Congratulations to the Winning Research Papers and Posters from the Medical Library Association (MLA) 2019 Annual Meeting!

The MLA Research Caucus is pleased to announce the winners for best research papers and posters presented at the MLA 2019 annual meeting in Chicago, IL. Thank you to the 25 judges who volunteered their expertise to help select these deserving awardees. To learn more about the awards and selection process, visit the Research Caucus website at [http://www.mlanet.org/p/cm/ld/fid=938](http://www.mlanet.org/p/cm/ld/fid=938).

**Contributed Papers**

**1st Place - Investigating Emerging Roles for Medical Librarians at College and University Libraries**

- Alexander Carrol, Lead Librarian for Research Engagement, NC State University, Raleigh, North Carolina
- Jason Reed, Health Sciences Information Specialist, Purdue University, West Lafayette, IN

Objectives: This study seeks to identify emerging roles for health sciences librarians by examining position descriptions at U.S. college and university libraries. We hypothesize that because of increasing interdisciplinary research within colleges and universities, there may be emerging roles for medical librarians at academic institutions without dedicated academic health sciences libraries as signified by Association of Academic Health Sciences Libraries (AAHSL) membership.

Methods: To gather these position descriptions, we are using two methods. We are collecting position advertisements posted to several job boards and health sciences librarian mailing lists between September 1 2018 and March 1 2019. Positions that include at least one of the following terms in the position title, qualifications, or responsibilities are flagged for review: medic*, health, life, nursing, veterinary, bio*, pharma*. We are also advertising this study on several health sciences librarian mailing lists, soliciting individuals who meet these criteria to deposit their position descriptions into a repository via a Qualtrics survey. We are using grounded theory (an inductive, qualitative research methodology) to identify themes within the collected position descriptions that meet the inclusion criteria.

Results: We found a total of 104 job postings that met our inclusion criteria. Of those 104, 60 were advertised at AAHSL member institutions, and 44 from non-AAHSL institutions. 81 of these advertisements were for front-line librarian positions, with the remaining 23 for management level positions. Job postings were listed in 32 distinct states, with at least one posting in all 8 National Network of Libraries of Medicine (NNLM) Regions. We found the highest number of postings in Region 2 (Southeastern / Atlantic Region), and the fewest in Region 6 (Pacific Northwest
Region). Qualitative and additional quantitative analyses of the content of the collected position descriptions are ongoing at this time.

Conclusions: Our preliminary quantitative data suggest the existence of a relatively high number of health sciences librarian job postings at institutions outside of AAHSL. Librarians entering into these advertised positions, specifically into front-line positions, will likely seek out professional development opportunities that will align with the MLA Competencies for Lifelong Learning and Professional Success. This suggests an opportunity for MLA to expand its membership by designing continuing education opportunities for health sciences librarians employed at academic institutions without dedicated academic health sciences libraries.

2nd Place - Burnout among Health Information Professionals: Elevating the Issue to Inspire Change

- Angela Spencer, Medical Library Manager, St. Luke’s Hospital, Chesterfield, Missouri
- Elizabeth Laera, Medical Librarian, Brookwood Baptist Health, Birmingham, Alabama

Objectives: To obtain data on how many health information professionals meet the Copenhagen Burnout Inventory criteria and how many feel they are burned out or close to burning out despite survey results. This study also seeks to determine which category of health information professionals are facing the highest risk of burnout and what is being done to combat or prevent burnout.

Methods: Potential study participants were contacted via various medical and special library listservs. Participation was limited to health science information professionals, including paraprofessionals. Using SurveyMonkey, study participants first completed a modified version of the Copenhagen Burnout Inventory (CBI) and then were asked about their general experiences with burnout, what, if anything, they are doing to relieve stress or prevent burnout, and demographic questions to quantify their results with others in similar settings, age ranges, and experience levels.

Results: 497 responses were recorded. Of these, 41 respondents did not complete enough of the survey to be counted, bringing the total number of usable surveys to 456. 179 participants reported an overall level of burnout. Using average CBI scores, we determined that 117 of those reporting burnout had scores suggested at least a moderate level of burnout. 41.88% of these scored at the significant level of burnout or higher. 5 participants or 1.14% reported not feeling burned out scored at the moderate or significant level in the CBI. Of those scoring at least moderate in the CBI (n=143), 52.45% were from an academic environment and 62.22% had 15 or less years of experience. The participants with the highest CBI averages (n=26) had very little in common among their reasons for burnout or demographics.
Conclusions: Are health information professionals burned out? Research shows that burnout has been a theme in librarianship literature since the early 1980s. Public, academic, school, and special library journals have published articles on recognizing signs of burnout, preventing burnout in the workplace, and ways to combat burnout in librarians and information professionals. However, there is limited research to determine the number of librarians and information professionals experiencing burnout. This study helps to determine the level of burnout health information professionals are experiencing, and in the future, may help librarians and other information professionals find ways to prevent burnout.

Honorable Mention - Elevating Nursing Librarianship: Assessing Trends in Distance Librarian Services for Advanced Practice Nursing Programs

- Gregg Stevens, Health Sciences Librarian, Stony Brook University, Stony Brook, New York
- Elizabeth Hinton, Instruction and Research Librarian, University of Mississippi Medical Center, Jackson, Mississippi
- Roy Brown, Research and Education Librarian, Virginia Commonwealth University, North Chesterfield, VA

Objectives: With the increasing popularity of distance education among universities and busy students, many Advanced Practice Nursing (APN) programs have shifted to become either online or hybrid programs. To meet the research and instruction needs of these students, some nursing librarians are using technology for virtual research and instruction.

Methods: This study was designed to assess the extent to which nursing librarians in North America are providing virtual research and instruction services for APN students. An IRB-approved survey with ten objective questions was developed to determine how librarians are providing services for APN students at their universities. It was announced in October 2017 through several health sciences librarian listservs. The survey ran for four weeks. Data were analyzed using Qualtrics and Excel.

Results: Eighty complete responses were received. The majority of respondents (66%) indicated that their universities’ APN programs were conducted in a hybrid format and the same percentage also indicated that they generally provide library instruction in person. Most librarians indicated that they have provided research assistance through some virtual method (phone or email) and some have also used online chat (11%) and video chat (9%). A strong majority of librarians (95%) indicated that they feel comfortable using technology to provide research assistance and instruction.

Conclusions: Many opportunities exist for nursing librarians to use technology to provide virtual research assistance and library instruction. Greater promotion of
these alternate methods can supplement traditional in-person services, providing greater flexibility for the busy schedules of graduate nursing students. Some outreach may be necessary to highlight the advantages of virtual services.

Contributed Posters

1st Place - Knowing and Doing: Quantitative and Qualitative Exploration of Wellness Behaviors among Health Sciences Librarians

- Susan Keller, Librarian, Children's National Medical Center, College Park, Maryland
- Layla Heimlich, Medical Librarian, MedStar Washington Hospital Center, Bethesda, Maryland
- Fred King, Medical Librarian, MedStar Washington Hospital Center, Silver Spring, Maryland
- Jory Barone, Medical Librarian, Medstar Washington Hospital Center, Washington, District of Columbia

Objectives: The connection between abundant and easy access to information among health science librarians and the practice of wellness behaviors is unknown. This project looks at the behaviors of both health science and non-health science librarians in order to answer the question: "Is having access to high-quality health information associated with a high level of wellness behaviors among health science librarians?"

Methods: After consultation with a biostatistician and approval by the Institutional Review Board, we designed a survey consisting of seven demographic items: two items on workplace support for wellness behavior (e.g., vaccines, wellness programs), three items to assess access to health information and awareness of healthy behavior recommendations, seven specific healthy behavior practice items, and three open ended questions.

We contacted 88 library organizations and 49 agreed to help us distribute our survey. These organizations represented public, school, academic, and health science libraries. We also posted the survey on the MEDLIB-L (Medical Library Association Listserv), Special Library Association Listserv, as well as seven SLA and MLA special interest groups. We opened the survey on March 7, 2018 and closed it on April 25, 2018.

Survey analysis tools included RedCap, SAS 9.4, and Dedoose.

Results: 1913 librarians responded to the survey - 663 health science librarians (HSL) and 1250 non-health science librarians (Non-HSL). We found NO significant demographic differences between the two groups. HSL are more likely than Non-HSL to eat 5 or more fruits/vegetables per day (p value 0.031). HSL were more likely than Non-HSL to exercise moderately (p value <0.001). HSL were less likely than Non-HSL to engage in prayer or other spiritual practices (p value 0.009). Using
Dedoose, we identified themes concerning the barriers, facilitators, and connections between the profession of librarianship and wellness behaviors.

Conclusions: Overall, health science librarians have more access to quality health information and have healthier eating and exercise behaviors, but spend less time in prayer and other spiritual activity than non-health science librarians. We expect to gain more insight into the barriers and facilitators, as well as the connections between the profession of librarianship and the practice of wellness behaviors, after analyzing the qualitative results from the survey.

2nd Place - The Impact of Institutional Repositories: A Systematic Review

- Michelle Demetres, Scholarly Communications Librarian, Weill Cornell Medical College, New York, New York
- Diana Delgado, Associate Director, Information, Education and Clinical Services, Weill Cornell Medicine, New York, New York
- Drew Wright, Research Librarian, Weill Cornell Medical Library, Sunnyside, New York

Objectives: Institutional repositories are an ideal outlet to present and publicize an academic institution's output. However, there are many challenges associated with its startup and upkeep. The objective of this study is to concretely define the various impacts that an institutional repository can provide for an academic institution, thusly justifying its implementation and/or maintenance.

Methods: A comprehensive literature search was performed in March 2018 in the following databases from inception: Ovid MEDLINE, Ovid EMBASE, The Cochrane Library (Wiley), ERIC (ProQuest), Web of Science (Core Collection), Scopus (Elsevier), and Library, Information Science & Technology Abstracts (EBSCO). A total of 6,331 citations were screened against predefined inclusion/exclusion criteria.

Results: The 13 included studies were divided into three areas of impact: citation count; exposure/presence; and administrative. Those focusing on citation count (5) and exposure/presence (7) all saw a positive impact for the institution and/or researchers. The one study focusing on administrative benefit saw a unique tie-in with automated ORCID profile population.

Conclusions: Based on the available literature, institutional repositories do appear to have a positive impact in the following areas: citation count, exposure/presence, and administrative burden. In order to make more concrete conclusions, additional, higher quality studies are needed.

Honorable Mention - E-Books and Print Books: What Do Medical Students and Residents Prefer and Why

- Erin Watson, Health Sciences Librarian, University of Saskatchewan, Saskatoon, Saskatchewan, Canada
Objectives: The objective of this research is to determine in which format medical students and residents prefer to use monographs to support their learning and clinical work. Informal feedback from library users at the researcher's institution, and results reported in the literature, have both varied, making acquisition decisions difficult.

Methods: The researcher surveyed medical students and residents at her institution to determine their preferred reading format, and the reasons and circumstances surrounding it. The survey also asked what respondents do if their preferred format is not available. Medical education is delivered through a distributed program at the researcher's institution, therefore, respondents were asked to indicate where they are located; this will help determine if students studying through the distributed program prefer to use electronic materials, or whether they borrow/acquire print materials.

Results: Of 844 possible respondents, 232 answered the survey, a response rate of 27.5%. Not all respondents answered all questions. When reading only a few pages, the vast majority (72%, n=166) preferred to use e-books. When reading a chapter of 10 pages, the largest number (48%, n=105) preferred e-books. When reading an entire book, the majority (72%, n=166) preferred print books. Distributed students and residents were not statistically more likely to prefer e-books to print books. The top reasons for choosing to use e-books were immediate access to content (n=205; 89%), searchability (n=175; 76%), and accessibility on the go (n=166; 70%). Top reasons for choosing print books were reduced strain on the eyes (n=177; 77%), easier absorption of information (n=128; 56%), and being able to hold the book in one's hands (n=128; 56%). When respondents preferred to use e-books, but only the print format was available from the library, a majority (n=140; 61%) would use the print book, though a sizeable number (n=109; 47%) felt they would get the e-book from elsewhere. When print was preferred but only e-books were available from the library, the majority (n=173; 76%) would use the e-book, though 34% (n=78) might buy their own copy of the print.

Conclusions: While medical students and residents enjoy using e-books for their convenience and accessibility, they prefer print books for sustained reading. Libraries should continue to make print books available to their patrons, even to those in distributed locations.