornell Medical Library, Weill Cornell Medical College, New York, NY; **Lyubov L. Tmanova**, Translational Science Librarian, Samuel J. Wood Library and C.V. Starr Biomedical Information Center, Weill Cornell Medical College, New York, NY; **Drew Wright**, Research Librarian, Weill Cornell Medical Library, Weill Cornell Medical College, New York City, NY; **Loretta Merlo**, Manager, Circulation, Weill Cornell Medical Library, Weill Cornell Medical College, New York, NY

Title: Surveying information and informatics literacy of first year medical students (*Poster #183*)

Abstract:

Objectives: Medical librarians promote students' effective use of information for evidence-based practice. However, rapidly exchanging curricular requirements and health information technologies require better understanding of medical students' initial information capabilities and needs. We therefore sought to determine the levels of information literacy and health informatics familiarity in a cohort of incoming medical students.

Methods: Weill Cornell Medical Library (New York, NY) librarians developed and administered a survey to gauge students' familiarity with information, informatics, and bioinformatics tools including electronic health records (EHRs), personal health records (PHRs), and BLAST. The team generated and pilot tested twenty-seven questions of various formats: binary, Likert scale, and free text. The survey was administered via iPads in August 2013 to students who had just completed a library orientation. The Institutional Review Board at Weill Cornell Medical College approved this study.

Results: Of the 77 medical students who attended the library orientation, 72 (94%) completed the survey. An overwhelming majority of subjects (98%) envisioned themselves likely to use the library for research purposes, its study spaces (47%), and its online assets (40%). Furthermore, a majority (74%) reported being somewhat or very likely to use a "personal librarian" throughout their time at WCMC. Over half (53%) reported previous experience searching biomedical literature in PubMed in addition to others: Web of Science (18%), Ovid MEDLINE (15%), Scopus (10%), and BIOSIS (3%). Subjects listed laptops as the most preferred modality for accessing biomedical information (60%) and smartphones as the least preferred modality (67%). Over 2 out of 5 (44%) subjects reported having seen an EHR, fewer had seen a PHR (29%), and only 46% of those who answered expressed more than moderate interest in learning more about each. A majority (72%) described themselves as novice or proficient in computer programming. Subjects widely ranged in their familiarity with bioinformatics tools, but most were unsure or did not know tools such as BLAST and DAVID existed (50%-89%). However, over half the subjects (60%) reported moderate to extreme interest in learning more about bioinformatics tools.

Conclusion: Incoming medical students had notable amounts of experience with online biomedical databases, yet expected to use many of the library's physical resources. Interestingly, more subjects had seen EHRs than PHRs, had computer-programming experience, and expressed moderate to strong interest in bioinformatics databases. The survey results inform the library's future education and outreach strategies by highlighting areas

for improving students' information, informatics, and bioinformatics literacy.

Honorable Mention

Authors: **Patricia F. Anderson**, Emerging Technologies Librarian, Taubman Health Sciences Library, University of Michigan-Ann Arbor; **Skye Bickett**, AHIP, Reference and Education Librarian, Library, Philadelphia College of Osteopathic Medicine, Suwanee, GA; **Joanne Doucette**, Associate Director, Knowledge Management, and Assistant Professor, Library and Learning Resources, Massachusetts College of Pharmacy and Health Sciences University, Boston, MA; **Pamela R. Herring**, AHIP, Electronic Resources Librarian, Harriet F. Ginsburg Health Sciences Library, University of Central Florida College of Medicine, Orlando, FL; **Judith Kammerer**, AHIP, Medical Librarian, Medical Library, University of California-San Francisco, Fresno, CA; **Andrea Kepsel**, AHIP, Health Sciences Educational Technology Librarian, MSU Libraries, Michigan State University, East Lansing, MI; **Tierney Lyons**, Reference Librarian, Library, Penn State University-Worthington Scranton, Dunmore, PA; **Scott Mclachlan**, Information Officer, Library, Oxford, United Kingdom; **Ingrid Tonnison**, Electronic Services Librarian, Library, Central Coast Local Health District, Gosford, New South Wales, Australia; **Lin Wu**, AHIP, Reference Service Librarian, Health Science Center Library and Biocommunications Center, University of Tennessee-Memphis

Title: Tools for Building Our Information Future: Emerging Technologies Vital to Medical Libraries (*Poster #201*)

Abstract:

Objectives: As health care professionals steadily incorporate emerging technologies into their practice and education, health sciences libraries need to investigate, adopt, and provide learning opportunities on relevant and forthcoming technologies. This study identifies emerging technologies central to medical librarianship and serves as an exploratory project for research on skills and information structures medical librarians need in this changing environment.

Methods: To gather insight on the emerging technologies critical to medical librarianship, the authors identified forthcoming trends and newly adopted tools through an online survey and two focus group sessions. First the authors identified tools and technologies of interest to medical librarians and/or their communities, collaborating by using mind-mapping software to develop a flowchart that shows their relatedness. This map informed trends to explore in the survey and focus groups. The online survey and two Twitter-based focus groups, conducted in

summer 2013, were distributed through a variety of media (Twitter, blogging, email), targeting medical librarians and health care leaders.

Results: The data from the survey and focus groups enriched the flowchart with additional technologies, also identifying appropriate roles for medical librarians. The flowchart includes over eighty main groups of emerging technologies, some being broken down for more detail about the technologies. The main roles for librarians were identified as that of an organizer and provider of information, a guide, and teacher. Collected data were analyzed to determine gaps, most significant technologies, and potential applications.

Conclusions: The top five emerging technologies for medical librarianship were identified by the authors. These technologies have the potential to be used for communication and education by librarians, on the human body, in health care delivery and public health, and in traditional librarianship. Further research should address barriers for adoption and concerns of librarians for these and other emerging technologies.

Best Hospital Paper/Poster

Authors: **Shauna-Lee Konrad**, Health Information Consultant, Health Sciences Library; **Erin M. Boyce**, Clinical Librarian, Health Sciences Library, University Hospital; **Sandra McKeown**, Clinical Librarian, Health Sciences Library; **Jill McTavish**, Clinical Librarian, Health Sciences Library; London Health Sciences Centre, London, ON, Canada

Title: Addressing Survey Validity for the Evaluation of a Literature Search Service (*Poster #14*)

Abstract:

Objectives: To consider types of validity evidence and their role in survey study design. To strengthen the validity of a survey that evaluates a mediated literature search service provided by clinical librarians in a large teaching hospital.

Methods: A literature review revealed that an assessment tool has not been published for evaluating the quality of librarian mediated literature searches. A preliminary tool was drafted for this purpose. As a result of a facilitated project "pre-mortem," where colleagues were asked to assess the tool and anticipate failure risks, several limitations of the preliminary tool were found, including double-barreled questions, inconsistent

wording, and failure of the tool to provide measurable results. To strengthen the validity of the survey, researchers reviewed the literature to gain familiarity with survey best practices and consulted an expert specializing in library and information science survey methodology. Various steps were then taken to strengthen the validity of the study, particularly focusing on the survey tool. Improvements such as "talk-alouds" with five key client groups, a one-month pilot study, and extensive question redesign were utilized.

Results: The restructured tool evaluates two key areas: (1) perceived quality of literature search results and (2) perceived quality of literature search service. Problem questions were removed, demographic questions were refocused, and wording consistency was improved. Bias was reduced through systematic, blind sampling; independent survey administration; and an extended evaluation period to account for workload changes and an increased sample size. The pilot also revealed unexpected limitations to survey design, such as problems loading the survey from a mobile phone, which were addressed. Researchers also plan to calculate Cronbach's alpha coefficient to assess internal validity.

Conclusions: Assessment of survey reliability is limited by the single-setting application of this tool. Evaluation of services is often essential to demonstrate the library's value to administration and stakeholders. Simple steps to enhance survey validity will allow librarians to draw stronger conclusions from their research and obtain information that facilitates tangible service improvements. Strengthening the validity of our research tools yields more refined and actionable data, enables more precise service improvement, increases the likelihood of publication, and ultimately contributes to and strengthens the evidence base of the profession.

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MLA 2015 ANNUAL MEETING RESEARCH AWARD WINNERS, AUSTIN, TX

Sandra De Groote, MLIS, AHIP¹; Jennifer Lyon, MLIS, MS²; and Terry Henner, MLS³

Congratulations to the 2015 MLA Annual Meeting Research Award winners selected by the Research Section Awards Committee and Judges! Thanks to the 53 preconference and onsite judges for their excellent efforts to identify these wonderful papers and posters using the evaluation criteria on the Research Section website. The Research Section presented a \$100 cash award for 1st Place for both papers and posters, and also for the best paper/ poster that included a hospital librarian as an author. A \$50 cash award is presented for 2nd Place for both paper and poster, and a \$25 cash award is presented for each Honorable Mention paper and poster. Enjoy the abstracts of the winning papers and posters. We hope that you are inspired to submit your research for future annual meetings.

Contributed Papers

1st Place

Authors: **Jean P. Shipman**, AHIP, FMLA, Director, and Director for Information Transfer, Center for Medical Innovation; **Erica Lake**, Associate Librarian; **Jessi Van Der Volgen**, AHIP, Trainer/Curriculum and Content Specialist; University of Utah, Salt Lake City, UT

Title: A Lean Application in Documenting Patient Education for Meaningful Use

Section Program: Cost, Quality, and Access: Librarians Engaged in the Business of Health Care (Corporate Information Services Section)

Abstract:

Objectives: Patient education is crucial in ensuring patient satisfaction, quality care outcomes, and Meaningful Use (MU) reimbursement. There is currently a variety of ways to provide patient education but not all can be audited to demonstrate compliance with MU requirements. Reducing the variables in patient education documentation decreases the risk of being penalized for not meeting MU requirements.

Methods: Our team represented areas of expertise required by the project topic, including individuals from the clinical education staff, information technology, and the health sciences library. The team received training in the principles and strategies of Lean, and immediately began applying this training to the project to identify system inefficiencies. Team members performed a Gemba walk, observing 38 patient/provider interactions in two outpatient clinics. A standard survey form and

protocol was developed to collect consistent data regarding how providers accessed, delivered, and documented patient education. Providers were told we were observing the functionality of the electronic health record to minimize the impact on their regular patient education behavior.

Results: Though nearly all providers were supplying patient education, they were not doing it in ways that could be audited to show MU compliance. Analysis of collected data revealed four key points:

- there was variable provider awareness of the MU patient education requirements;
- there was an inconsistent processes for accessing and documenting patient education;
- there were sizable content gaps in the patient education resource, and differing provider preferences for reference material;
- and there were technical difficulties searching for, and accessing, patient education information as embedded in the electronic health record.

Conclusions: The skills and knowledge level of the electronic health record user contributes to the variability of patient education workflow processes. By implementing changes to improve the process and reduce variability, a positive financial impact can be made through cost avoidance, revenue generation, and MU compliance. Since adoption of MU Stage 2 standards have been delayed, the team's recommended changes have yet to be evidenced.

2nd Place

Authors: **Lisa M. Federer**, AHIP, Research Data Informationist, National Institutes of Health, North Bethesda, MD

Title: Beyond the Basics: Pushing the Limits of Data Management Instruction

Section Program: Education Without Limits (Public Health/ Health Administration Section)

Abstract:

Objectives: Many biomedical libraries have begun to incorporate data management sessions into their instructional offerings, yet most focus on introductory, "data 101" level offerings. This paper reports on the development of library-based, advanced data management sessions, covering topics addressing data management across the entire research data life cycle.

Methods: The library conducted a survey to determine areas of interest and need for data-related instruction among researchers, clinicians, and other library users. Evaluations from the library's "Introduction to Data Management" class were also analyzed to assess areas of need for advanced data management instruction. The library's research data informationist developed three 1.5 hour long courses covering topics identified as the most highly relevant to survey respondents: organization and description with metadata, reuse of existing scientific datasets, and preservation and retention of research data. These courses were offered as standalone sessions over the course of three months in fall 2014. Class evaluations collected quantitative and qualitative feedback from attendees.

Results: Results of the needs assessment suggested that researchers would benefit from advanced, in-depth instruction in specific data-related topics. Class evaluations also support this finding, with attendees tending to rate topic-specific classes higher than overview classes on relevance, satisfaction, and other measures.

Conclusions: Libraries can play an important role in providing training to help researchers gain expertise with specific tasks and skills across the entire research data life cycle. While many libraries have focused their efforts around data management planning and introductory courses, researchers may benefit more from specialized training courses.

Honorable Mention

Authors: David A. Nolfi, AHIP, Health Sciences Librarian & Library Assessment Coordinator; Marcia Rapchak, Instruction Librarian; Lori J. Marra, Clinical Instructor; Christine K. O'Neil, Professor; Melanie T. Turk, Assistant Professor; Duquesne University, Pittsburgh, Pennsylvania

Title: Interprofessional Information Literacy Education for Nursing, Allied health, and Pharmacy Freshmen

Section Program: Issues in Interprofessional Education (Collection Development Section)

Abstract:

Objectives: Librarians partnered with faculty in the nursing, allied health, and pharmacy schools to create an interdisciplinary, health sciences version of a required, information literacy course for freshmen. Our objectives included providing early opportunities for interprofessional collaboration, measuring changes in students' confidence with information literacy skills, and establishing a baseline of students' readiness to engage in interprofessional learning.

Methods: Course registration was targeted to include 10 students from each school. Course work included formulating research questions using PICO, finding information resources relevant to health care professionals, evaluating literature, and working in interdisciplinary groups. We hypothesized that participating in an interprofessional course would create a greater sense of confidence and increased understanding of the relevance of information literacy skills in the students' academic and professional futures. Thus, pre- and post-class surveys were designed to measure these changes and compare results with other health sciences students enrolled in non-health sciences versions of the course. The authors also administered the Readiness for Interprofessional Learning Scale (RIPLS) at the beginning and end of the semester. In addition to measuring changes in RIPLS scores, the authors plan to use the results as a baseline for future interprofessional education efforts.

Results: Students in the health sciences version of the course (N=27) rated the relevance of the course to their college studies (1.2%) and careers (3.3%) slightly higher than students in general sections (N=574). Scores were also higher for college studies (2.3%) and careers (5.1%) when compared to health sciences students in other sections (N=295). Independent t-tests indicated these results were not statistically significant, possibly due to the small sample of students in the health sciences section. Responses to the pre- and post-class RIPLS survey suggested that students recognize that interprofessional learning will help them understand their own roles and the roles of other health professionals. However, the results also suggested that these freshman respondents believe that they can learn more in classes focused on their own disciplines.

Conclusions: Students in this class were in the earliest stages of their academic programs. Thus, the students' understanding of their future professional roles, interprofessional learning (or work), and evidence-based practice was very limited. This course gave students a first experience with interprofessional learning and EBP. It represented a starting point for future interprofessional learning courses and provides a baseline for students' growth.

Contributed Posters

1st Place

Authors: Kris Glodoski Wolf, Librarian, Madison College Libraries, Madison Area Technical College, Madison, WI; Catherine Arnott-Smith, Associate Professor, School of Library and Information Studies: iSchool, University of Wisconsin-Madison, Madison, WI

Title: How Wisconsin Public Libraries Used Websites and Facebook Pages to Promote Patient Protection and Affordable Care Act Resources for the 2013/14 Marketplace Enrollment Period. (*Poster #118*)

Abstract:

Objectives: Research question 1: How did Wisconsin state public library websites promote information about the Patient Protection and Affordable Care Act (ACA) to local communities following the call to action at the American Library Association's Annual Conference in June 2013? Research question 2: How was social media used to complement or replace information about the ACA on public library websites?

Methods: Sixty-three libraries previously identified in a financial literacy study were used as a sample of the Wisconsin Public Library System. To diversify the dataset, peer libraries were added based on population data pulled from Wisconsin's Department of Instruction municipal reports. Library websites were evaluated for ACA content by the following measures: 1) number of clicks to access ACA information; 2) location of ACA resources in website categories; and 3) type of ACA resource (LibGuides, hyperlinks, event information). Corresponding library ACA-related Facebook posts made during FY2013-14 were also evaluated, noting post frequency and type.

Results: 50 (38%) of the 130 public libraries sampled provided some form of ACA information on their respective websites. Of those 50 libraries, 23 (46%) provided links-only to HealthCare.gov and/or HealthCare laws; 19 (38%) provided an ACA-specific informational page with links to a variety of resources; and 8 (16%) provided ACA-related library event information. The majority of the ACA information provided was made available to the user in 1-2 clicks. Regarding social media: 115 (88%) of the 130 public libraries sampled have a Facebook account and maintain a Facebook page. Of those 115 libraries, 46 (40%) posted information about ACA at least once, while the other 69 (60%) did not post ACA information.

Conclusions: While the percentage of accessible online information is consistent between library websites and Facebook pages, the collected data shows variability in accessibility, indicating a need for future uniformity in disseminating ACA information. The resulting analyzed data is intended to inform future assessment of public libraries' collaborative efforts (both online and in-person interactions) in response to consumer health initiatives.

2nd Place

Authors: Blair Anton, AHIP, Associate Director-Clinical

Informationist Services; Jaime Friel-Blanck, AHIP, Clinical Informationist; Lori Rosman, AHIP, Public Health Informationist; Claire Twose, Associate Director, Public Health/Basic Sciences Informationist Services; Sue Woodson, Associate Director, Collections; Johns Hopkins University, School of Medicine, Baltimore, MD

Title: Librarians as Coauthors (*Poster #139*)

Abstract:

Objectives: Publication in peer-reviewed literature is a key indicator of merit in academic environments. Librarians contribute their expertise and skills to the research effort of our users and demonstrate value through co-authorship in reporting that research. We explored changes in co-publication frequency, subject domains and types of articles that would suggest increasing recognition of the librarian's positive impact on research.

Methods: We performed a scoping review of published literature of librarian-researcher co-authorship to detect trends in scholarly publication collaboration. Using a medical/health sciences library affiliation filter, we conducted searches in 3 electronic databases (SCOPUS, EMBASE and Web of Science) to identify librarians in the role of co-author. We chose the databases for their comprehensiveness in subject disciplines and indexing sensitivity in the affiliation field. Citations were imported into reference software and duplicates were removed. The authors performed a preliminary screening of 10,761 unique citations, based on inclusion criteria of authorship that indicated a partnership between a researcher and a librarian. A final analysis will include full text and data abstraction of included publications for trends including subject discipline, publication year, source, country, times cited, and other bibliographic information.

Results: Our original search, conducted February 29, 2014, yielded 17,486 citations from the following databases: Embase (4,726), SCOPUS (6,685) and Web of Science (6,075). We performed an update on January 16, 2015: Embase (319), SCOPUS (343) and Web of Science (552), yielding an additional 1,214 citations. After the removal of 7,939 duplicates from the two searches (7,427 and 512 respectively), the authors screened 10,761 total unique citations, first round: 10,059 and update: 702 citations. Of the 10,761 citations screened, 2,472 were included, indicating authorship by at least one librarian and a researcher or research group. The authors determined six (6) exclusion categories: NLM/NCBI/NIH (3,795), Single Authored (2,106), Only Librarians/Library Staff Authored (1,472), No Library Affiliation (890), Letters/Comments/Conference Abstracts (23), and Non-English (3). The NLM exclusion, also a limitation of our study, was established because of the

challenge of differentiating degreed librarians from subject specialists at the NLM. We also note that 3 of the top 5 journals where collaborative work is most frequently published are in non-library based disciplines. A text-mining for the words "systematic" and "meta-analysis" in titles totaled 590 instances.

Conclusions: The authors conclude that articles with librarians as co-authors are being published more frequently, especially in the last 10 years. Compared to 5 years ago, the publications have increased approximately 130%.

Honorable Mention

Authors: **C. Steven Douglas**, AHIP, Head, Collection Strategies and Management, Health and Sciences and Human Services Library, University of Maryland-Baltimore, MD; **Eileen G. Harrington**, Health & Life Sciences Librarian, Priddy Library, The Universities at Shady Grove, Rockville, MD

Title: A Place at the Table: Health Sciences Librarians and Consortial E-Book Demand-Driven Acquisitions (DDA) Selection, Purchasing, and Management (*Poster #199*)

Abstract:

Objectives: The University System of Maryland and Affiliated Institutions (USMAI) Library Consortium consists of the 16 libraries from Maryland's diverse public universities and colleges, including a research university, a distance education university, liberal arts colleges, professional schools in law and the health sciences, HBCU institutions, and two system centers. A pilot was implemented to explore the feasibility of a joint demand driven acquisition (DDA) e-book program.

Methods: A committee of ten—including the collection manager from the health sciences library and a health sciences librarian from one of the system centers—convened to design and manage the pilot. The consortium leadership provided a budget of \$100,000, and the committee selected a broad profile, focusing on the subject areas offered at the system centers, which offer several interdisciplinary and inter-institutional courses. One goal was to provide greater equity in access to resources across institutions. The committee decided to pilot a novel consortial DDA model that limited the lending of each purchased book rather than agreeing to a price multiplier. A simple questionnaire was devised to measure participation by campus.

Results: The pilot went live in August 2013 with an initial load of 6,560 titles into the consortium's shared catalog. The original model was to pay for 6 short term loans and

purchase the book at print list price on the 7th. A purchase entitled the consortium to 14 short term loans per year with an additional copy being purchased at print list price on the 15th. Over the course of the year the committee removed certain titles from publishers who demanded exorbitant increases in the cost of short term loans and added others. Currently the shared DDA collection contains 15,532 titles. An analysis of usage shows that the users of all libraries in the system have benefited from the program, and funding for the pilot was approved for a second year.

Conclusions: A consortial e-book DDA program can be a cost-effective way of equitably increasing access to a greater number of resources for library users. As e-book models for libraries continue to evolve it is vital that libraries work with publishers to design systems that are mutually beneficial. It is our hope that other consortia will adopt this type of model so that it will continue to be viable in the marketplace.

Best Hospital Paper/Poster

Authors: **Barbara J. Henry**, Director, Medical Libraries, Lewis B. Flinn Medical Library, Christiana Care Health System, Newark, DE; **Sarahfaye Heckler**, Research Associate, Value Institute, Christiana Care Health Care System

Title: COTH (*Poster #60*)

Abstract:

Objectives: This study identifies the level of services, budgets, staffing, and resources provided by independent academic medical center (IAMC) libraries whose institutions are members of the Council of Teaching Hospitals & Health Systems (COTH), as well as the impact of any changes in the libraries that may have occurred over the past five years.

Methods: COTH is a group of 400 teaching hospitals with a documented affiliation agreement with an accredited medical school, and who sponsor at least four active residency programs. IAMCs operate independently of medical school ownership or governance while maintaining major medical school affiliations. An online survey was designed and distributed to 177 COTH library directors. The survey collected information on healthcare system demographics, residency programs, library structure and size, staff, budgets, collections, services, and electronic resources. It addressed changes in library facilities over the past five years and their impact on staff and library users.

Results: Fifty-six librarians (31.6%) responded to the survey. Of these, 9 were excluded because they indicated they were part of a university healthcare

system, were not an IAMC, or received government funding. The final sample consists of 47 librarians from 22 states and the District of Columbia, representing hospitals ranging in size from 185-1960 beds. Twenty-three (48.9%, n=47) librarians fully completed the survey; the remainder only provided partial information. Libraries reported changes in physical size: 30.4% (n=23) experienced a decrease while 13.0% (n=23) experienced an increase. Some lost staff (43.5%, n=23) while others did not experience a change in staffing (47.8%, n=23).

Approximately half (52.2%, n=23) reported an increase in their operating budget during the past year (mean increase 13.3%, n=12), and 43.5% (n=23) reported a decrease in staff (mean decrease 35.4%, n=10). Almost all (87.0%, n=23) respondents decreased their print collections (both book and journal; mean decrease 41.5%, n=19), but only 25% (n=20) reported this decrease affected customer satisfaction. Most increased their online collections (87.0%, n=23), with a mean increase of 40.42% (n=19). Of these, 81.0% (n=23) reported an impact on customer satisfaction.

Conclusions: IAMC libraries have not experienced consistent changes in facility size, staffing, and budgets, and the direction of change is mixed. Over the past five years there has been a shift toward the provision of more electronic resources accompanied by a decline in print collections and these changes have either improved or had no impact on customer satisfaction.

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MLA ANNUAL MEETING 2015 RESEARCH SECTION PROGRAMS AND MEETINGS, AUSTIN, TX

The Research Section sponsored several exciting programs and events at the 2015 MLA Annual Meeting:

Sunday

Put That in Writing: Perspectives from the Editorial Board

Primary Sponsor: Nursing and Allied Health Resources Section

4:30-5:55pm

- Information Sharing and Professional Responsibility: How to Start a Journal and Keep It Going
- Collaborative Writing
- Publishing in the Journal of the Medical Library Association: Insights from the Editor

The MLA Research Agenda Systematic Review Project

Primary Sponsor: Research Section

4:30-5:55 pm

Join us for an open forum style presentation to learn about the MLA Research Agenda's Systematic Review project. 15 teams have been working on systematic reviews covering each of the questions identified in the new Research Agenda. Come hear from each team to learn about their progress as well as the problems they've identified along the way. Each of the teams were given complete autonomy which has led to many different approaches. There is much to be learned about both the status of the Research Agenda's systematic reviews, as well as how teams with many members from many geographic locations have worked together.

Monday

Failing Forward: Leveraging the Unexpected to Create New Opportunities

Primary Sponsor: Research Section

10:30-11:55 am

- Surveys and Statistics: Lessons for avoiding Survey Design Missteps

- Limited Perfectionism, or How I Learned to Stop Worrying and Love the Epic Fails
- Balanced Scorecard Implementation for Health Sciences Libraries: Expectations and Surprises
- Turning Lemons into Lemonade: Making Negative Research Results Useful

Tuesday

Research Section Business Meeting

7:00-8:55 am

Members of the Research Section met in-person to review and discuss activities. If you missed the meeting please look for the Minutes on the Section's website.

Librarians, Evidence, and Systematic Reviews: Limitless Possibilities

Primary Sponsor: Health Association Libraries Section

3:00-4:25 am

- Survey of Systematic Review Authors to Determine Rates of Librarian Involvement, Roles, and Benefits/Barriers to Collaboration
- Efficiently Searching for Systematic Reviews: How to Perform High-Quality Searches More Efficiently
- Beyond the Search: Librarian Involvement on the Systematic Review Team
- Number Needed to Read: What is the Value of Searching Different Databases in Systematic Reviews?

Open Access and the Library Infrastructure

Primary Sponsor: Technical Services Section

3:00-4:25 am

- Open Access Roles for the Library
- Replicability and Reproducibility of Research Using an Open Data Set
- Promoting Open Educational Resources and Other Alternatives to Traditional Textbooks
- When "How Hard Can It Be?" Becomes "A Sisyphean Task": Framing a Data-Sharing Platform for Developmental Health Outcomes

HYPOTHESIS (ISSN 1093-5665) is the official journal of the Research Section of the Medical Library Association. Published since 1987, all issues are available online at <http://www.mlanet.org/p/cm/ld/fid=503>.

